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INFLUENCE OF CASH MANAGEMENT PRACTICES ON THE PERFORMANCE OF PRIVATE LEARNING INSTITUTIONS IN SELECTED COUNTIES IN SOUTH NYANZA REGION, KENYA

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Abstract

Finance in learning institutions is an important constraint to growth in South Nyanza Region since these learning institutions do not get grant from the government sources such as free secondary education fund, free primary and government sponsored students. Leading to low enrolment turnout in the private sector therefore inadequacy in application of cash management practices. The purpose of the study was to determine the influence of cash management practices on performance of private learning institutions. Contingency theory of cash management directed the study. The study employed a survey research design. The study found out that liquidity flow index adds value to an institution when cash flows increases (B=0.321; p<0.05); operation cash flows resulted into a positive cash flow which indicated an increase in performance (B=0.361; p<0.05); cash conversion cycle resulted into an increase in performance (B=0.334; p<0.05) in learning institutions. The study concluded that most private learning institutions use cash management practices as applied by board of management. The study recommends that cash management practices be applied extensively in the running of private learning institutions since they influence performance and valuable insights in management of cash in learning institutions.

Keywords: cash management practices, private learning institutions

Background of the Study

According to Bort (2004) cash management is of importance for both new and growing businesses. Institutions may suffer from cash flow problems because of lack of margin of safety in case of anticipated expenses such that they experience problems in finding the funds for innovation or expansion. Bort (2004) concluded by saying that the key to successful cash management lies in tabulating realistic projections, monitoring collections and disbursements, establishing effective billing and collection measures, and adhering to budgetary parameters because cash flow can be a problem to the business organization.

Keeping track of cash flow in institutions entails the movement of funds in and out of the institution, whereby this information of cash flow

is tracked on a weekly, monthly or quarterly basis in order to identify where the institution is currently from a financial standpoint and where it will be several months in the future. Hence without adequate cash flow, an organization can become technically insolvent even though assets far out way the liabilities. To reduce the chances for an institution becoming technically insolvent, the following parameters were recommended to be employed in evaluating the influence of a cash management system. Therefore key indicators in cash management practices include: cash conversion cycle, operation cash flows, increase or decrease in cash and liquidity flow index.

In the case of institutions operating in multinational settings, maintaining liquidity may additionally allow an organization opportunity for arbitrage between segmented national capital markets and institutional settings. Such institutions also face additional opportunities and challenges in managing liquidity under currency and political risks. Thus, because of the wide spread segmentation of national financial markets, the ability to increase institutional value by internalizing the rates due to the market imperfections through liquidity managements apply even to a great extent to institutions operating in multinational settings (Ibid: 601).

Over the years, institutional services or practices in Kenya have become more complex with an elaborate network of service delivery programmes, management and administrative infrastructure. The situation is compounded by the ongoing reforms, including decentralization, which have major effects on the Ministry of Education's performance. This calls for upgrading of technical, operational and management capacities at all levels (GOK 2011).

The government of Kenya has initiated ICT based systems to curb cases of cash management practices which is an initiative that encourages adoption and effectively integrating cash management practices to reduce cases of fraud in institutions. Although most of the users have problems with flexibility, hard features of the practices as well as reliability, integrating performance, user friendly cash management practices would ensure that necessary information are stored at centralized location to ease effective performance use (GOK, 2011).

Statement of the problem

Finance is one of the most important constraint to growth in the private learning institutions in south Nyanza region since these institutions do not get grant from the government thus rely fully on its own revenue collection from self-sponsored students. As government funding to universities continued to fluctuate and reduce, fees was introduced under the banner of cost sharing strategy, which was coined and imposed on the country by the World Bank and International Monetary Fund among other donor agencies. On average, the student fee to study at the university is Kshs 120,000 (USD 1,538) per year for undergraduates. The students are expected to pay Kshs 50,000 (USD 641) of this amount. In private universities the fees range from Kshs 96,950-127,330 (USD 1,243-USD 6,232). Therefore free primary education, secondary education and reduction of fees in vocational training sector funding has contributed towards education and infrastructural improvement in the public sector as provided for in the Education Sector Reform of 2008 which has lead to low enrolment turnout in the private sector (World Bank, 2009). Thus low cash inflows in private institutions which has resulted to inefficiency in cash outflows.

This has prompted the researcher to carry out a study to evaluate the influence of cash

management system using a study of cash management practices on the performance of private learning institutions in selected counties in south Nyanza region. Hence use of inadequate application of cash management practices that asserted to low performance of organizations. However, performance of learning institutions and financial viability is interrelated and plays a great role in procuring and availing of resources and services.

Objectives of the Study

The main objective of the study was to assess the influence of cash management practices on performance of learning institutions in South Nyanza region, the specific objectives of the study were to:

i. Establish the influence of liquidity flow index on the performance of private learning institutions.

ii. Assess the influence of operation cash flows on performance of private learning institutions.

iii. Establish the influence of cash conversion cycle on performance of private learning institutions

Research Questions

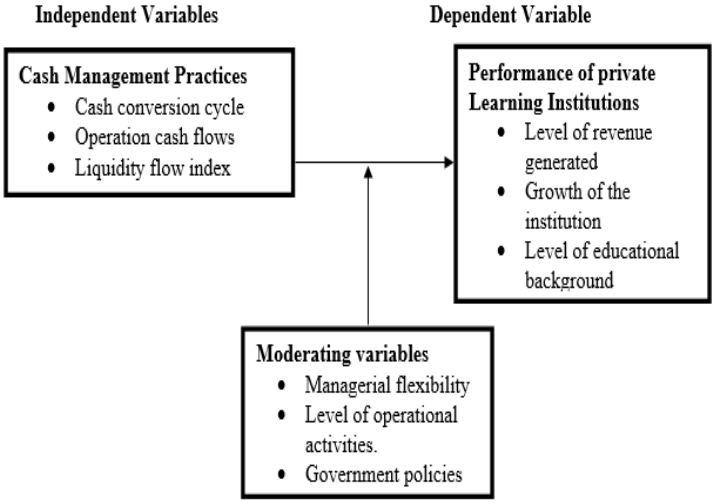
The study aimed to answer the following research questions;

i. What is the influence of liquidity flow index on performance of private learning institutions?

ii. How does operation of cash flows influences performance in private learning institutions?

iii. What is the influence of cash conversion cycle on performance of private learning institutions?

Conceptual Framework



Research Methodology

The study employed a survey research design. The target population constituted 72 top level management, 144 middle level management and 297 lower level administrative staff in South Nyanza Region. A census study was used to conduct the study on the 513 respondents. Questionnaires and interview schedules were used to collect data. The instruments were personally administered by drop-and-pick method. The data collected was coded and analyzed by use of Statistical Package for Social Sciences (SPSS). The descriptive statistics were done by using mean and standard deviation and inferential statistics by use of regression analysis and analysis of variance (ANOVA) were used to analyze data.

Research Findings and Discussion

Liquidity flow index on performance in learning institutions

The study determined the influence of liquidity flow index on performance by indicating relationships between the amount of cash that was available to meet obligations and the institutions' value by reducing the systematic components of its risk as it reduces the

institution's susceptibility to economic fluctuations that is through liquidity management by management policy makers, overall policies, statement on influences of performance, identification with banking institutions and a reflection of cash management practices in place.

Table 1: Management policy makers for cash management

Opinion	Frequency	Percentage
Board of management	252	50.0
Chairman	101	20.0
Bursar/Accounts Clerk	85	16.9
Auditor	66	13.1
Total	**504**	**100**

The study determined who sets the management policy for cash management for the institutions, from the findings majority of the respondents as shown by 50.0% indicated that the board of management sets the management policy for cash management, 20.0% indicated that the chairman sets the management policy for cash management, 16.9% indicated that the Bursar/Accounts Clerk sets the management policy for cash management whereas 13.1 % of the respondents indicated that the Auditor sets the management policy for cash management, this results implies that this is in line with GOK (2011), who found that management policy makers for cash management in learning institutions must be initiated with ICT based systems to curb cases of cash management practices which is an initiative that encourages adoption and effective integration to reduce cases of fraud in institutions through formulation of policies that enhances effective integration of performance. Hence cash management practices are set by the board of management.

Table 2: Institution's overall policy for the management of its cash management practices

Policy	Frequency	Percentage
Formal policy	315	62.5
No policy	121	24.0
Informal policy	68	13.5
Total	**504**	**100**

The study determined whether the institutions have an overall policy for the management of its cash management practices, from the findings majority of the respondents as shown by 62.5% indicated that the institutions have a formal overall policy for the management of its cash management practices, 24.0% indicated that the institutions have no overall policy for the management of its cash management practices whereas 13.5 % of the respondents indicated that the institutions have an informal overall policy for the management of its cash management practices. GOK (2011), found that proper initiated ICT based systems and policies put in place enables to curb cases of cash management practices that enhances necessary information in order to ease effective performance use. This implies that the institutions have formal overall policies as their cash management practices to enhance performance.

Table 3: Statement on influences of performance in the institution

Statement	Frequency	Percentage
Efficient processes	246	48.8
Optimal use of cash	99	19.6
Risk minimization	51	10.1
Increase or decrease in cash	108	21.5
Total	**504**	**100**

The study determined what influences performance in various institutions, from the findings majority of the respondents as shown by 48.8% indicated that efficient processes influences performance in various institutions, 21.5% indicated that the increase or decrease in cash influences performance in various

institutions, 19.6% indicated that the optimal use of cash influences performance in various institutions whereas 10.1 % of the respondents indicated that risk minimization influences performance in various institutions. According to Blair (2014), who found that cash management exists in a context whereby optimizing cash management must be contextual. Hence efficient processes were a clear trend of cash management practices on performance of private learning institutions. Thus Blair (2014) concluded that it was not possible to say what best practice in cash management is, because different institutions have different needs. This implies that efficient processes influences performance in various institutions giving good results which achieved effective management performance.

Table 4: Institution identification with banking institution in terms of operating a bank account

Opinion	Frequency	Percentage
Yes	377	74.8
No	127	25.2
Total	**504**	100

The study determined whether institutions identify themselves with any banking institution in terms of operating a bank account, from the findings majority of the respondents as shown by 74.8% agreed that institutions identify themselves with any banking institution in terms of operating a bank account, whereas 25.2% of the respondents disagreed, this implies that institutions identify themselves with any banking institution in terms of operating a bank account. Cash management practice therefore include but not limited to; budgeting, accounting, debt management, cash management, and other core sub-systems in financial management, which varies with institutions in which the system are integrated. In addition, studies indicate that other than aforementioned sub-systems, many countries, and institutions often integrate as well as tax administration, asset management, procurement management, payroll systems, human resources, pension and social security systems. This results confirms Heeks (2009), who found that a learning institution that intends to influence effective and transparent cash management practices had to integrate tested and proven cash management systems that identifies the institutions with banking institutions in terms of operating bank accounts, keeping track of cash payments and keeping books of accounts whereby adaptation of proper strategies to enhance systematic control of routines in terms of performance. Heek (2009) further indicated that an institution that thrives in performance had to adopt efficient financial management systems (FMS) as a crucial catalyst for economic development.

Table 5: Reflection of cash management practices in place

Opinion	Frequency	Percentage
Yes	343	68.1
No	161	31.9
Total	**504**	**100**

The study determined whether performance in learning institutions reflect cash management practices in place, from the findings majority of the respondents as shown by 68.1% indicated that performance in learning institutions reflect cash management practices in place whereas, 31.9% of the respondents were of the contrary opinion, this results concurred with Bort (2004), who found that the key to successful cash management lies in tabulation of realistic projections, monitoring collections and disbursements that establishes effective billing and collection measures that adheres to budgetary parameters because of cash flow being

a problem to institutions hence performance in learning institutions as per results found reflects cash management practices in place.

Table 6: Institution technology integration in cash management

Opinion	Frequency	Percentage
Yes	401	79.6
No	103	20.4
Total	**504**	100

The study determined whether institutions integrate technology in cash management, from the findings majority of the respondents as shown by 79.6% agreed that most institutions integrate technology in cash management, whereas 20.4% of the respondents disagreed, this implies that institutions integrate technology in cash management. The respondents further indicated that the scale of cash management system can also vary and be limited to institution or country-levels for example the Ministry of Finance. However, common government institutions including local governments are meant to ensure that users effectively adhere to common standards, rules and procedure which has been meant to reduce the risks of mismanagement within respective institutions. According to GOK (2011) confirms that by initiating ICT based systems in learning institutions, it curbs cases of cash management practices which encourages adoption and effective use of integrated systems to reduce cases of fraud in learning institutions.

Table 7: Institution's cash budget with the corresponding financial needs

Opinion	Frequency	Percentage
Yes	389	77.2
No	115	22.8
Total	**504**	**100**

The study established whether institution's cash budget meets the corresponding financial needs, from the findings, majority of the respondents as shown by 77.2% indicated that institution's cash budget meets the corresponding financial needs whereas, 22.8% of the respondents disagreed, this implies that institution's cash budget meets the corresponding financial needs. The respondents further indicated that liquidity flow index is the most crucial task for business managers. The business becomes insolvent when it fails to pay back the money owed timorously, which was the primary reason for bankruptcy among businesses. The prospect of such an implication was to force businesses to efficiently manage their cash with caution. Proper cash management practices prevent bankruptcy, thereby increasing profitability and sustainability of businesses, concurring with Mbroh, (2012) that a proper and efficient cash management practice is imperative to recently established and growing businesses.

Table 8: Institution's ability on liquidity flow index on performance

Opinion	Frequency	Percentage
Below 1 month	234	46.4
2 to 4 months	109	21.6
5 to 12 months	96	19.1
13 months and above	65	12.9
Total	**504**	**100**

The study determined the time frame of the institution's ability on liquidity flow index in generating the cash needed to meet performance in the institution, from the findings, most of the respondents as shown by 46.4 % indicated that the time frame of the institution's ability on liquidity flow index in generating the cash needed to meet performance is below 1 month, 21.6% of the respondents indicated that the time frame of the institution's ability on liquidity flow index in generating the cash needed to meet performance ranges between 2 to 4 month,

19.1% of the respondents indicated that the time frame of the institution's ability on liquidity flow index in generating the cash needed to meet performance ranges between 5 to 12 months whereas 12.9% of the respondents indicated that the time frame of the institution's ability on liquidity flow index in generating the cash needed to meet performance ranges between a period of 13 month and above. This is an indication that the time frame of the institution's ability on liquidity flow index in generating the cash needed to meet performance is below 1 month. This is in line with Aggarwal (1989), who found that under asymmetric information, a liquid institution is able to fund valuable projects that are difficult or costly to fund in financial markets. Hence the researcher indicated the time frame of the learning institution's ability on liquidity flow index in generating cash needed to meet performance which was below 1 month.

Cash conversion cycle on performance of learning institutions

The study determined the relation between cash conversion cycle and performance of learning institutions whereby it established the time interval between actual cash payment and expenditure of operational resources and ultimate collection of cash from the clients and services. Therefore performance refers to routine manner in which day-to-day financial activities within a business entity are gathered and recorded. The study therefore determined performance of private Learning Institutions in relation to cash management practices as follows:

Table 9: Cash conversion cycle used in your institution on Performance of private Learning Institutions

Statement relating to cash conversion cycles	Most extent	More extent	Moderate extent	Low extent	No extent	mean	Standard deviation
Is the payment receipt to deposit reconciliation regularly reviewed by management?	321	143	20	15	5	1.83	0.26
Are cash funds periodically counted on a surprise basis by an independent employee?	300	120	54	20	10	1.76	0.29
Are surprise cash counts documented?	342	145	10	5	2	1.80	0.28

The study determined the extent to which respondents agreed with the above statements relating to cash conversion cycle as influential cash management practices used in institutions from the research findings the study established that majority of the respondents agreed that; cash funds periodically counted on a surprise basis by an independent employee as shown by mean of 1.76 and a standard deviation of 0.29 are the cash conversion cycle that influence cash management practices in various institutions followed by surprise cash counts documented as shown by a mean of 1.80 in each case and a standard deviation of 0.28 and finally followed by payment receipt to deposit reconciliation regularly reviewed by management as shown by a mean of 1.83 and a standard deviation of 0.26, the finding above concurs with the study findings by Khemani, (2005), that in any organization, employee remuneration speaks a lot, in fact when employees are not well paid; they are likely not adopting positive approach towards their jobs thus in every learning institutions, the management ensured proper and realistic pay packages that corresponded to respective work jurisdictions within which every employee was assigned, as this ensured that employee fraternity delivers to their utmost best, and with

positive attitude now, within an institution, it was unbelievable that personnel responsible for handling finances are being paid peanuts, which was compared to a security officer using a toy gun to guard a bank.

Table 10: Extent to which profit margin is influenced by cash convention cycles

Extent	Frequency	Percentage
Mostly influenced	72	14.3
More influenced	98	19.4
Moderately influenced	244	48.4
Less influenced	56	11.2
Not influenced	34	6.7
Total	**504**	**100**

The study determined the extent to which profit margin was influenced by cash convention cycles in the institution, from the study findings 48.4% of the respondents indicated that the profit margins are moderately influenced, 19.4 % of the respondents indicated that the profit margins are more influenced, 14.3 % of the respondents indicated that the profit margins are mostly influenced, 11.2 % of the respondents indicated that the profit margins are less influenced whereas 6.7% of the respondents indicated that the profit margins are not influenced. This implies that the profit margins are moderately influenced by cash convention cycles in the institutions because of the time intervals between the actual cash and the expenditure of operational resources.

Table 11: Level of institutional revenue per year

Level	Frequency	Percentage
Below 100,000	52	10.3
Between 101,000 to 500,000	105	20.8
Between 501,000 to 750,000	132	26.2
Between 751,000 and above	215	42.7
Total	**504**	**100**

The study determined level of institutional revenue per year, from the findings 42.7% of the respondents indicated level of institutional revenue per year to be between 751,000 and above, 26.2% of the respondents indicated level of institutional revenue per year to be between 501,000 to 750,000, 20.8% of the respondents indicated level of institutional revenue per year to be between 101,000 to 500,000 whereas 10.3% of the respondents indicated level of institutional revenue per year to be below 100,000. This implies that the levels of institutional revenue per year was between 751,000 and above thus the institutions were receiving considerably high level of revenue.

Table 12: Profit margin after deduction of total costs spent

Level	Frequency	Percentage
Below 50,000	16	3.2
51,000 to 150,000	45	8.9
151,000 to 500,000	291	57.7
501,000 and above	152	30.2
Total	**504**	**100**

The study determined the organizations' profit margin after deduction of total costs spent, from the findings 57.7% of the respondents indicated profit margin after deduction of total costs spent to be between Ksh. 151,000 and 500,000, 30.2% of the respondents indicated profit margin after deduction of total costs spent to be 501,000 and above, 8.9% of the respondents indicated profit margin after deduction of total costs spent to be between Ksh.51, 000 and 150,000 whereas 3.2% of the respondents indicated profit margin after deduction of total costs spent to be below Ksh 50,000. This implies that the profit margin after deduction of total costs spent in most organization was averagely high.

Table 13: Management policy review on cash management practice

opinion	Frequency	Percentage
Monthly	66	13.1
Quarterly	82	16.3
Semi-annually	101	20.0
Annually	219	43.5
Whenever necessary	36	7.1
Total	**504**	**100**

The study determined how often are management policies on cash management practices reviewed, from the study findings 43.5% of the respondents indicated that management policies on cash management practices are annually reviewed, 20.0% of the respondents indicated that management policies on cash management practices are semi-annually reviewed, 16.3 % of the respondents indicated that management policies on cash management practices are quarterly reviewed, 13.1 % of the respondents indicated that management policies on cash management practices are monthly reviewed whereas 7.1% of the respondents indicated that management policies on cash management practices are reviewed whenever necessary. This implies that management policies on cash management practices are annually reviewed.

Table 14: Duration taken to collect and convert resource inputs into cash flows

period	Frequency	Percentage
Below 1 month	104	20.6
2 to 4 months	237	47.0
5 to 12 months	93	18.5
13 months and above	70	13.9
Total	**504**	**100**

The study determined how long it takes the institution to collect or convert resource inputs into cash flows, from the findings, most of the respondents as shown by 47.0 % indicated that it takes the institution to collect or convert resource inputs into cash flows for a duration ranging between 2 to 4 months, 20.6% of the respondents indicated that it takes the institution to collect or convert resource inputs into cash flows for a duration of below 1 month, 18.5% of the respondents indicated that it takes the institution to collect or convert resource inputs into cash flows for a duration ranging between 5 to 12 months whereas 13.9% of the respondents indicated that it takes the institution to collect or convert resource inputs into cash flows for a duration of 13 months and above. This was an indication that it takes the institution to collect or convert resource inputs into cash flows for a duration ranging between 2 to 4 months.

Operating cash flows on performance in learning institutions

The study established the effect of operating cash flows as a cash management practice on performance on learning institutions whereby it was the amount of cash an institution generated in a measured time from its operations. Here various methods were used to determine the amount of operating cash flows through use of income statements and the balance sheet to prepare the cash.

Table 15: Operation cash flows on Performance of private Learning Institutions

Statement	1 Most extent	2 More extent	3 Moderate extent	4 Low extent	5 No extent	Mean	Standard deviation
Are all funds received deposited with no fund being held back for change, petty cash, etc.?	328	134	35	6	1	1.45	0.23
Are deposit slips prepared in at least duplicate form?	327	137	24	11	5	1.34	0.25
Do you use either a locking bank bang or a sealing plastic tamper proof bag for deposit?	344	122	2	1	1	1.68	0.27

The study determined the respondent's level of agreement with the above statements relating to operation cash flows as influential cash management practices used in your institutions.

From the research findings the study established that majority of the respondents agreed that deposit slips are prepared in at least duplicate form as shown by a mean of 1.34 and a standard deviation of 0.25, all funds received are deposited with no fund being held back for change and petty cash. Therefore as shown by a mean of 1.45 and a standard deviation of 0.23, institutions use either a locking bank bang or a sealing plastic tamper proof bag for deposit as shown by a mean of 1.68 and a standard deviation of 0.27, the above findings concurs with the findings by (Ross, 2005) according to Ross (2005), the importance of cash management systems by saying that it is vitally crucial to have a good knowledge of cash flows due to the uneven nature of the cash inflows and cash outflows. Institutions emphasizes that the single thing which can break a business can be the poor management of cash flow.

Table 16: Institution's ability to influence performance on an operating cash flow

Opinion	Frequency	Percentage
Most sufficient	122	24.2
More sufficient	278	55.2
Less sufficient	56	11.1
Not sufficient	48	9.5
Total	**504**	**100**

The study determined the institutions' influence on performance in regard to an operating cash flow whereby from the study findings 55.2% of the respondents indicated that institutions more sufficiently influenced performance on an operating cash flow, 24.2% of the respondents indicated that institutions most sufficiently influenced performance on an operating cash flow, 11.1 % of the respondents indicated that institutions less sufficiently influenced performance on an operating cash flow, whereas 9.5% of the respondents indicated that institutions do not sufficiently influence performance on an operating cash flow. This implies that institutions most sufficiently influenced performance on an operating cash flow.

Table 17: Clearer cash management practice of the current reality of the business operations

Opinion	Frequency	Percentage
Yes	409	81.2
No	95	18.8
Total	**504**	100

The study determined whether performance provided the institution with a clearer cash management practice of the current reality of the business operations since from the findings majority of the respondents as shown by 81.2% agreed that performance provided the institutions with a clearer cash management practice of the current reality of the business operations, whereas 18.8% of the respondents disagreed, this implies that performance provided the institutions with a clearer cash management practice of the current reality of the business operations.

Table 18: Operating cash flow activities that suits the institution

Opinion	Frequency	Percentage
Operating activities	248	49.2
Investing activities	105	20.8
Financing activities	89	17.7
Net increase or decrease in cash	62	12.3
Total	**504**	**100**

The study determined operating cash flow activities that suits various institutions, from the findings majority of the respondents as shown by 49.2% indicated that operating activities are operating cash flow activities that suits various institutions, 20.8% indicated that investing activities are operating cash flow activities that suits various institutions, 17.7% indicated that financing activities are operating cash flow activities that suits various institutions whereas

12.3% of the respondents indicated that net increase or decrease in cash are operating cash flow activities that suits various institutions, this implies that operating activities are operating cash flow activities that suits various institutions.

Table 19: Management's investigation on all substantial variations

Opinion	Frequency	Percentage
Yes	392	77.8
No	112	22.2
Total	**504**	100

The study determined whether management investigate all substantial variations from norms such as cash register voids, refunds, errors and revenue levels, from the findings majority of the respondents as shown by 77.8% agreed that management investigated all substantial variations from norms such as cash register voids, refunds, errors and revenue levels, whereas 22.2% of the respondents disagreed, this implies that management of institutions investigated all substantial variations from norms such as cash register voids, refunds, errors and revenue levels.

Table 20: Monitoring of cash flow at individual performance level

Opinion	Frequency	Percentage
Cash flow losses	40	7.9
Net cash position	136	27.0
Amount billed	110	21.8
Amount of revenue	218	43.3
Total	**504**	**100**

The study determined whether institutions monitors cash flow at individual performance level, from the findings, most of the respondents as shown by 43.3% indicated that amount of revenue received forces institutions to monitor cash flow at individual performance level, 27.0% of the respondents indicated that due to net cash position institutions are forced to monitor cash flow at individual performance level, 21.8 % of the respondents indicated that amount billed made the institutions to monitor cash flow at individual performance level whereas 7.9% of the respondents indicated that due to cash flow losses institutions have to monitor cash flow at individual performance level. This was an indication that amount of revenue received, forces institutions to monitor cash flow at individual performance level. The respondents further indicated that recognizing revenue is not always the same as collecting cash. For example a university may send a bill to a student for tuition but not immediately collects the money that was owed. This shows up on the university's balance sheets as an increase in accounts receivable and is booked on the statement of revenues, expenses and changes in net assets as revenue. While the university shows an increase in revenue it does not actually have more cash. Hence the role of the cash flow statement is to show the inflows and outflows of cash, the findings above concurs with the study findings by Rudy, (2002), that public institutions' operating cash flow is the sum of cash flows from operations plus cash flows from non-capital financing activities. In private colleges and universities one can just look at cash flows from operations. One of the major differences between operating cash flows and income (loss) before other revenue (net income) is that net income includes depreciation as an expense. However, since depreciation is a non-cash expense it does not represent an outflow of cash therefore it is an expense only on paper.

Regression Analysis Results

A multiple regression model was applied to assess the influence of cash management practices on performance of learning institutions in South Nyanza region

The logistic regression used in this model was;

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon}$$

Where Y (Dependent variable) = Revenue (Performance of private learning institutions), β_0 = Constant term (regression coefficient), β_1, β_2 and β_3 = slopes of the regression equation, X_1= Liquidity flow index, X_2= Operation cash flows, X_3= Cash conversion cycle, and ε = Error Term.

Table 21: Coefficients[a]

Model		Unstandardized Coefficients		Standardized T Coefficients		Sig.
		B	Std. Error	Beta		
1	(Constant)	1.341	1.023		1.312	.001
	Liquidity flow index	.321	.118	.213	2.636	.002
	Operation cash flows	.361	.125	.207	2.728	.000
	Cash conversion cycle	.334	.114	.211	2.947	.000

Predictor variables: (Constant), liquidity flow index, operation cash flows and cash conversion cycle

From the data in table 21, the established regression equation was

$$\mathbf{Y = 1.341 + 0.321X_1 + 0.361X_2 + 0.334\ X_3}$$

From the findings in the multiple regression, it showed that all the independent variables which includes; liquidity flow index, operation cash flows and cash conversion cycle had predictive value on the dependent variable (Performance of private learning institutions) meaning they were all statistically significant, since the P value is less than 0.05,

From the Unstandardized Coefficients, the model predicts that increase in liquidity flow index (0.321) results into maintaining liquidity hence adds value to an institution. These findings concurred with Soenen (1989), who found that an institution that faces variable demand adds value by maintaining liquidity to permit its operating flexibly since changes in operating levels are more expensive than changes in liquidity or working capital. Aggarwal (1989), also further found that under asymmetric information, a liquid institution was able to fund valuable projects that are difficult or costly to fund in financial markets. Hence increase in performance of learning institutions in South Nyanza region, holding other independent variables (operation cash flows and cash conversion cycle) constant. Furthermore, increase in operation cash flows (0.361) resulted into a positive cash flows which indicated how much cash the institutions had generated from operations during the financial year whereby there was an increase in performance of learning institutions in South Nyanza Region and contradicts that of Woodward (1997), who found that a negative cash flow to indicate how a technical insolvency problem that may go bankruptcy because of an additional cash being used to support the operations during the same period. Hence unable to finance its operations because of negative cash flow from operations. Thus the interpretation of these findings resulted into an increase in the performance of learning institutions in South Nyanza region while holding other independent variables (liquidity flow index and cash conversion cycle) constant. Finally, an increase in cash conversion cycle (0.334) resulted into an increase in performance of learning institutions because of the interval between actual cash payments and expenditures. Hence cash conversion cycle provided the institutions with valid alternatives for measuring their liquidity. These findings concurred with Lynch (2007), who found that the longer the time taken to get back the money paid out, the more the likely hood the institution is to face technical insolvency. Therefore, an increase in performance was realized in learning institutions in South Nyanza region holding other

independent variables (liquidity flow index and operation cash flows) constant.

On the other hand, Beta expresses the relative importance of each independent variable in standardized terms. Firstly, the results show that all the independent variables (liquidity flow index, operation cash flows and cash conversion cycle) are significant predictors because these three objectives confirm a close relationship that existed between them in relation to the time interval, measured time for generation of cash flow and the amount of cash flow that was available for meeting obligations within the same period. These results concurred with those of Kasilo (1997), Lynch (2007) and Soenen (1989) because of the time frame intervals exhibited. In conclusion, a multiple regression was run to predict the performance of learning institutions in South Nyanza region from the independent variables (liquidity flow index, operation cash flows and cash conversion cycle). These variables statistically, significantly predicted the performance of learning institutions in South Nyanza region. All four variables added statistically, significantly to the prediction, $p < .05$.

Table 22: Model summary

Model	R	R^2	Adjusted R Square	Std. Error of the Estimate	Sig
					0.000
1	.873	.7621	.762	.223	

Predictor variables: (Constant), Liquidity flow index, Operation cash flows and Cash conversion cycle

Dependent Variable: Performance of private learning institutions

R is the square root of R-squared and is the correlation between the observed and predicted values of dependent variable implying that the association of 0.873 between performance of private learning institutions and cash management practices which include liquidity flow index, operation cash flows and cash conversion cycle was strong.

Adjusted R squared is the coefficient of determination which tells us how performance of private learning institutions varies with variations in cash management practices which include liquidity flow index, operation cash flows and cash conversion cycle. From table 4.6.2, the value for R squared was 0.762 which implies that there was a variation of 76.2% on performance of private learning institutions with variation in liquidity flow index, operation cash flows and cash conversion cycle at a confidence level of 95%. This shows that 76.2% changes in performance of private learning institutions could be accounted to liquidity flow index, operation cash flows and cash conversion cycle. R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in table 4.6.2 was notable that there exists a strong positive relationship between the study variables as shown by 0.873. It was found out that the R squared of our model is 0.7621 with the adjusted $R^2 = .762$ that means that the linear regression explains 76.2% of the variance in the data. Due to the fact that difference between R square and Adjusted R square is small (0.0001) shows that the independent variables were precise.

Analysis of variance (ANOVA)

Table 23: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.178	10	.547	4.724	.0001[b]
	Residual	4.744	494	.113		
	Total	**6.922**	**504**			

Critical value =2.50

Predictor variables: (Constant), liquidity flow index, operation cash flows and cash conversion cycle. Dependent Variable: Performance of private learning institutions

From the ANOVA table, it shows that all the independent variables which includes; liquidity flow index, operation cash flows and cash conversion cycle helps to predict the performance of private learning institutions, (F= 4.724, P (.0005).

Summary

Liquidity flow index on performance of learning institutions

From the findings, it was revealed that management policies for cash management are set by the board of management and that management policies for cash management practices are set by the board of management. The study also established that the institutions have a formal overall policy for the management of its cash management practices and that the profit margins are moderately influenced in the institutions.

The study further established that institutions identify themselves with many banking institutions in terms of operating a bank account. Cash management practice therefore include but not limited to; budgeting, accounting, debt management, cash management, and other core sub-systems in financial management, which varies with institutions in which the system are integrated. In addition, studies indicate that other than aforementioned sub-systems, many countries and institutions often integrate as well as tax administration, asset management, procurement management, payroll systems, human resources, pension and social security systems.

The study also established that the scale of cash management systems could also vary and be limited to institution or country-levels for example the Ministry of Finance. However, common government institutions including local governments are meant to ensure that users effectively adhere to common standards, rules and procedures which have been meant to reduce the risks of mismanagement within respective institutions

The study further revealed that cash management practices are the most crucial task for business managers. The business becomes insolvent when it fails to pay back the money owed timorously, which is the primary reason for bankruptcy among businesses. The prospect of such an implication is to force businesses to efficiently manage their cash with caution. Proper cash management practices prevent bankruptcy, thereby increasing profitability and sustainability of businesses.

Cash conversion cycle on performance of learning institutions

The study established that the profit margins are moderately influenced by cash conversion cycles in the institutions. The study also established that the profit margin after deduction of total costs spent in most organization was averagely high.

The study revealed that management policies on cash management practices are annually reviewed. The study further established that it takes the institution to collect or convert resource inputs into cash flows for a duration ranging between 2 to 4 months.

The study established that in any organization, employee remuneration speaks a lot, in fact when employees are not well paid; they are likely not adopting positive approach towards their jobs thus in every learning institutions, the management ensures proper and realistic pay

packages that corresponds to respective work jurisdictions within which every employee is assigned, as this ensures that employee fraternity delivers to their utmost best, and with positive attitude now, within an institution, it was unbelievable that personnel responsible for handling finances are being paid peanuts, which is compared to a security officer using a toy gun to guard a bank.

The study further revealed that the importance of cash management systems by saying that it is vitally crucial to have a good knowledge of cash flows due to the uneven nature of the cash inflows and cash outflows. Institutions emphasizes that the single thing which can break a business can be the poor management of cash flow.

Operating cash flows on performance of learning institutions

The study established that institutions most sufficiently influence performance on an operating cash flow. The study also established that performance provide institutions with a clearer cash management practice of the current reality of the business operations. The study revealed that management of institutions investigate all substantial variations from norms such as cash register voids, refunds, errors and revenue levels.

The study established that profit margins after deduction of total costs spent in most organizations was averagely high. The study also revealed that cash management practice seeks to strengthen financial control and efficiency through timely and reliable financial information to auditors and other investigating and prosecutorial agencies. Hence greatly improves accounts, records and report practices. It is realistic to state that, when cash management practices work well, the banks find it easy to make automatic reconciliation and enhance closer monitoring of outstanding cash and bills in bank accounts.

The study established that cash management practice therefore include but not limited to; budgeting, accounting, debt management, cash management, and other core sub-systems in financial management, which varies with institutions in which the system are integrated. In addition, studies indicate that other than aforementioned sub-systems, many countries, and institutions often integrate as well as tax administration, asset management, procurement management, payroll systems, human resources, pension and social security systems. The study further revealed that institutions most sufficiently influence performance on an operating cash flow.

The study further established that management of institutions investigate all substantial variations from norms such as cash register voids, refunds, errors and revenue levels and that the amount of revenue forces institutions to monitor cash flow at individual performance level. The study also indicated that recognizing revenue was not always the same as collecting cash.

The study further established that public institutions' operating cash flow are the sum of cash flows from operations plus cash flows from non-capital financing activities. In private colleges and universities one can just look at cash flows from operations

The study also revealed that cash management practices are the most crucial task for business managers. The business becomes insolvent when it fails to pay back the money owed timorously, which is the primary reason for bankruptcy among businesses. The prospect of such an implication was to force businesses to efficiently manage their cash with caution. Proper cash management practices prevent bankruptcy,

thereby increasing profitability and sustainability of businesses.

Conclusions

From the findings the study established that liquidity flow index was positively significant to influence cash management practices thus the study concludes that liquidity flow index had positive influence on the performance of private learning institutions.

The study ascertained that cash conversion cycle, and other core sub-systems in financial management, which varies with institutions in which the system are integrated, aforementioned sub-systems, many countries and institutions often integrate as well as tax administration, asset management, procurement management, payroll systems, human resources, pension and social security systems thus the study concludes that cash conversion cycle had a positive impact on the performance of private learning institutions.

The study revealed that operation cash flows can be used to make sure that cash management practices are in line and proper operation cash flows also helps public institutions management to discover mistake at early stage thus the study concludes that operation cash flows has a positive impact on the performance of private learning institutions.

Recommendations

Based on the findings, the study recommends that the management on learning institutions should consider adopting liquidity flow index as a cash management practice. This allowed the management to create a comprehensive understanding that can be leveraged to influence stakeholders and create better decisions.

The study also recommends that, the organization adopt operation cash flows and cash conversion cycle as part of cash management practices as this helps the organization to gather valuable information that provides valuable insights in the management of cash in learning institutions as this effectively minimize any misappropriation of funds in learning institutions.

The study recommends that the management should have an effective cash management plan. This helps to identify internal and external credit risks which are likely to cause a significant increase in the budget, disruption of the schedule or performance problems. By identifying, avoiding and dealing with potential credit risks in advance, the organization can respond effectively to the challenges whenever they emerge. The senior management of the learning institutions therefore should develop and establish credit policies and credit administration procedures as part of overall cash management framework and get those approved from the board. Such policies and procedures shall provide guidance to the staff on various appropriate cash management practices to adopt.

Recommendations for further studies

This research had intended to establish the influence of cash management practices on performance of learning institutions in South Nyanza region. Other researchers may focus on the relationship between cash management practices and financial performance of public learning institutions in Kenya.

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