

Asian Journal of Economics, Business and Accounting

21(10): 97-105, 2021; Article no.AJEBA.71551

ISSN: 2456-639X

Exploration of Cash Flow Management for Enterprise's Business Performance

Emmanuel Makoji Egwu^{1*}, Fausat Ibidunni Orugun² and Abosede Adelakun¹

¹Faculty of Management Sciences, National Open University of Nigeria, Nigeria. ²Department of Banking and Finance, Kogi State University, Anyigba, Nigeria.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJEBA/2021/v21i1030435

<u>Editor(s):</u>

(1) Prof. Chun-Chien Kuo, National Taipei University, China.
<u>Reviewers:</u>

(1) Ren-Fang Chao, I-Shou University, China.
(2) Hussin Jose Hejase, Al Maaref University, Lebanon.
Complete Peer review History: https://www.sdiarticle4.com/review-history/71551

Original Research Article

Received 20 May 2021 Accepted 25 July 2021 Published 06 August 2021

ABSTRACT

The study explored cash flow management for enterprise's business performance. The study specifically investigated SMEs' fulfilment of financial obligations through cash flow management, and determines the influence of cash flow management strategy on their performance in FCT Abuja. Survey research design was used. Data were gathered and analysed using the descriptive method and regression analysis. Findings showed that cash flow management influences the fulfilment of financial obligations, and that cash flow management strategies influence the performance of enterprises in Abuja. The study concluded that cash flow is critical to the success of enterprises. The study recommended that owners and managers of enterprises in Abuja should improve on their cash flow management, and that policy makers should incorporate strategy in management of cash flow framework to enhance improved performance.

Keywords: Cash flow management; business performance; financial resources; working capital; financial obligation.

1. INTRODUCTION

Organizations are set up to design and execute certain goals and objectives ranging from wealth maximization, survival, growth and expansion among others. The successful execution of these goals and objectives is primarily anchored on the available financial resources. Machirori & Fatoki [1] posited that the financial resources are scare. It is with these resources that most of the activities concerning the organization are planned and executed. These resources enable the acquisition and replacement of fixed assets such as land, buildings, equipment, fixtures, fittings and furniture among others, and also ensure that sufficient part of it is available as working capital for the purpose of carrying out day to day operational activities. This working capital includes cash at bank and in hand, receivables (debtors), bonds, stock of raw materials. work-in-progress and finished goods [2].

The most important component of the working capital is the cash which can be described as representing funds available to an organization with which disbursements to discharge financial obligation can be made without any form of restriction. The cash may include items such as currency notes, coins, and bank balances. Sometimes marketable securities are included in determining cash balance because of its nature of being easily converted to cash. This resource is so important to an organization that its inadequacy can lead to disruptions in meeting day to day operational financial needs and fulfilling obligation to maturing debts. López-Gracia & Sogorb-Mira [3] acknowledge that financial obligations keep operations smooth. Failure to fulfill these obligations may spell doom for the organization as it may lead to insolvency and illiquidity.

Insolvency refers to a situation of inadequacy of a firm's realizable total assets to liquidate its long term and short term liabilities. Illiquidity refers to a situation of inability of a company to settle its maturing financial obligation as at when due. Put in another way a company is said to be solvent if the assets both fixed and current are of sufficient value when realized to settle the firm's long term and short term liabilities. According to Morrison [4], "the case of insolvency surfaces when there are reasonable grounds for suspecting that a company is unable to pay its debts, after taking into account contingent and prospective liabilities" (p.5). A company is also said to be

liquid if it is able to meet its financial obligations as they fall due.

The financial well-being of business organization can be ascertained through cash flow analysis. Myeni [5] expressed that the analysis of cash critical to the sustainability of flow is organizations. Dahmen and Rodríguez [6] argued that insufficient cash flow is one of the strong factors that have contributed to financial difficulties of organizations. There is presently growing preference of cash basis of appraisal of available funds which provide a better measure of operating performance than organization's profit and loss account and balance sheet. Cash flow information also serve as useful guide in alerting investors to significant changes in the organization financial condition.

Consequently, effective cash flow management is desirable in an organization to ensure synchronization between cash inflow (receives) and cash outflow (payments), availability of enough cash in excess of current requirement and seeking avenues to make up for shortages. This can best be achieved through strategies of cash planning, analysis of cash flows, determination of optimum cash levels and adequate dealing with surplus or shortages.

1.1 Statement of the Problem

Some business enterprises have not been doing well in Abuja. There is observed high rate of failure, particularly the 'Small and Medium-sized Enterprises' (SMEs). Cant & Wiid [7] posited that expressed dismay that the funding and support by government and other private individuals and organizations could not even avert the height of their failure. This is an indication that there is a problem of cash flow. Owners of the enterprises, particularly the SMEs, may have challenges with managing cash flow effectively. Haron, Yahya, & Haron [8] are of similar position that cash flow management is one of the most significant difficulties that SME owners face. Myeni [5] added that the overall business issue is that inadequate cash flow management is one of the leading causes of SME failure. There is possibility that the operations and performance of some SMEs in Abuja may be affected by cash flow management.

The earnings of some SMEs have been on the increase. Despite their growth in sales, resultant cash and information shows that sometimes the SMEs are unable to meet their financial

obligations to their suppliers and creditors. It is important to know that SMEs can fulfill financial obligations significantly through cash flow management. Also, there arises the need to conduct research to understand how SME owners employ cash flow management strategies for enhancing performance [9,10,11]. There is possibility that the performance of SMEs whose cash inflow is more than its cash outflow will be high.

According to Turyahebwa et al. [2], working capital management relies heavily on cash management. This working capital includes cash at bank and in hand, receivables (debtors), bonds, stock of raw materials, work-in-progress and finished goods. Working capital management can bring about improved SMEs' performance. Research in the subject matter with respect to Abuja still lacks attention. This study filled the gap.

1.2 Objectives of the Study

The main objective of this study was to assess cash flow management as an effective business strategy in enhancing business performance. This study would specifically:

- Investigate whether SMEs fulfill financial obligations through cash flow management.
- Determine the influence of cash flow management strategy on the performance of SMEs in Abuja.

1.3 Hypotheses of the Study

- **H₁:** Cash flow management has a positive and significant impact on financial obligations.
- H₂: Cash flow management has a positive and significant impact on performance of enterprises.

2. LITERATURE REVIEW

Cash could be described as representing funds available to a company with which disbursements can be made with a view of discharging its obligation without any form of hindrance. It may include items such as currency notes, coins and bank balances. Marketable securities may also be included in determining the cash balances due to its nature of easy convertibility to cash.

The timing for receipt of cash in an organization does not usually coincide with the timing for payments with cash. Thus, it is possible that at a certain period the amount of cash available may be far greater that the cash needs of the organization resulting to idle funds. There could be periods too that available cash would be insufficient to meet the cash needs of the organization thus resulting to some sort of disruption in business activities.

Consequently, due to the divergence in the cash flow pattern and its associated costs in the form of idle funds or insufficient funds it is imperative that the flow patterns of cash both in and out are studied so as to ameliorate the condition. This underpins the importance of cash flow management which is concerned with analyzing of cash inflows and outflows with a view of determining optimum cash balances to be held by the firm at a point in time.

A number of features of cash management make it assume greater importance than other current assets items of a business concern. Firstly, cash extremely important to an organization because it is readily available for discharging financial obligations and indebtedness. Secondly, its net present value is negative when kept idle thus can be regarded as the least productive asset. This is because keeping it idle would result to direct loss to the company as the interest income that would have been earned if invested would be lost. Thirdly, predicting cash flows correctly is difficult because there is no perfect matching between cash inflows and outflows of cash in a business. During some periods, circumstances such as payments for taxes, dividends, raw materials among others may cause cash outflows to exceed cash inflows. There are yet circumstances too which can cause cash inflows to exceed cash outflows at a particular time, for example large cash sales and accelerated debt collection.

Fourthly, the financial well-being of business organization can be ascertained through cash flows analysis. There is presently growing preference of a cash basis of appraisal of available funds over the traditional working capital approach by financial analysis. The contend that financial statements which provide information of a business organization's cash flows provide a better measure of operating performance than the organization's profit and loss account and balance sheet. Cash flow information also serves a useful guide in alerting investors to significant changes in the organization's financial condition.

Consequently, effective cash flow management is desirable in an organization to ensure synchronization between cash inflows (receipts) and outflows (payments), availability of enough cash in excess of current requirements and seeking avenues to make up for shortages. This can be best achieved through strategies of cash planning, analysis of cash flows, determination of optimum cash level and adequately dealing with surpluses of shortages.

Authors [such as 12,13] state that management involves trying make more from little, and averting wastage skillfully and proficiently. Everyone carried out a measure of management in his/her daily affairs; yet everybody is not a manager and everybody cannot be a manager in the context of management decision in the sense that management is a discipline that has to be learnt for effectiveness, since effectiveness is good management.

Easterby-Smith, Thorpe, & Jackson [14] opines that there is no precise agreement on what management is about. Cole & Kelly [15] added that "there is no generally accepted definition of 'management' but they consider it to be coordinated activities (forecasting, planning, organizing, deciding, commanding) to direct and control an organization." While some say that management is about planning, organizing, staffing, directing, coordinating, reporting and budgeting (POSDCORB), others believe that management is the ability to make right decisions in conditions of uncertainty, decisions that will work (satisfying) within the given constraints [16] rather than seeking for the best possible decisions that might be made in any circumstances. Management has to do with performing the role of forecasting, planning, organizing, implementing and monitoring (FPOIM). Jones & George [17] posited "management, then, is the planning, organizing, leading, and controlling of human and other resources to achieve organizational goals efficiently and effectively." Implied in this definition is the fact that management involves managing our time and others as well as us. In doing this we have to ensure that performance conforms to plan and that what is been planned is accomplished.

Fundamentally, management principles and concepts are universal. No matter how management is defined; the manager regardless of the level in the organization must posses' three basic skills. These are technical skills,

human relations skill and conceptual skills; he further stressed that though the importance of each skill varies at different managerial levels [16]. Jones (1999) has defined management as the process by which individuals and group efforts are coordinated towards group goals. This definition is in line with the very popular and often-quoted definition of Mary Parker Follet quoted by Graham [18] as "Management being the act of getting things done through other people". This definition will always be accepted anytime alongside Kurtz's [19] definition that "Management is the achievement organizational objectives through people and other resources available at a time" (p. 254).

3. RESEARCH METHODOLOGY

This research is quantitative of a survey type using descriptive research method. The target population of the study consisted of the owner/managers of SMEs. The total population of SMEs in is 2,825. These were SMEs that are registered in Abuja. Computation premised on the formula below:

$$n = \frac{NZ + (s_e)^2 x (1 - P)}{N_{S_e} + Z^2 x P (1 - P)}$$

Where n = sample size N = total number of population Z= the standard value (2.58) of 1% level of probability with 0.99 reliability Se= Sampling error (0.01) p = the population proportion

$$n = \frac{2,825(2.58) + (0.01)^2 x (1 - 0.5)}{2,825(0.01) + (2.58)^2 x 0.5(1 - 0.5)}$$

N= 243.647646093314 (244 approximately)

For this study, stratified random sampling technique was used. Data were analysed using both descriptive and inferential analytical techniques. Hejase & Hejase [20] contend that descriptive statistics deals with "describing a collection of data by condensing the amounts of data into simple representative numerical quantities or plots that can provide a better understanding of the collected data" (p. 272). The inferential technique that was employed is regression analysis.

4. DATA ANALYSIS AND RESULT

Results show that 44.7% (109 out of 244) of the respondents were female and 55.3% (135 out of

244) were male. Hence, the majority of the entrepreneurs in Abuja were males.

Table 1 shows that 28 respondents (11.5%) were less than 20 years; 95 respondents (38.9%) were within 21-25 years; 77 respondents (31.6%) were within 26-30 years; 20 respondents (8.2%) were within 31-35 years; 6 respondents (2.5%) were within 36-40 years; 8 respondents (3.3%) were within 41-45 years; and 10 respondents (4.1%) were 46 years and above. The implication of the result is that the youthful age range of 20 to 25 dominates the business environment in Abuja.

Table 2 shows that 71 respondents (29.1%) have below 10 years business experience; 98 respondents (40.2%) have 11-15 years business experience; 49 respondents (20.1%) have 16-20 years business experience; and 26 respondents (10.7%) have 21-25 years business experience.

As for the financial obligations of the SMEs, Table 3 shows the average value of minimum payments on a loan (mean= 1.6885) with standard deviation (SD= .69189); and this showcases little divergence from the mean. The average value of the 'on-time payment of bills' is 1.7582 with a standard deviation of .84798, indicating that the data also scattered around the mean. The mean score 'care of financial needs' is 1.6803, and the standard deviation is .68212. The standard deviation shows a lesser divergence from the mean. The results show the average value of 'owing of huge debt' (mean= 1.7705) with standard deviation (SD= .72335). The data also spread around the mean. By ranking the mean, majority of SMEs appear to have huge debt to pay. The second on the mean ranking is on-time payment of bills. This may imply that the owners of the enterprises often secure loan to pay bills or have many bills that are not cleared. This has great implication for policy making and projected cash flow.

Table 4 reveals that SMEs based their Cash Flow Management mainly on money flow through the business (given the mean= 1.6352; standard deviation= .54636); acquisition of raw materials, equipment or tools for operations (given the mean= 2.6803; standard deviation= 1.31322); income, corporation, value added tax payment as well payment of other tax obligations (given the mean= 2.8402; standard deviation= 1.35289); and increasing bank overdrafts and loans of the enterprises (given the mean= 2.9426; standard deviation= 1.32590). The coefficients skewness of the variables suggest that the data are positively skewed and did not comply with the symmetrical distribution assumption. Only the data meant for 'increasing bank overdrafts and loans of the enterprises' are negatively skewed and comply with the symmetrical distribution assumption.

Table 5 shows that with a standard deviation of 1.23260, the estimated mean value of 'regular cash flow analysis' is 2.9139, signifying that the data on both sides diverges from the mean. The standard deviation is high, and implies that the data on 'regular cash flow analysis' scattered out. The skewness statistics of -0.127 indicate that the data were negatively skewed and fulfilled the assumption of asymmetric distribution. The mean value of 'tackling of late payments with an incentive' is 3.3402 and the standard deviation is 1.26486. This implies more data divergence from the mean. The -0.540 for skewness statistics shows more compliance with the assumption of asymmetric distribution. Moreover, 'making payment easier for customers' has higher variation prospect. The mean value (making payment easier for customers) is 3.2828 and the standard deviation is 1.34484. This means more data divergence from the mean. The coefficient of skewness of -.415 suggests that the data is negatively skewed and did comply with the symmetrical distribution assumption.

Summarize the above!!!

Table 1. Age of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 20 Years	28	11.5	11.5	11.5
	21-25 Years	95	38.9	38.9	50.4
	26- 30 Years	77	31.6	31.6	82.0
	31-35 Years	20	8.2	8.2	90.2
	36- 40 Years	6	2.5	2.5	92.6
	41- 45 Years	8	3.3	3.3	95.9
	> 46 Years	10	4.1	4.1	100.0
	Total	244	100.0	100.0	

Source: Field Survey (2021)

Table 2. Years of experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 10 Year	71	29.1	29.1	29.1
	11-15 Years	98	40.2	40.2	69.3
	16-20 Years	49	20.1	20.1	89.3
	21-25 Years	26	10.7	10.7	100.0
	Total	244	100.0	100.0	

Source: Field Survey (2021)

Table 3. Descriptive statistics of financial obligations

	N	Mean	Std. Deviation
Made only minimum payments on a loan	244	1.6885	.69189
Paid all bills on time	244	1.7582	.84798
Take care of financial needs	244	1.6803	.68212
Owing huge debt	244	1.7705	.72335

Source: Field Survey (2020)

Table 4. Descriptive statistics on the cash flow management

	Mean	Std. Deviation	Ske	ewness
	Statistic	Statistic	Statistic	Std. Error
The flow of money through the business	1.6352	.54636	.056	.156
Acquisition of raw materials, equipment or tools for the company's operations	2.6803	1.31322	.091	.156
Income, corporation, Value Added Tax payment as well payment of other tax obligations	2.8402	1.35289	.072	.156
Increasing bank overdrafts and loans of the company	2.9426	1.32590	108	.156

Source: Field Survey (2021)

Table 5. Descriptive statistics on cash flow management strategies

	Mean	Std. Deviation	Ske	wness
	Statistic	Statistic	Statistic	Std. Error
Conduct a regular cash flow analysis	2.9139	1.23260	127	.156
Tackle late payments with an incentive	3.3402	1.26486	540	.156
Make payment easier for customers	3.2828	1.34484	415	.156

Source: Field Survey (2021)

Table 6. Model Summary on cash flow management and financial obligations

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.817 ^a	.668	.667	.73393

a. Predictors: (Constant), Cash Flow Management

Table 6 shows that the coefficient of determination R^2 is 0.668; implying that cash flow management explains the variation in the financial obligations of enterprises by 66.8%. Thus, the remaining 33.2% indicates that there are other variables that can explain the variations in the financial obligations of enterprises in Abuja. The R^2 value is observed to be above 50%; this means that enterprises have been able to fulfill financial obligations through cash flow management strongly.

Table 7 shows that according to the analysis of variance, the F-statistics to be 487.484 at the significant level of 0.01. This expresses a good model fits, and that supports strongly the variations in the financial obligations. The table also indicates that cash flow management explains the variation in the financial obligations of enterprises significantly.

The Coefficients in Table 8 shows that cash flow management has linear relationship with financial obligations (β = 0.792; sig< 0.01). This implies that if there is an increase of 1unit standard deviation in the predictor (cash flow management), the dependent variable (financial obligations) will increase by 79.2% of a standard deviation, that is, a change in cash flow management will bring about a positive change in financial obligations.

Table 9 shows that cash flow management strategies determine the variation in the performance of enterprises (R^2 = 0.228). This implies that cash flow management strategies explain the variations in the performance of enterprises by 22.8%. There is observed weakness in the coefficient of determination (R^2), since it is below 50%. The remaining 77.2 unexplained variation shows that there is other colossal range of variables that can account for variation in the performance of enterprises in Abuja.

Moreover, results of analysis of variance analysis shows the F-statistics to be 71.641 at the significant level of 0.01. This expresses a good model fits, and that supports strongly the variations in the performance of enterprises. That is, cash flow management strategies explain the variation in the performance of enterprises significantly.

Table 10 shows that a linear relationship exists between cash flow management strategies and performance of enterprises (β = 0.847; sig< 0.01). The result proves that if there is an increase of 1 unit standard deviation in the predictor (cash flow management), the dependent variable (performance of enterprises) will increase by 84.7% of a standard deviation, that is, a change in cash flow management will bring about similar a positive change in performance of enterprises.

Table 7. ANOVA on cash flow management and financial obligations

Mod	del	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	262.582	1	262.582	487.484	.000 ^b
	Residual	130.353	242	.539		
	Total	392.934	243			

a. Dependent Variable: Financial Obligations, b. Predictors: (Constant), Cash Flow Management

Table 8. Coefficients on cash flow management and financial obligations

M	odel	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		В	Std. Error	Beta			
1	(Constant)	1.362	.107		12.732	.000	
	Cash Flow Management	.792	.036	.817	22.079	.000	

a. Dependent Variable: Financial Obligations

Table 9. Model Summary on cash flow management strategies and performance of enterprises

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
_ 1	.478 ^a	.228	.225	1.07943

a. Predictors: (Constant), Cash Flow Management Strategies

Table 10. Coefficients on cash flow management strategies and performance of enterprises

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		В	Std. Error	Beta		
1	(Constant)	1.406	.183		7.700	.000
	cash flow management strategies	.847	.100	.478	8.464	.000

a. Dependent Variable: Performance of Enterprises

5. DISCUSSION OF FINDINGS

Finding shows that cash flow management significantly influences the meeting of financial obligations. Enterprises that effectively manage their cash flow have the tendency of meeting their financial obligations. The finding advances the assertion of Odeyinka, Lowe & Kaka [21] that cash flow is essential to meeting any financial obligations. The present study is able to assert that there is need for effective management of cash flow. The study is able to ascertain that cash flow management is the reason why some enterprises have been able to meet their financial obligations.

Finding shows that cash flow management strategies have significant influence on the performance of enterprises in Abuja; but the influence appears to be weak. The result shows that the linear relationship between cash flow management strategies and performance of enterprises is strong. This is an indication that enterprises in Abuja can increase their performance with adoption of effective cash flow management strategies. This finding advances that of Nangih, Ofor, & Ven Onuorah [22] that cash flow from financing activities had positive and significant influence on firm performance. The finding also advances that of Adjei, Fugar, Adinyira, Edwards, & Parn [23] that cash flow factors influence profitability.

6. CONCLUSION

Cash flow is critical to the success of enterprises. It is the lifeline of every enterprise. When an enterprise fails for financial reasons, this may be traced to insufficient cash flow or lack of effective management. There is need for owners or managers to effectively track the flow of finance in and out of the enterprises. This has great implications for success. This study has been able to provide empirical evidence that cash flow management can influence the meeting of financial obligations. Importantly, evidence

emerged that cash flow management strategies have significant influence on the performance of enterprises in Abuja.

7. RECOMMENDATIONS

The study recommended that:

- Owners and managers of enterprises in Abuja should improve on their cash flow management; as this can greatly influence the fulfilment of financial obligations.
- ii. Policy makers should incorporate strategy in management of cash flow framework to enhance improved performance of enterprises in Abuja.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- Machirori T, Fatoki O. The impact of networking on access to debt finance and performance of small and medium enterprises in South Africa. Journal of Economics. 2013;4(2):97-104. Available:http://www.krepublishers.com
- 2. Turyahebwa A, Sunday A, Ssekajugo D. Financial management practices and business performance of small and medium enterprises in western Uganda. African Journal of Business Management. 2013;7:3875-3885.

DOI:10.5897/AJBM2013.6899

- López-Gracia J, Sogorb-Mira F. Financial constraints and cash-cash flow sensitivity. Applied Economics. 2014;47(10): 1037–1049.
 - DOI:10.1080/00036846.2014.987918
- Morrison D. When is a Company Insolvent? The University of Queensland, TC Beirne School of Law Legal Studies

- Research Paper Series, Research. 010; 10-09
- 5. Myeni SS. Cash-Flow Management Strategies in Small and Medium-Sized Occupational Health Enterprises. Doctoral Dissertation: Walden University; 2018.
- Dahmen P, Rodríguez E. Financial literacy and the success of small businesses: An observation from a small business development center. Numeracy. 2014;7(1): 1-12.
 - DOI:10.5038/1936-4660.7.1.3
- Cant MC, Wiid JA. Establishing the challenges affecting South African SMEs. International Business & Economics Research Journal. 2013;12:707-716. DOI:10.19030/iber.v12i6.7869
- 8. Haron N, Yahya S, Haron H. Cash flow information and small enterprises' performance. International Journal of Organizational Innovation. 2014;7:7-17. Available:http://www.academia.edu
- 9. Uwonda G, Okello N, Okello NG. Cash flow management utilization by small medium enterprises (SMEs) in northern Uganda. MERIT Research Journal of Accounting, Auditing, Economics and Finance, 2013;1(5):67-80.

 Available:http://meritresearchjournals.org
- Kroes JR, Manikas AS. Cash flow management and manufacturing firm financial performance: A longitudinal perspective. International Journal of Production Economics. 2014;148:37-50. DOI:10.1016/j.ijpe.2013.11.008
- Mazzarol T. Research review: A review of the latest research in the field of small business and entrepreneurship: Financial management in SMEs. Small Enterprise Research. 2014;21(1):2-13. DOI:10.5172/ser.2014.21.1.2
- Šotić A, Rajić R. The Review of the Definition of Risk. Online Journal of Applied Knowledge Management. 2014; 3(3):17-26.
- Sule JG, Ogbadu EE, Nafiu AT. factor analysis of total quality management

- adoption by SMEs in Nigeria. Facta Universitatis Series: Economics and Organization. 2016;13(4):365 377. DOI: 10.22190/FUEO1604365S
- Easterby-Smith M, Thorpe R, Jackson PR. Management and Business Research (5th Edition). London: SAGE Publications Ltd; 2015.
- Cole GA, Kelly P. Management Theory and Practice (8th edition). Andover: Cengage Learning EMEA; 2015.
- Hejase HJ, Hejase AJ, Hejase HANJ. Quantitative methods for decision makers: Management approach. Beirut, Dar Sader Publishers; 2012.
- Jones GR, George JM, Contemporary Management (10th edition). New York: McGraw-Hill Education; 2018.
- 18. Graham P. Mary Parker Follett: Prophet of Management. Boston: Harvard Business School Press; 1995.
- Kurtz, David L. Contemporary Business. Hoboken, NJ: John Wiley & Sons; 2011.
- Hejase AJ, Hejase HJ. Research methods: A practical approach for business students (2nd Edition). Philadelphia, PA, USA: Masadir Inc; 2013.
- Odeyinka HA, Lowe J, Kaka AP. Artificial neural network cost flow risk assessment model, Construction Management and Economics, 2013;31(5):423-439, Available:http://dx.doi.org/10.1080/014461 93.2013.802363.
- 22. Nangih E, Ofor TN, Ven Onuorah JKJ. Cash Flow Management and Financial Performance of Quoted Oil and Gas Firms in Nigeria. Journal of Accounting and Financial Management, 2020;6(4): 1-12.
- Adjei EA, Fugar FDK, Adinyira E, Edwards DJ, Parn EA. Exploring the significant cash flow factors influencing building projects profitability in Ghana. International Journal of Construction Engineering and Management. 2018;7(1): 35-46.

DOI: 10.5923/j.ijcem.20180701.04

© 2021 Egwu et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
https://www.sdiarticle4.com/review-history/71551