

## **A System-Based Knowledge Management Framework for Tax Administration Performance**

**Okoh Umale<sup>1</sup>, Muzainah Binti Mansor<sup>2</sup>, Marhaiza Binti Ibrahim<sup>3</sup>**

<sup>1</sup>*Ph.D Candidate, Tunku Puteri Intan Safinaz School of Accountancy, Universiti Utara Malaysia  
Lecturer II, Department of Accounting and Business Administration, Federal University Kashere, Nigeria*

<sup>2</sup>*Associate Professor, Tunku Puteri Intan Safinaz School of Accountancy, Universiti Utara Malaysia*

<sup>3</sup>*Senior Lecturer, Tunku Puteri Intan Safinaz School of Accountancy, Universiti Utara Malaysia*

*Corresponding Author: Okoh Umale*

---

**Abstract:** *It is unequivocal that developing economies are characterised by tax administration inefficiency. However, knowledge management can improve administrative efficiency. This study proposes a system-based knowledge management framework that can improve tax administration efficiency in developing economies. System-based theory is employed as underpinning theory. The framework is based on thoroughly review and synthesized literature. The system-based knowledge management framework comprises of inputs, internal processes and outputs. This paper believes that tax administration performance will be improved in terms of efficiency if the knowledge management framework is employed.*

**Keywords:** *Tax administration, knowledge management framework, system-based theory*

---

Date of Submission: 20-10-2019

Date of acceptance: 02-11-2019

---

### **I. Introduction**

One of the major sources of revenue generation that is eminent in both developed and developing economies for nation development is tax. In the developed economies, substantial revenues are generated from tax to finance budget and nation development. The ratios of tax revenue to Gross Domestic Product (GDP) in the developed economies are between 30% to 40% (World Bank, 2017). Tax revenue ratio to GDP is a major standard benchmark used to assess tax revenue performance (OECD, 2013; Umar, Derashid & Ibrahim, 2017). However, developing economies are characterised with low tax revenue generation. Bird (2015) posits that tax revenue generation in the developing economies is low. Tax revenue ratio to GDP in developing economies is between 6% to 20% (World Bank, 2017). Thus, tax revenue generation in the developing economies is low and needs improvement.

Tax administration in every nation influences tax revenue generation. For any nation to improve her tax revenue generation, tax administration in such nation has to be efficient and effective. For example, studies have shown that improved service delivery to tax payers improves tax revenues generation (Semenova, Filippova & Efremova, 2017; Keen, 2014). Mansor and Tayib (2015) assert that the trust of every improved tax revenue generation is efficient and effective tax administration. Tax administration performance in developing nations is low and needs improvement in terms of efficiency. Bird (2015) posits that tax administration in developing nations is inefficient and ineffective which results to low tax revenue generation. Thus, tax administration in developing nations needs improvement.

Inefficiency and ineffectiveness of tax administration has led to several researches aimed at improving tax administration performance in the developing economies. For example, Mansor and Tayib (2015) proposed a holistic model by combining open system and integrated model to improve tax administration performance. In the same vein, Pantamee, Mansor and Othman (2017) developed a reformed tax administration model to improve tax revenue generation in Nigeria. In spite of effort to improve tax administration performance, it is still a challenge in developing nations. However, studies have shown that knowledge management (KM) improves tax administration performance (Rosdi et al., 2016; Sejdija, 2012). Study by Rosdi et al. (2016) and Sejdija (2012) on how KM improves tax administration performance focused on information and communication technology (ICT) only. Other factors in KM were not addressed. This study intends to fill the research gap by integrating the various factors in KM to address tax administration inefficiency in developing nations. Thus, this study intends to propose a KM framework for tax administration performance using system-based theory.

### **1.1 Knowledge Management**

KM is a process that create, store, retrieve, disseminate, apply and leverage knowledge to improve administrative performance (Yahyapour, Shamizanjani & Mosakhani, 2015; Sejdija, 2012). KM improves administrative efficiency which translates to overall performance in an administration (Yousif, 2012). Busanad (2016) stated that KM improves capability of knowledge workers and increases job outputs in an organisation. In the same vein, Yahyapour, Shamizanjani and Mosakhani (2015) posit that KM reduces cost of operation in an organisation. Moreover, Kimani (2013) asserts that KM improves quality of service delivery and policy making in an organization.

In literature, KM researches in tax administration include Rosdi et al. (2016) and Sejdija (2012). Rosdi et al. (2016) analysed the important role of ICT on the success of KM in Inland Revenue Board of Malaysia (IRBM) and affirmed that KM implementation improves tax administration in terms of increased tax revenue generation. Sejdija (2012) analysed KM system of “North-Rhine Westphalia” (NRW) tax administration in Germany and found that Integral Systems (ISYS) is the major sources of information used by the tax administration and there is a need for improvement. Based on literature review, the two researches on KM in tax administration focused on ICT. This study intends to employ System-based theory which will address KM in tax administration holistically by integrating several factors that are critical for success of KM implementation. Next sub-section discusses system-based theory which serves as a guide for the KM framework in tax administration.

### **1.2 System-Based Theory**

System-based theory is employed in diverse discipline to address problems and issues holistically (Mele, Pels & Polese, 2010). A system is set of interrelated components which work together to achieve a desired goal. System-based theory emphasises on integration of different components to address an issue or solve a problem (Sejdija, 2012). This study intends to propose a framework that integrates factors in KM to improve tax administration efficiency. System-based approach has been widely used in administrative and performance management. It is the basis of input-process-output (Pantamee & Mansor, 2016; Mansor, 2011). From management perspective, system-based theory comprises of six components namely: sub-system, synergy, open and close system, system boundary, flow and feedback. Flow component of system-based theory from management perspective is the basis of input-process-output for administrative and performance management (Mansor, 2011). System-based theory has been employed for KM in other organisation. For example, Yang et al. (2015) employed system-based theory to propose a holistic KM framework aimed at improving transport infrastructure performance in Australia. Also, Stankosky and Baldanza (2000) employed the system-based theory to develop a framework for enterprise management engineering.

Furthermore, the system-based approach has been widely used in tax administration context. For example, Panatamee, Mansor and Othman (2017) employed system-based approach to develop a reformed tax administration model to improve tax revenue generation in Nigeria. Also, Mansor and Tayib (2015) employed system-based approach to propose a holistic model by combining open system and integrated model to improve tax administration. This study intends to approach KM in tax administration from holistic perspective to improve tax administration efficiency. The trust of system-based theory is integration of interrelated part to achieve a particular goal. This study intends to integrate various KM success factors to improve tax administration efficiency. Hence, system-based theory is suitable to guide the proposed KM framework for this study. The framework consists of inputs, internal processes and outputs. The framework is discussed in the next section.

## **II. A Proposed System-Based Knowledge Management Framework**

The system-based KM framework for tax administration is based on critical review and synthesized literature on KM framework, tax administration efficiency (internal objectives) and system-based theory. System-based KM framework believes that tax administration efficiency can be attained through managing tax administration knowledge systematically. The systematic management of tax administration knowledge involves basic components which include: (1) inputs, (2) internal processes and (3) outputs. The system-based KM framework for tax administration components is discussed in terms of inputs, internal processes and outputs as follows.

### **1. Knowledge Management Inputs**

KM inputs are resources that are required for efficient knowledge creation and management in an organisation (Yang et al., 2015). This paper proposes that tax administration should identify necessary KM inputs based on tax administration internal objectives. Studies have identified critical factors for successful KM implementation. These critical factors serve as inputs for KM in tax administration. The factors comprises of people, managerial and technology (Busanad, 2016; APO, 2013; Girard & McIntyre, 2010). Thus, this paper

proposes people, managerial and technology factors as KM inputs for tax administration. This paper believes that the inputs are necessary for knowledge creation in the internal processes and translate to tax administration efficiency in the outputs module. The inputs are to be employed to create knowledge in the internal processes.

## **2. Knowledge Management Internal Processes**

In the internal processes, knowledge necessary for efficient tax administration is to be created. Nonaka and Takeuchi (1995) explained process of knowledge creation in an organisation. This paper believes that the process of knowledge creation by Nonaka and Takuechi (1995) is suitable for knowledge creation in tax administration. The process includes socialisation, externalisation, combination and internalisation. Thus, the paper proposes knowledge creation through socialisation, externalisation, combination and internalisation which will create the tacit and explicit knowledge needed for efficient operation in tax administration in developing economies.

## **3. Knowledge Management Outputs**

This paper believes that knowledge created in the internal processes translates to tax administration efficiency as outputs. Therefore, tax administration internal objectives which are administrative efficiency should be indentified for KM implementation purpose. Studies have identified tax administration internal objectives that translate to tax administrative efficiency. These tax administration internal objectives include low cost of administration, improved service delivery to tax payers and increase rate of job outputs by tax administrators (Semenova, Filippova & Efremova, 2017; Crandall, 2010). This paper believes that low cost of administration, improved service delivery to tax payers and increase rate of job outputs by tax administrators engender tax administration efficiency.

## **4. Summary and Conclusion**

This paper discusses inputs, knowledge creation and outputs that are encapsulated in a proposed system-based KM framework for tax administration in developing economies. The system-based KM framework is based on literature review on KM frameworks, tax administration efficiency (internal objectives) and system-based theory. Thus, the paper integrates KM inputs, knowledge creation processes and tax administration internal objectives (outputs) systematically. It believes that the proposed system-based KM framework can engender tax administration efficiency and increase tax revenue generation in developing economies. This paper provides guidelines for KM implementation in tax administration for developing economies to improve tax administration performance in terms of efficiency.

## **References**

- [1]. APO. Knowledge Management for Publi-sector Productivity, Asian Productivity Organisation. 2013.
- [2]. Bird, R. M. Improving Tax Administration in Developing Countries. *Journal of Tax Administration*. 2015; 1(1), 23–45.
- [3]. Busanad, A. M. Implementing KM in a Public Organization : The Case of the Dubai Police Force. University of Portsmouth. 2016.
- [4]. Crandall, W. Revenue Administration : Performance Measurement in Tax Administration. 2010.
- [5]. Girard, P. John, McIntyre, S. “Knowledge Management Modeling in Public Sector Organizations: A Case Study.” *International Journal of Public Sector Management*. 2010; 23(1), 71–77.
- [6]. Keen, M. “Tax Administration for the 21st Century.” Wellington. 2014.
- [7]. Kimani, L. W. Knowledge Management in the Public Sector: Its Role in Facilitating the Delivery of Health Infrastructure. University of the Western Cape. 2013.
- [8]. Mansor, M. Application of a Framework for Tax Administration Performance Management in Developing Countries : A Case Study in Malaysia. University of New South Wales. 2011.
- [9]. Mansor, M., & Tayib, M. A. Holistic Approach to Tax Administration Performance Management: Developing an Integrated and Open System Model. *International Journal of Education and Social Science*. 2015; 2(4), 132–142.
- [10]. Mele, C., Pels, J., & Polese, F. A. Brief Review of Systems Theories and Their Managerial Applications. *Service Science*. 2010; 2(1–2), 126–135.
- [11]. Nonaka, I. and Takeuchi, H. *The Knowledge- Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York. 1995.
- [12]. OECD. What Drives Tax Morale? Tax and Development Program. Center for Tax Policy and Administration. 2013.
- [13]. Pantamee, A. A., Mansor, M. B., & Othman, Z. Performance-Governance Tax Administration Reform Model as an Instrument for Tax Revenue Generation in Nigeria. *International Journal of Innovative Research & Development*. 2017; 6(3), 78–82.
- [14]. Rosdi, I. S., Chew, K. W., Samsudin, N., & Hassan, S. Transforming Knowledge Management at Inland Revenue Board of Malaysia. *Knowledge Management and E-Learning*. 2016; 8(2), 259–270.
- [15]. Sejdija, F. Knowledge Management in Public Administration: Critical Success Factors and Recommendations. University of East London. 2012.
- [16]. Semenova, N. N., Filippova, A. N., Efremova, T. A. Estimation of Tax Administration Efficiency in Russian Federation in Context of Budget Tax Revenues. *Advances in Economics, Business and Management Research*. 2017; 38, 612–618.
- [17]. Stankosky, M. A. and Baldanza, C. Knowledge Management: An Evolutionary Architecture Toward Enterprise Engineering. Reston, VA.: International Council on Systems Engineering (INCOSE). 2000.
- [18]. Umar, M. A., Derashid, C., & Ibrahim, I. Challenges of Tax Revenue Generation in Developing Countries: Adopting the Carrot and Stick Approach. *IOSR Journal of Humanities and Social Science*. 2017; 22(1), 30–34.

- [19]. WorldBank. International Monetary Fund, Government Finance Statistics Year Book Data Files, World Bank and OECD GDP Estimates. 2017.
- [20]. Yahyapour, S., Shamizanjani, M., & Mosakhani, M. A Conceptual Breakdown Structure for Knowledge Management Benefits Using Meta-Synthesis Method. *Journal of Knowledge Management*. 2015; 19(6), 1295–1309.
- [21]. Yang, J., Yuan, M., Yigitcanlar, T., Newman, P., & Schultmann, F. Managing Knowledge to Promote Sustainability in Australian Transport Infrastructure Projects. *Sustainability*. 2015; 8132–8150.
- [22]. Yousif, L. A. Knowledge Management Implementation, Innovation, and Organisational Performance: An Empirical Study in the Iraqi Mobile Telecommunication Sector. Universiti Utara Malaysia. 2012.

Okoh Umale" A System-Based Knowledge Management Framework for Tax Administration Performance" *IOSR Journal of Business and Management (IOSR-JBM)*, Vol. 21, No. 10, 2019, pp. -.40-43