

Measurement Model of Co-Ordination Mechanism in Uganda's Local Governments

Ibrahim A. Musenze
Phd Candidate, Makerere University (MUBS)

Prof. Joseph Ntayi
Faculty of Computing and Management Science, Makerere University Business School

Prof. J.C Munene
Makerere University

Abstract

Multi level confirmatory analysis was used to evaluate the factor structure underlying the 21-item four factor co-ordination scale at the Local Government level. Results from 212 Local Governments supported a correlated 4 factor model at each levels and indicated that the item loadings were not significantly ($p < 0.05$) different across levels. There was strong Convergent Validity for the four factor co-ordination scale (composed of plan, mutual adjustment, direct supervision and standardization) indicated with a higher NFI value of .945. These multi-level results provide support for the construct validity of the scores from co-ordination mechanism scale.

Keywords: Local Governments; Co-ordination Mechanisms; Confirmatory Factor Analysis

Introduction

This study sought to investigate and evaluate the factor structure underlying co-ordination mechanisms in Uganda at the Local Government level, and to test the association between different dimensions central to the model of co-ordination mechanism in Uganda's Local Government. This is because one of the key issues of new public sector management and organisational debate, as well as government practice is the requirement to achieve the whole of government's capacity to generate quality services (Christensen & Laegreid, 2007). Specifically, the existence of multiple dependencies such as shared resources (computers, operating service delivery manuals, to mention but a few), task assignments, and information flow in Local Governments, call for appropriate co-ordination mechanisms, only if Local Governments are to have the capacity to meet their mandate of delivering quality services with efficiency and effectiveness (Malone & Crowston, 1994; Lewis & Talalayeyski, 2004).

The current distributed Local Government expertise, resources, information flow, new waves of information and communication technologies, increasing public expectations for integrated services, complexity of policy challenges, budgetary pressures and challenges to reconstitute political primacy, all justify the move towards focus on appropriate co-ordination mechanisms (Bouckaert et' al 2010).

The momentum for co-ordinated action within the Government of Uganda's context is traced to 2001 arising from the dire necessity for donor budgetary support in view of the then widening budgetary deficits. This required donor participation in activities of all sectors, for example, budget consultations, institution of co-ordination forums to facilitate actor working relationships and information exchange in regard to implementation of tasks (Ministry of Finance, Planning and Economic Development, 2001a and b). Further motivation for this study, emanates from the fact that despite the role of Local Governments in quality service delivery, there is no apparent empirically confirmed measures of co-ordination mechanisms specific to Uganda's Local Governments that would work as standards for co-ordination mechanisms in Local Government service sector.

Local Governments have been earmarked as effective governance institutions relevant in improving the quality of life through delivery of quality services to the public that are compatible with local needs and expectations (Agagu, 1997; Oates, 2005). The relevancy of Local Government institutions is well articulated by the Republic of Uganda's 1995 Constitution and Local Government Act (CAP 243), which place Local Governments at the centre for value generation and delivery of quality service to the people. Co-ordination in Local Governments is accordingly, driven majorly by the above legislative framework, as actor's co-ordination processes are shaped by broader set of laws and regulations (Christensen et' al., 2007). The considerable importance attached to Local Governments as evidenced above, call for the Government of Uganda to focus more on appropriate co-ordination mechanisms to ensure that Local Governments fulfil their mandate of quality service delivery and in a sustainable manner.

Central to this study, is the fact that Local Governments' ability in attainment of their mandate, can better be achieved through a well formulated structure of co-ordination mechanisms, and this study positions itself as relevant to Local Government Management as well, as to the diverse array of literature on co-ordination. Health & Stauden Mayer (2000), and Galbraith (1973), have for instance, noted that earlier work on co-

ordination has focused on performance of single task activity, and revolved around organisational structure, ignoring the process aspect of co-ordination in spite of its importance (Kellogg et al., 2006; Ring & van de Ven 1994). This stream of literature in its entirety, does not provide sufficient agreement to the exact structure for relevant co-ordination mechanisms sufficient to permit Local Governments realise their local broad mandate. It is on this background, that we are persuaded to test the co-ordination mechanism measurement model.

Literature Review

Co-ordination mechanisms

Ballard & Seibold (2003), define co-ordination purely as a joint attainment of individual goals through supportive process. Quinn & Dutton (2005) on the other hand, perceive co-ordination as a process through which actors organise their actions in a manner that they believe will permit them to achieve their goals. A broader conceptualisation of co-ordination has been given by Faraj & Xiao (2006) in which co-ordination is regarded as the integration of organisational work under conditions of task interdependence.

According to Faraj & Xiao (2006), co-ordination is a temporal and situational process of input regulation and interface to realise joint concert and routine. Based on this conceptualisation, co-ordination can be viewed within the lens of systems theory that explains how diverse set of activities and individual behaviour of Local Governments' actors are managed with a view of achieving a common goal (Laarman, 1999; Midgley, 2003; Leischow et al., 2008; Ivery, 2007).

Co-ordination mechanisms on the other hand describe organisational schedules, engagements or arrangements that facilitate individuals to achieve collective routine and performance (Okhuysen & Bechky, 2009). They therefore, represent organisational strategies through which organisational tasks are accomplished. Co-ordination mechanisms, have also been conceptualised as administrative tools that facilitate integration among different organisational units (Martinez & Jarillo (1989). According to Mintzberg (1989), co-ordination mechanisms (which are either formal or informal) represent the essential aspects of structure in organisations.

In co-ordination literature, these organisational strategies, or arrangements in most scenarios comprise of instruments or tools and connections that bring together interdependent components. In a Local Government setting for example, co-ordination mechanism include quality service delivery arrangements that require bringing materials to workers in a defined chain, or progression and the roles that describe tasks of interdependent actors.

Research on co-ordination mechanism is basically characterized or typified by conceptual development of co-ordination mechanisms supported by a range of organisational theories: for example, the systems theory (Aronson, 1998; Ivery, 2007); the Agency theory (Jensen and Meckling 1976; Jansen, 1993); Institutional theory (Powell & Dimaggio, 1991; Meyer 1997, Scott, 2001). Based on theoretical assertions, basically, four fundamental co-ordination mechanisms have been pointed out in theory: Plan (Thompson, 1967; March & Simon, 1958; Crowston, 1997, Scott & Davis, 2007; Van de Ven, Dellbecq & Koenig 1976); Direct supervision (Mintzberg 1979; Van de Ven, Dellbecq & Koenig 1976; & Klein et al 2006); Standardization (Mintzberg 1979; Thompson, 1967; Martinez & Jarillo 1989); and Mutual Adjustment (March & Simon 1958; Thompson 1967, Martinez & Jarillo 1989; Faraj & Xiao, 2006).

According to the above authors, plans are conceptualised as functional elements of formal organisations that are considered as vital to organizing. Management is therefore seen as fundamental in the generation of these plans, which later are passed over to action centres for implementation. According to Okhuysen & Bechky (2009), extant literature on co-ordination places, plans in constricted, or narrow perspective with importance on potential preparation for task accomplishment.

Direct supervision describes a process where co-ordination is achieved arising out of one individual taking responsibility for others' work. In this regard, the supervisor issues instructions and regularly monitors actions of others, as they perform the assigned tasks. This monitoring framework is based on the agency theory (Jensen & Meckling, 1976), concerning study of potential problems of Principal – Agent relationship that arise from conflicting goals. Based on this theory, it becomes relevant for Local Government managers to employ the weapon of direct supervision of the subordinates who may consider opting for adverse measures in the event of principals' failure to satisfy their interests. Mutual adjustment requires that co-ordination of work is made possible through a process of informal communication between the people undertaking the dependent work. The actors simply adapt to each other as the work progresses.

Standardization of (work processes, output, skills and knowledge, and above all norms) has been well articulated in literature as cardinal co-ordination mechanisms. Standardization of work processes occurs where co-ordination is made possible by specifying work content in rules and routines to be followed. Rules are therefore necessary as they establish relationship between multiple organisational parts besides forming basis for choice between options when disagreements occur (Okhuysen & Bechky 2009).

Standardization of output occurs through communication and clarification of expected results. In view of this, it is considered a goal setting method since it does not detail individual's actions necessary for the

realisation of the goal. Standardization of skill is achieved when a particular kind of training is required to perform the specified work. This mechanism is thus facilitated through training and education. This strategy allows actors to coordinate in almost a similar fashion. Finally, Standardization through norms requires reliance on socialisation to establish uniform, or common values, and beliefs that permit individuals to work towards a common expectation. This cultural based co-ordination mechanism, was indeed a late addition by Mintzberg (1998).

Within in Uganda's Local Government setting, there are a number of departments that should interact so as to facilitate implementation of service delivery policies. This arrangement has necessitated the Government of Uganda to establish an elaborate co-ordination framework. For instance in a district, all Heads of department directly report to Chief Administrative Officer (the head of civil service in a district), thus making him/her, the overall coordinating centre. The Chief Administrative Officer, coordinates his/her activities through District's coordinating central agencies like District Capacity Building Units, District Technical Planning Committees and the District Service Commission (an independent statutory body charged with the responsibility entry, retention and exit of staff), which execute Local Government's co-ordination priorities (Savoit, 1995).

The Local Government Management Service Delivery Manual (2011), establishes capacity building unit tasked with co-ordination of capacity building programmes and it is coordinated by the Principal Human Resource Officer. This officer ensures programme planning, supervision and monitoring, direction of resource allocation, and integration of department and lower level capacity building activities into overall capacity building plan which translate into a mechanism through which the district executes its capacity building programmes. In order to impart skills and required knowledge, Local Governments have embraced the notion of standardization of knowledge and skills through regular training of Local Governments bureaucrats. In this regard, we borrow from Mintzberg's theoretical assertion that standardization of knowledge and skill is paramount for co-ordination success (Mintzberg, 1976). Similarly, Central Government has issued standardization recruitment guidelines to permit uniformity of skills and knowledge of Local Government actors (Job description and specification for jobs in Local Governments 2011).

The Local Government Act CAP (243), establishes the District Planning Committee which is chaired by the Chief Administrative Officer. Its composition includes: heads of department, section heads, and any other member as may be officially co-opted by the Chief Administrative Officer. This institution is an effective co-ordination mechanism central to Local Government planning endeavours. During planning, there is a lot of information exchange among interacting Local Government actors which facilitate the process of co-ordination. The Technical Planning Committee assist in dealing with cross cutting issues as it brings on board principal Local Government actors in the arena of service delivery there by acting as a coordinating link among multiple Local Government actors (Fournier, 1987).

Extant literature on co-ordination has however focused more on performance of a single task activity and revolved on co-ordination as a structure (Galbraith, 1973; Heath & Stauden Meyer,2000), but has sparsely considered the process aspect of co-ordination in spite of its importance (Kellogg et al.,2006; Ring & Van Deven,1994). This thread of literature only is limited in providing sufficient agreement to the exact shape for necessary co-ordination mechanisms relevant to permit Local Government to achieve its broad mandate. This necessitates a study to test co-ordination mechanism's measurement model in the context of Uganda's Local Government setting. Hence in this study, we hypothesize as follows:

H₁: There is a significant relationship between co-ordination mechanism's factor structure of observed variables and their underlying latent variables in Uganda's Local Governments

Methodology

The study employs across section study design to provide answers to the formulated hypothesis. A total sample of 302 Local Governments for this study was generated based on the rule of the thumb as suggested by Krejcie and Morgan (1970). This sample was drawn from a total population of 1448 Local Governments in Uganda which are registered members of Uganda Local Governments Association. Since Local Governments are distributed under five layers/types; District Councils, Municipal Councils, Municipal Division Councils, Town Councils and Sub County Councils , we relied on proportionate stratified sampling, to sample 23 districts, 04 Municipal Councils, 13 Town Councils, 13 Municipal Division Councils and 227 Sub Counties. Thereafter, using simple random technique, we wrote all names of Local Governments and placed them in marked bowls, from where we drew simple random samples without replacement, until we achieved the number of 302. The unit of analysis was the Local Government whose heads of department and section heads comprised, the unit of inquiry.

Based on Gay's (1987) suggestion, this study accepted a Local Government with a minimum of 3 respondents. A total of 212 Local Governments responded translating into a response rate of 63 percent which was judged sufficient for this study.

Measures of Co-ordination Mechanisms

We identified measures of co-ordination mechanism as: plan, direct supervision, mutual adjustment and standardization based on the works of March and Simon (1958) and Mintzberg (1979). These were anchored on a six point Likert scale (1-6) designed to measure such mechanisms.

Statistical Modelling

To estimate the model, we relied on Structural Equation Modelling (SEM). SEM is a multi-purpose statistical modelling tool that is used to test hypotheses about casual relationships among observed and latent variables (Lei & Wu, 2007). Structural Equation Modelling (SEM) takes a confirmatory procedure to multi – variate analysis of a structural model, one that specifies casual relations among a series of variables so as to ascertain whether a prior hypothesized model is in agreement with the collected data (Lei & wu, 2007).

We performed Confirmatory Factor Analysis (CFA) so as to determine whether the hypothesized co-ordination mechanism factor structure, provides a good fit of the data (Hoe, 2008), based on a sample of 212 Local Governments. The current study employs AMOS 19, because the cases exceed 200 which is the recommended cut off (Kline 2005). The Chi-square statistic which is a test measure for model fit, requires that a model is rejected if the $p < 0.05$. Other scholars such as Garvar & Mentzer (1998); Bentler, (1990); Lei & wu, (2007) recommend NFI, CFI, IFI, GFI, should be above 90 for a good fit, RMSEA < 0.08, which indicates acceptable fit; while, the Chi-square statistic should not be significant ($p > 0.05$). We accordingly followed these benchmarks in fitting our co-ordination mechanism model.

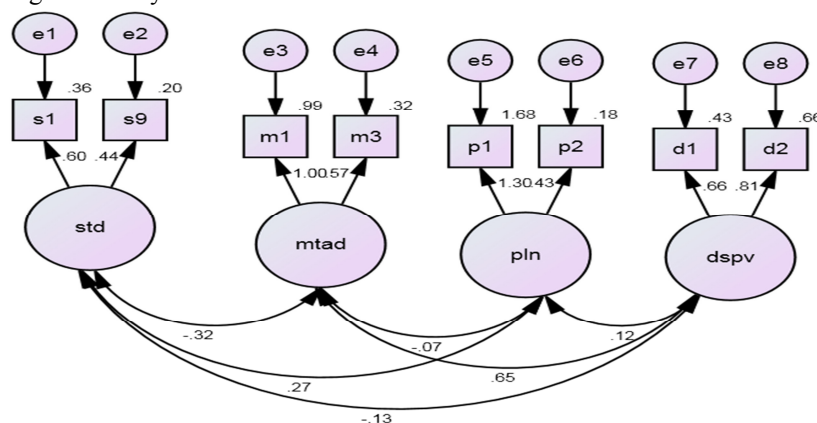
Results

We hypothesized a four factor model to be confirmed in the measurement proportion of the model. Using box plots and Mahalanobis Distance procedure, there were no observed outliers. Initially, the model did not sufficiently fit the data (NFI = 829; IFI = .871; TLI = .569 CFI = .856, RMSEA=.109). These results necessitated post-hoc modification, which we performed. Subsequent results of analysis indicated a significant relationship between co-ordination mechanism structure of observed variables and their underlying latent variables in Uganda’s Local Government as reflected in Figure 1, and Table 1 respectively. The co-ordination mechanism model hypothesized in this study indicated an NFI of .945 which demonstrates strong convergent validity (Arbuckle, 2010; Hair, *et al.*, 1998). Additional supplementary evidence is indicated by the RMSEA of 0.48, NFI = .945, IFI = .981, TLI = .961, CFI = .981 GFI = .977

In view of the above fit indices, co-ordination mechanism structure is confirmed in respect to Local Governments in Uganda.

The unstandardized loadings in Table 1, aside with the Critical Ratio and p -values are also used to show level of statistical significance. The critical value should be greater than 1.96 and p -value should be less than 0.05 to signify statistical significance. In the instant case, all the estimates that were not constrained appear to be significant, while all other indicators had sufficiently large standardized loadings with R^2 values ranging from moderate to strong regressions.

Convergent validity can also be evaluated by assessing the factor loadings. The observed factor loadings, contrasted with its standard errors, indicate evidence of relationship between co-ordination mechanisms and its dimensions of plan, standardization, mutual adjustment and direct supervision (Bentler & Bonnet, 1980). As displayed in Table 1, the observed loadings of all items are statistically significant ($p < 0.01$). Discriminant validity was evaluated based on Average Variance Extracted (AVE) which accordingly to Fornell & Larcker (1981) should be greater than 0.5. In this case, it was 0.60 which is a demonstration of satisfactory and tolerable convergent validity.



NFI = .945; IFI = .981; TLI = .961; CFI = .981; AGFI = .940; GFI = .977; RMSEA = .048

Table 1 Path Coefficients for Co-ordination Mechanism

Path	Unstandardized path coefficient	CR	Standardized path coefficient	R2	AVE	<i>p</i>
S1 ← std	1.000		0.599	.66	0.602	.
S9 ← std	1.111	2.480	0.443	.43		0.013
S1 ← pln	1.000		1.296	.18		
P2 ← pln	.284	1.675	0.426	1.68		0.09
d1 ← Dir	1.000		0.657	.32		
d2 ← Dir	1.590	7.237	0.818	.99		0.001
M1 ← Mut	1.000		0.996	.20		
M3 ← Mut	.504	5.811	0.570	.36		0.001

Table 2 Co-ordination Mechanisms in Uganda's Local Governments

Co-ordination Measure		Specific Mechanism Item	Code Per Analysis (Notation)
Standardization	1.	Team members know of their performance expectations	S ₁
	2.	I often find myself duplicating work already done by others	S ₉
Plan	1.	There are technical planning committees in place	P ₁
	2.	Work plans are generated before work is done	P ₂
Direct supervision	1.	Local Government projects like classroom construction are regularly monitored.	d ₁
	2.	There are no disagreements in my team about who should be doing what task.	d ₂
Mutual Adjustment	1.	I have no difficulty in accessing information from my team members when I need it.	M ₁
	2.	I receive required information from my colleagues in group on time.	M ₂

Discussion

The study purpose was to assess the factor structure underlying a four factor co-ordination mechanism scale in Uganda's Local Governments, on one hand, and to assess the relationship between specific dimensions of co-ordination mechanism model on the other. Results allude to the view that co-ordination mechanisms is a combination of factors (adjustment, direct supervision, standardization and plan) hence a broad encompassing variable.

The study illustrates that among those factors or indicators are; plan, mutual adjustment, direct supervision and standardization and these dimensions account for co-ordination mechanisms in Uganda's Local Governments as hypothesized, thus supporting the hypothesised factor structure. This finding is consistent with the works of March and Simon (1958). According to these authors, co-ordination mechanisms represent strategies through which co-ordination is achieved. These strategies or mechanisms have been identified in literature as plan, mutual adjustment, direct supervision, standardization among others. The association of these dimensions is significant ($p < 0.01$) which indicate blending, lending support to our hypothesis.

Based on the fact that the results of this study are consistent with existing literature as seen above, it can be discerned that it can be relied on to generate models tailored to specific service sectors. Uganda's Local Governments, thus, need to place considerable emphasis on planning, direct supervision, mutual adjustment and standardization.

The results of this study seem to lend support to Agency, Systems and Institutional theories. For example, the Agency theory point to the Agent's non co-operative behaviour and conflict of interest that inevitably leads to sub-optimal outcome. To this end, Local Government authorities are required to devise co-ordination strategies such as direct supervision, so as to minimize Agent's self-seeking behaviours (Meyer, 2000). With direct supervision as one of the dimensions accounting for co-ordination mechanisms in Uganda, this study confirms direct supervision as a central and qualified dimension that Local Governments embracing co-ordination function need to keep tabs on.

Additionally, the Institutional theory (Meyer & Rowan, 1997; Scott 2007) is supported by this study. This theory examines how organisations secure better and competitive positions by conforming to rules and

norms of institutional environment. Rules constrain and regulate behaviour (Scott, 2001). In this regard, based on this paradigm, Local Governments will be able to secure implementation of mechanisms such as plans and standardization which are confirmed co-ordination mechanisms in Uganda's Local Governments through enforcement facilitated by such a regulatory frame work.

Conclusions and implications

We studied 212 Local Governments in Uganda. We hypothesized a four factor model of co-ordination mechanism which has been confirmed in Local Governments in Uganda with dimensions of: plan, mutual adjustment, standardization and direct supervision with the attendant 8 items by which to measure the conceptually confirmed dimensions above. This model is thus recommended to Uganda's Local Governments as befitting model. The study has critical implications for management in Uganda. First, considering the fact that Local Governments have been earmarked as engines for improved service delivery, the government and other stakeholders ought to give considerable attention to the confirmed factors of planning, standardization, mutual adjustments and direct supervision, while undertaking the co-ordination function. Secondly, management could succeed in ensuring that Local Governments fulfil their mandate though focusing on organisational processes like monitoring and supervision, planning, standardization of work processes, skills and knowledge, work output and norms.

References

- Agagu, A.A (1997)Local Government in Kalowole,D (ed) Readings, Political science, Ibadan, Dekaal.
- Arbuckle, J.L., 2010. Amos 18.0 User's Guide. USA: Amos Development Corporation.
- Aronson, D. (1998): Using Systems Thinking to Increase the Benefits of Innovation Efforts. *R&D Innovator*, Vol. 6. No. 2.
- Ballard D.J & Seibold, D.R (2004) Communication related Organizational Structures & Work Group temporal experience: The Effects of Co-ordination method, technology type & Feedback cycle on member's Contractual & Enactments of time Communication Monographs 71 (1), 1-27.
- Ballard, D.I. & Seibold, D.R. (2003). Communicating and Organising in Time: A Meso-level model of organizational temporality. *Management Communication Quarterly*. 16 (3), pp 380-415.
- Bentler, P. M (1990) Comparative fit indexes in structural models, *Psychological Bulletin*, 107, 2, pp. 38-246.
- Bouckaert, Geert, B. Guy Peters and Koen Verhoest (2010). The Co-ordination of Public Sector Organizations: Shifting Patterns of Public Management. Basingstoke: Palgrave Macmillan.
- Christensen, H., Griffiths, K. M., Gulliver, A., Clack, D., Kljakovic, M., & Wells, L. (2008). Models in the delivery of depression care: A systematic review of randomised and controlled intervention trials. *Family Practice*, 9, 25-35. Retrieved from <http://www.biomedcentral.com/1471-2296/9/25>
- Christensen, Tom and Per Læg Reid (2007) "Introduction – Theoretical Approach and Research Questions". Pp. 1-16 In *Transcending New Public Management: The Transformations of Public Sector Reforms*, edited by Tom Christensen and Per Læg Reid. Aldershot: Ashgate
- Crowston, K. (1997). A co-ordination theory approach to organizational process design. *Organization Science*, 8, 157-175.
- DiMaggio, P.J. and Powell, W.W. (1991). Introduction, in W.W. Powell and P.J. DiMaggio (eds.) *The New Institutionalism in Organizational Analysis*, Chicago: University of Chicago Press.
- Faraj, S., & Xiao, Y. 2006, 'Co-ordination in Fast-Response Organisations', *Management Science*, 52(8), pp. 1155-1169.
- Fayol, H., 1916. *General and industrial management* (original published in French, translated (1949). London: Pitman Publishing.
- Fornell, C., Larcker, D.F. (1981) Evaluating structural equation models with unobservable Variables and measurement error. *Journal of Marketing Research* 18 (1), 39-50.
- Fournier, J. (1987) *Le travail gouvernemental*. Paris :Dalloz.
- Galbraith, J. 1973. *Designing complex organizations*. Addison- Wesley, Reading, MA.
- Garver, M. S. and Mentzer, J.T(1999) Logistics research methods: Employing structural equation
- Gay, L.R. (1987). *Educational Research: Competencies for Analysis and Application*, 3rd ed., (Columbus, Ohio: Merrill Publishing Company, 1987).
- Gerardo, A. Okhuysen & Beth. A Bechky (2009) 10 Co-ordination in Organizations: An integrative perspective, *The Academy of management Annals*,3:1, 463-502.
- Government of Uganda. 1995 Constitution of the Republic of Uganda. G.O.U: Kampala.
- Government of Uganda. 1995 Constitution of the Republic of Uganda. G.O.U: Kampala.
- Government of Uganda/Donor Sub-Group on Decentralization 2001. *Fiscal Decentralization in Uganda: The way forward*. Final Report. MOFPED/MOLG, Kampala.
- Hair, Black, W.C., Babin, B.J., Anderson, R.E. (1998). *Multivariate Data Analysis*. 7th edition. New Jersey:

- Prentice Hall.
- Heath, C. & Staudenmayer, N. (2000). Co-ordination neglect:How lay theories of organizing complicate co-ordination in organizations. *Research in Organizational Behavior* 22, 53-191.
- Ivery, J.M. (2007). Organizational ecology: A theoretical framework for examining collaborative partnerships. *Administration in Social Work*, 31(4), 7-19.
- Jensen, M. 1993, 'The Modern Industrial Revolution, Exit, & the Failure of Internal Control Systems', *Journal of Finance*, 48, 3, pp. 831-880.
- Jensen, M., and Meckling, W. 1976. Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3: 305-360.
- Kellogg, K.C., Orlikowski, W.J., Yates, J. (2006). Life in the Trading Zone: Structuring Coordination Across Boundaries in Post bureaucratic Organizations. *Organization Science*, Vol, 17, No, 1, January-February 2006, pp. 22-44.
- Klein, K. J., Ziegert, J. C., Knight, A. P., & Yan, X. (2006). Dynamic Delegation: Shared, Hierarchical, and Deindividualized Leadership in Extreme Action Teams. *Administrative Science Quarterly*, 51(4): 590-621.
- Kline R.B. (2005). Principles and practice of structural equation modeling 2nd Edition. The Guilford Krejcie, R.V., & Morgan, D.W. (1970). *Educational and Psychological Measurement*, 30, 607-610.
- Laarmans, R. (1999). *Communicatie zonder Mensen*. Amsterdam: Uitgeverij Boom.
- Lei, P. W. and Wu, Q (2007) An NCME Instructional Module on Introduction to Structural Equation Modeling: Issues and Practical Considerations, *Educational Measurement, Issues and Practice*, 26, 3, pp. 33-44.
- Leischow, Scott, Allen Best, William Trochim, Pamela Clark, Richard Gallagher, Stephen Marcus, and Eva Matthews. "Systems Thinking to Improve the Public's Health," *American Journal of Preventive Medicine*, vol. 35, no. 2S, 2008, pp. S196–S210.
- Lewis, I., Talalayevsky, A. (2004) "Improving the interorganizational supply chain through optimization of information flows", *Journal of Enterprise Information Management*, Vol. 17 Iss: 3, pp.229 – 237.
- Malone, T. W. and Crowston, K. 1994. The interdisciplinary study of co-ordination. *Computing surveys*, 26(1), p. 87-119.
- March, J.G. & H.A. Simon. (1958). *Organizations*. New York:McGraw-Hill.
- Martinez, J. I & Jarillo, J.C (1989). The evolution of research on co-ordination mechanism in multinational research. *Journal of international Business studies* 489-514.
- Meyer, J.W. and Rowan, B. (1977). Institutionalized Organizations: Formal structure as myth and ceremony, *American Journal of Sociology* 83(2): 340–363.
- Midgley, G. (Ed.) (2003). *Systems thinking*. London: Sage.
- Ministry of Finance, Planning and Economic Development [2000], *Poverty Reduction Strategy Paper, Uganda's Poverty eradication Action Plan, summary & main objectives*.
- Ministry of Finance, Planning and Economic Development [2001a], *Poverty Reduction Strategy Paper, Progress Report 2001: Uganda Poverty Status Report 2001 Summary* [<http://poverty.worldbank.org/files/uganda%20ppr.pdf>].
- Ministry of Finance, Planning and Economic Development [2001b], *Action programme for the development of Uganda 2001-2010, Third United Nations Conference on the Least developed countries, Brussels*.
- Ministry of Public Service (Government of Uganda), (2011). *Job Descriptions and Specifications for Jobs in Local Governments*. Kampala –Uganda.
- Mintzberg H. (1989) *Mintzberg on Management: Inside our strange world of organizations*. The Free Press, New York, 1989.
- Mintzberg, H (1979). *The structuring of organisational* Englewood Cliffs. NJ: Prentice – Hall.
- Mintzberg, H. (1979). *The structuring of organizations: A synthesis of the research*. Englewood Cliffs, NJ: Prentice-Hall.
- Mintzberg, H. (1998). Five Ps for Strategy, In: Mintzberg, H., J.B. Quinn and S. Ghoshal (Eds.): *The modeling to test for construct validity*, *Journal of Business Logistics*, 20, 1, pp.33-57.
- National Service Delivery Survey 2008 Report*. Ministry of Public Service, Uganda Bureau of Statistics.
- Newton, K & Van Deth. J.W (2005) *Foundation of Comparative Politics*. Cambridge : Cambridge University Press.
- Oates, W.E (2005), "Towards a second Generation Theory of Fiscal Federation" *International Tax & Public Finance*, 12 pp349-373.
- Pollitt, C. (2003). Joined-up Government: a Survey. *Political Studies Review*, 1: 34–49.
- Powell, W.W. and DiMaggio, P.J. (Eds.) (1991) *The New Institutionalism in Organizational Analysis*, The University of Chicago Press: Chicago.
- Quinn, R., & Dutton, J.E. (2005). Co-ordination as energy-inconversation. *Academy of Management Review*, 30 (1), 36 – 57.

- Ring, P. S., & Van de Ven, A. H., 1994 Development Processes of Cooperative Interorganizational Relationships. *Academy of Management Review* 19 (1): 90 – 118.
- Savoie , D.J (1995) Central Agencies : Looking backward. Ottawa: Canadian Centre for Management Development.
- Scott, W. R. (2001). *Institutions and Organizations*. Thousand Oaks, CA: Sage, 2nd ed.
- Scott. W. R. and Davis, G. F. (2007), *Organizations and Organizing: Rational, Natural, and Open System Perspectives*, Pearson Prentice Hall, Upper Saddle River NJ.
- Siu L. (2008) *Issues and procedures in Adopting Structural Equation Modelling Technique: Journal of Applied Quantitative Methods, Vol 3,2008, pp76-83.*
- The Local Government Act, Cap, 243, Uganda.
- The Local Government Management and Services Delivery (LGMSD) Programme, operational manual for Local Government, January 2011.
- The Local Government Management and Services Delivery (LGMSD) Programme, operational manual for Local Government, January 2011.
- Thompson, J.D (1967) *Organisations in action: Social Science Bases of Administrative Theory*: New York; MC Graw- Hill.
- Thompson, J.D. (1967). *Organizations in action*. New York: McGraw-Hill.
- Van de Ven, A.H., Delbecq, A.L., & Koenig, R. 1976, Determinants of Co-ordination Modes within the Organisations', *American Sociological Review*, 41(2), pp. 322 - 338.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:

<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

Academic conference: <http://www.iiste.org/conference/upcoming-conferences-call-for-paper/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

