

Information Life Cycle Management and Organizational Excellence of Telecommunication Firms Rivers State, Nigeria

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DOI 10.56201/ijebm.v9.no1.2023.pg20.36

ABSTRACT

This study examined the relationship between information lifecycle management and organizational excellence of telecommunication firms in Port Harcourt. A sample size of one hundred (100) employees of the four telecommunication giant were selected from the population using random sampling procedure. Information life cycle management was measured by tasking, data sourcing and data transformation while organizational excellence was proxied by customer focus, innovation and commitment data were sourced through questionnaire administered to the employees of the telecommunication firms. The study adopted the quantitative method of data analysis which means that the gathered data from the retrieved research questionnaire was analyzed statistically and in three phases' namely descriptive analysis, univariate analysis and bivariate analysis. The study found positive and significant relationship between information life cycle management dimensions and measures of organizational excellence. It is, therefore, recommended that management attention need should be directed to information management life cycle and system integration.

Keywords: *Information, Life Cycle Management, Organizational Excellence, Telecommunication Firms*

INTRODUCTION

With the advancement in information technology, enterprises have invested vast resources in implementing information systems that undoubtedly come with higher expectations and hopes of improving the operational efficiency of, and bringing competitive advantages to, enterprises. From the viewpoint of quality management, the quality of information used by enterprises emerges as one important part of various enterprises quality management considerations (Stiroh, 2011). Information lifecycle management is a comprehensive approach to managing an organization's data and associated metadata, starting with its creation and acquisition through when it becomes obsolete and is deleted (Weintraub, et al., 2013). An effective Information

lifecycle management strategy can help lower storage and data management costs, as well as reduce the security, compliance and legal risks that come with failing to maintain full control over organizational data. The implementation of information life cycle in the telecommunication firms can enhance the overall organizational performance.

The term business excellence has appeared to be like organizational excellence with the difference that business excellence may be used more to private sector while organizational excellence to public sector (McAdam, 2000). Excellence has been defined by many researchers. One of the important definitions was defined by the European Foundation for Quality Management.

European Foundation for Quality Management defined excellence as the outstanding practice in the organization to achieve nine essential concepts, namely, customer focus, management by process and facts, continuous learning, partnership development and public responsibility, result orientation, leadership and constancy of purpose, people development and involvement, and innovation and improvement (EFQM guidelines, 1999). Additionally, Eisakhani (2008) argued that excellent organizations have seven features like perspective and mission, organization planning, processes, ambition purposes, strategic thinking, leadership, and technology. Models of organizational and business excellence are the instruments that assist organizations to measure the degree of the successful and excellent organizations' path (Attafar, Forouzan, & Shojaei, 2012). The relationship between information life cycle and organizational excellence has been studied by many researchers (Al-Dhaafri, Yusoff, & Al-Swidi, 2014; Ooncharoen & Ussahawanitchakit, 2008). The organizational excellence concept is an academic term originated from Peters and Waterman (1982) (Antony & Bahattacharyya, 2010). In addition, they argued that organizational excellence is measured based on the relationship between different performance's indicators.

LITERATURE REVIEW

Information Lifecycle Management

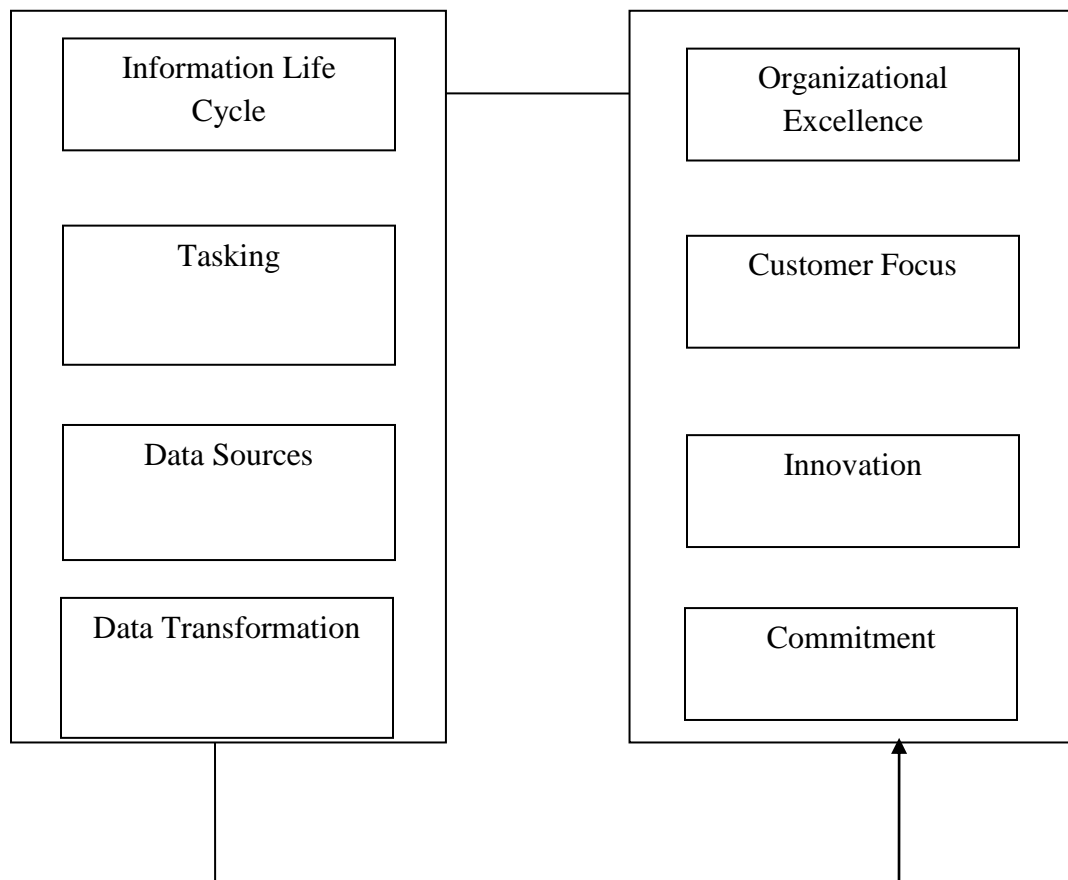
Information lifecycle management refers to overseeing data (information) from creation through to retirement to optimize its utility and lower its costs. It also aims to minimize the compliance and legal risks that the data introduces. Information lifecycle management helps align information with business requirements through service levels and management policies associated with metadata, data and applications (Sebina, 2017). Unlike earlier approaches to data storage management, Information lifecycle management deals with all aspects of data throughout its life span, rather than focusing only on one facet of data management. For example, hierarchical storage management is concerned only with automating storage processes and not with how data is transformed or used. Information lifecycle management addresses how data is utilized and many other issues. In addition, Information lifecycle management enables more complex criteria for storage management than systems that rely only on basic metrics, such as data age or access frequency.

Information lifecycle management takes a policy-based approach to handling data, providing a centralized, consistent strategy for managing the entire data life. Information lifecycle

management also facilitates automation and storage tiring. In this way, data can be automatically migrated from one storage tier or format to another based on the applicable policies. As a rule, newer data and data that must be accessed more frequently are stored on faster, more expensive storage media, while less-critical data is stored on slower and cheaper media (Saloojee, et al., 2017).

The Information lifecycle management approach enables information technology teams to specify different policies for different types of data throughout its life span. Information lifecycle management takes into account that data declines in value at different rates, with some types of data retaining its value much longer than other types (Robertson, 2015). In some cases, Information lifecycle management might also incorporate path management capabilities, which make it easier to retrieve stored data by tracking where it is in the storage cycle. To be effective, however, Information lifecycle management needs to be an organization-wide effort, involving procedures and practices, as well as applications and technology platforms.

Conceptual Framework



Source: Authors research desk, 2022

Figure 1: Conceptual relationship between Information life Cycle management and organizational excellence of the communication firm in Rivers State

Phases of Information Life Cycle Management

Tasking: This is the first phase of the cycle that sets out all the security objectives and decisions to be made in order to define the information requirements and therefore what data sources to use and what data to collect. Each security task is an independent entity having its own data requirements. Tasks are organised into categories relevant to the current security scenario. Moreover, due to their distinct nature, tasks are not of the same importance and, consequently, may have different priorities allocated to them (Ravi, 2011).

Data Sources: Regardless of how well the tasking stage is set up and organized, it is vital to identify the appropriate data sources that meet the tasking requirements. In order to determine the sources from which we can draw information, we must first categorize them. For that purpose, we use the intelligence-gathering disciplines, which describe this kind of derived information, as well as its source and scheme.

Data Collection: This is the stage in which data is gathered from the defined data sources. It contains all methods and Application Programming Interfaces (APIs) for connecting to the sources in order to draw the requested data (Ravi, 2011). It is important that this stage is always up-to-date and follows-up on all the changes that may occur in the sources or to the data (e.g., change in the data format or change in the way the sources are accessed). It is also vital to have the appropriate tools for collection of this data, since not all of them are provided through services or APIs. To that end, it may be necessary to Inventions 2018, 3, 71 5 of 39 use crawling engines to capture and collect (dynamic) web pages, images and videos from web sites, marketplaces, forums, social media and dark-web sources.

Data Cleaning: This stage ensures the quality of the data upon which we act. It incorporates the Big Data quality indicators (Ravi, 2011).making certain that we act on clean, correct, accurate and complete data. Based on these indicators, the Data Cleaning stage detects all of the anomalies and corruptions that the data derived from a record set, table or database. Then, it only proceeds with the appropriate indicator-specific actions in order to meet the desired quality properties.

Data Transformation: Regardless of the cleaning process applied to the data, it remains unstructured and scheme-less. In order to be able to store and analyse them, data must have a certain structure. For this reason, proper transformations are applied. This stage converts a set of data values from the data format of a source data system into the data format of a destination data system (Ravi, 2011).

Organizational Excellence

Organizational excellence and organizational performance are closely connected to each other. In other words, by improving performance, organizations can achieve highest level of excellence and win excellence awards. On the other hand, organizational excellence, as a practice and strategy, can help organizations to improve their processes and lead to have competitive advantages and increase performance. This relationship has been investigated by many

researchers. Al-Dhaafri et al. (2014) examined empirically the effect of organizational excellence on organizational performance. They found that organizational excellence has positive and significant effect on organizational performance. In addition, Antony and Bhattacharyya (2010) examined this relationship of SMEs in India based on data collected from 407 respondents. Their results indicate that organizational excellence and performance could be measured by consolidating variables of performance. Moreover, Ooncharoen and Ussahawanitchakit (2008) investigated the impact of organizational excellence on organizational performance of hotels in Thailand. Their findings showed that there is a positive and significant effect of organizational excellence on organizational performance.

Customer Focus

Customer focus is a business philosophy that places the customer at the center of all business development and management decisions. It is a marketing approach also, that involves products and services to be developed around consumer's preferences. The concept of customer focus has been gaining prominence in recent years as organizations realize the importance of concentrating on customers. For truly customer-focused organizations, every business activity is informed by customer needs and is designed to improve the customer experience (Mwangangi, 2016). Customer focus is a key source of sustainable competitive advantage for organizations. Customer focused organizations understand their customers, and align their strategies, systems and people to deliver on customer needs. Customer focus improves the effectiveness of marketing and service activities, which will be essential in the new, competitive landscape.

Concept of Innovation

Innovation is defined as the creation of new knowledge and ideas to facilitate new business outcomes, aimed at improving internal business processes and structures and to create market driven products and services (Plessis, 2007). Literatures on innovation indicate a variety of types of innovation (Damanpour et al., 2009), ranging from incremental to radical, for example. Some researchers group the types of innovation into three main categories: administrative and technical, product and process, radical and incremental (Yang, 2007). The reasons why organizations adopt different types of innovations are because of environmental conditions, organizational factors, generation processes of innovation, and organizational sector. Irrespective of the fact that innovation is a multi-type activity, present study will adopt the results of previous studies that considered the technological innovation, administrative innovation, radical innovation and incremental innovation as a main reason to survival and growth organizations (Oke, 2007).

Flow Theory of Information Lifecycle

Flow theory has been widely applied to understand user behaviour in the different phases of the information systems life cycle during last two decades. Nevertheless, its application is complicated due to issues and challenges related to the broad nature of information technology and human behaviour. Specifically, there is a lack of consensus on the conceptualization of flow in the IS context, and much uncertainty still exists about the key topics and the relationship between antecedents, dimensions and consequences of flow experience. However, a systematic review of how the flow phenomenon is conceptualized and operationalized within the IS life cycle has not been addressed yet. Flow theory is drawn from the joyfulness of online gaming; such activities are driven by internal motivations rather than external feedback or

incentives. Csikazentmihalyi (1975) defined flow as a holistic experience that people feel when they are fully involved in such activities and considered it as the main reason why people willing to continuously engage in one certain behavior.

Csikazentmihalyi (1990) systematically defined flow as a kind of experience with the appropriate challenge that could make a person deeply immersed in it while forgetting the passage of time and absence of themselves, and revealed seven psychological characteristics: tasks with a reasonable chance of completion, clear goals, immediate feedback, deep but effortless involvement, sense of control over our actions, no concern for the self, alteration of the time. The general features of the flow experience often defined by the interaction of challenges and skills (Nakamra & Csikazentmihalyi, 2014). The first mapping of the flow theory identified three regions of experience: a region of flow, challenges, match individuals skills; a region of anxiety, as challenges increasingly exceeded skills; a region of boredom, as opportunities for action (challenges) lower than skills (Davis & Csikazentmihalyi, 1977). Simply balancing challenges and skills did not optimize the quality of experience, hence, such shift revealed yet another important state, apathy, related to both lower challenges and skills (Csikazentmihalyi & Massimini, 1985). Further, eight channels are developed based on the three-level (low, average, and high) of challenges/skills, and flow is experienced when challenges and skills are both above average levels.

Two Step Flow Model

The two-step flow model was introduced by Hazel Gaudet, Bernard Berelson and Paul Lazarsfeld in 1948 (Lazarsfeld, Berelson & Gaudet, 1944). Their book *The People's Choice*, revealed the results of their analyses of the decision-making processes of voters during the 1940 election for President of the United States. The authors held that content on mass media first reaches highly active media users (also known as opinion leaders) who accumulate, interpret and convey the meaning of such content to less-active consumers of mass media. Gaudet, Berelson and Lazarsfeld had discovered that a majority of voters in the election had procured information concerning the presidential candidates not from the media directly, but from others who had read in the newspapers about the campaign. According to the authors, while mass media's impact upon individuals is limited, the transmission of information by word of mouth plays a vital role in the process of communication.

The two-step flow model posited that the media does not have a direct effect on the whole of the media audience, but is mediated through opinion leaders, who absorb the information and pass it on to their immediate social group. The two-step hypothesis suggests that opinion leaders are the crucial conduit for political information. Danielson and Deutschmann (1960) have contended, based upon substantial evidence showing mass media messages flowing directly to the public, that the two-flow model should be applied with caution. Everett Rogers (1962) cited in his book *Diffusion of Innovations*, a study wherein more than 60% of the respondents attributed to mass media (rather than interpersonal interactions) their awareness of what had been transpiring.

The aforementioned imply a greater prevalence of occurrences consistent with the hypodermic needle theory. Troidahl (1966) has noted that direct media exposure introduces discussion, and subsequently, opinion leaders assume their roles. This view incorporates the balance theory which holds that individuals seek to preserve consistency in their beliefs by seeking the counsel

of their opinion leaders when exposed to observations capable of challenging ingrained beliefs. The greater access to media content people today enjoy reflects a substantial change in the underlying conditions from the time when the two-flow model was developed. Empirical research into social media for instance, has discovered that the present digital landscape simultaneously facilitates one-, two- and multi-step flow theories of communication (Hilbert, Vásquez, Halpern, Valenzuela & Arriagada, 2017).

Empirical Review

Kalusopa and Ngulube (2012) also examined the records management practices in labour organisations in Botswana. The study which was quantitative in nature used a survey strategy to gather responses from 45 respondents. The study acknowledges the existence of information management practices in the various organisations but they fall below the expected standard. The result shows that the information management programmes are faced with many problems cutting across all the processes namely, creating, storing, processing and distribution. The outcome of the study reiterates the need for policies and strategies in information management to ensure effective performance.

Tungare (2017) studied the evolution of information management practices from users' perspectives. The review established that the major concerns of information management practices include information overload and information fragmentation. Information overload was defined as a situation where information processing and demand on individuals/organisations exceed the capacity and competency and the time needed for such processing. Information fragmentation, according to the review, is a situation where data are in different format, stored and distributed across multiple devices and locations using different applications for manipulation. It was established from the review that even though the technology has eased the processing of recording, creating, receiving, storing and disseminating, managing and using them sensibly is difficult. The amount of information generated by individuals/organisations can only increase, but organisational resources have remained constant. The situation poses a very difficult future for information workers whose job requires them to stay informed.

Robertson (2015) did some work on the effective information management and develop certain principles that are crucial and considered as critical success factors for information management projects. The review outlines the major challenges in information management programmes in contemporary organisations including: large number of disparate information management systems, which is hardly coordinated, lack of clear policies and guidelines on information management programmes as well as lack of top management's support; the human and other physical resources needed for effective information management are also lacking. These challenges have led to poor quality, inconsistency, duplication and outdated information. To address some of these issues, the study proposes that information management programmes should recognise the complexity of needs and plan to address these needs. Information management projects should deliver on tangible and visible benefits, and there is the need for active participation of all staff of the organisation and strong leadership.

Meriel (2010) used various ideas, concepts and research findings that have practical relevance for personal information to evaluate how individuals typically organize their information. The

results of the study indicate that information that is organised may serve three distinct purposes, namely easy records retrieval, reminds users on tasks that need to be done and represents the users' understanding of information items and how they relate to each other. The review further stresses the pivotal and vital role played by information management in improving organizational performance.

Stiroh (2011) to evaluate the relationship between investment in information managed by technology and productivity pay offs in the United States industries indicates that there is a robust evidence of a correlation between the productivity acceleration and the intensive use of information technology (IT) in the late 1990s. In a similar study to evaluate the high increase in information technology investment in the 1990s by Doms (2014), it emerged that the increase may be attributed to the fall in the prices of information technology goods, but not necessarily the fact that IT can boost productivity, which contradicts the finding of Stiroh (2011).

Love and Irani (2014) conducted a study to evaluate IT investment cost and benefit that organisations have experienced due to IT implementation. The study used survey method to collect data from 126 construction firms, which were small and medium scale enterprises (SMEs). Three key findings emerged from the study namely: Those different types of organisations invest differently in IT; investment in IT was not influenced by the size of the organisation and lack of strategic vision served as a challenge in justifying IT investment. The study concluded that the ability of construction SMEs to compete depends, to large extent, on the role of managers, tangible investment in intellectual capital, investment in ICT and strategic capacity.

Reddy, Srinivasu, Rikkula and Rao (2019) studied how Management Information Systems (MIS) has helped managers in decision making and identified the following key performance benefits: effective and efficient coordination between departments, quick and reliable referencing, access to relevant data and documents, reduction in labour cost and assisting in the day-to-day operations of the organisation such as accounting, stock control and many others. The result from the study indicates that MIS, which many researchers like Davis equate to information management, helps organisations to save time; cost and labour, which eventually improve organisational performance.

Saloojee, Groenewald and du Toit (2017) set out to evaluate the business value of information management and its investment benefits. The study established that information management creates indirect business value but has direct business cost, thus making the assessment of information management investment very difficult. It was identified that there are three important information management initiatives, which are business objectives, implementation and business outcome. This means that the business objectives look at the organisational goals and objectives that the information management initiative addresses using technical, business design and operations to implement the initiatives and evaluating how information management is used to achieve objectives. The result of the study indicates that for the business value of information management and its investment benefits to be realized, information management strategies should be aligned with the overall strategy of the organisation.

Trauth (2019) extensively examined the origin and evolution of the concept of information management by reviewing information management literature. The review examined and defined information management along the following dimensions: disciplinary perspective, management scope, societal sector, vocabulary and goals. The study indicated that the concept of information management evolved in three different sectors of the information processing community, namely data management, records management and data processing management, which hardly interact. It was observed that information should be recognized as a valuable entity and it should be independent of the technology that manipulates it. The review stressed the need to maintain a global view of corporate data, repositioning of the information management officer at a high level in the corporate hierarchy to integrate both information and information technology and that the future success of information management will depend on its ability to incorporate end users into the information management framework. The findings from the review indicate that researchers disagree on the meaning, discipline and dimensions of information management and that information management is a different entity which must be separated from information technology. The involvement of the top level managers was also considered to be very important in any effective and efficient information management programme.

METHODOLOGY

Survey research design was used to study the effect of information life cycle management and organizational excellence of telecommunication firms. Population of the study comprised the total employees of the four giant telecommunication firms operating in Rivers State while the sample size was limited to 25 employees from each of the four telecommunication firms. The 25 employees were selected from the rank of manager and supervisor. To determine the reliability of the instrument, a pre-retest method was adopted. Here the questionnaire was administered to a sample of twenty (20) employees who are not included in the original sample of the study. After a period of two (2) weeks, the same copies of the instrument were re-administered to the same subjects. Their responses at the two intervals were correlated using the Cronbach Alpha. The result of the Cronbach Alpha indicates 0.97 and this implies that instrument is reliable.

Data Analysis

Data were analyzed by use of descriptive and inferential statistics. Quantitative data collected by using a questionnaire was analyzed by the use of descriptive statistics using the Statistical Package for Social Sciences (SPSS) version 22.0 Descriptive statistics involves the process of transforming a mass of raw data into tables and charts with frequency distribution and percentages which are vital in making sense out of data. Descriptive statistics employed were percentages and measures of central tendencies whereby the mean and standard deviation were computed. In order to draw conclusions pertinent to the study objectives, spearman rank correlation coefficient was employed to analyze the association between information life cycle management and organizational excellence of telecommunication firms.

ANALYSIS AND DISCUSSION OF FINDINGS

Survey Response Rate

The study targeted a sample size of 100 employees of the four telecommunication firms Port Harcourt and the sample size was drawn with the use of random sampling techniques. A response rate of 93 percent was recorded. This implies that 93 out of the 100 questionnaire administered were retrieved. However 3 percent of the questionnaire was not retrieved; this represents 3 questionnaires due unwillingness of respondents.

Univariate Analysis (Descriptive Statistics)

The univariate analyses enabled the researcher to display the reply pattern on each of the study variables. This study adopted a 5-point Likert scale to decide the category of response from respondents as follows; very high extent = 5, high extent = 4, moderate extent = 3, low extent = 2 and very low extent = 1. The interpretation in connection to the mean is disclosed in the categorization method recommended by Ahukanna and Ugoji (2008). This classification presented all responses with a mean value less than 1.5 as very low extent, greater than or equal to 1.5 but less than 2.5 as low extent, greater than or equal to 2.5 but less than 3.5 as moderate extent, greater than or equal to 3.5 but less than 4.5 as high extent, and greater than or equal to 4.5 as very high extent. The researcher’s univariate analyses were presented based on this recommendation.

Table 1: Descriptive Statistics for Information Life Cycle Management

Dimensions	N	Minimu m	Maximu m	Mean	Std. Deviation
Tasking	97				
Tasking is required to achieve organizational excellence	97	1.00	5.00	4.1429	.65465
Tasking affect corporate excellence	97	1.00	5.00	4.3810	.74001
Data Sources	97				
Reliable source of information is prerequisite for organizational excellence	97	1.00	5.00	4.4286	.59761
Source of information affects corporate excellence	97	1.00	5.00	4.5238	.60159
Data Transformation	97				
Data is transformed to achieve organizational excellence	97	1.00	5.00	4.6667	.65828
Effective data transformation increases chances of excellence	97	1.00	5.00	4.5241	.59986
Valid N (listwise)	97				

Source: Field data 2023

From Table 1, with regards to the minimum and maximum mean scores of the dimension of information life cycle management indicated that most of the respondents were on the response scale of high extent and very high extent as the least mean score value was 4.14 which is greater than 3.5, and the maximum mean score value was 4.67, which was greater than 4.5 mark.

Table 2: Descriptive Statistics for the Measures

Measures of excellence	N	Minimu m	Maximu m	Mean	Std. Deviation
Customer Focus	97				

truly customer-focused organizations, every business activity is informed by customer needs	97	1.00	5.00	4.7167	.48305
Customer focus is a key source of sustainable competitive advantage for organizations	97	1.00	5.00	4.5714	.59761
Innovation	97				
Effective innovation depend on information management	97	1.00	5.00	4.5714	.59761
Innovation and information life cycle management are correlated	97	1.00	5.00	4.5132	.58994
Commitment	97				
Employees are committed in information management environment	97	1.00	5.00	4.4286	.59761
Commitment depend on availability of information	97	1.00	5.00	4.5714	.50709
Valid N (listwise)	97				

Source: Field data 2023

From Table 2, with regards to the minimum and maximum mean scores of the measures of excellence indicated that most of the respondents were on the response scale of high extent and very high extent as the least mean score value was 4.32 which is greater than 3.5 but lesser than 4.5, and the maximum mean score value was 4.72, which was greater than 4.5 mark. Majority of the responses here fell within the strongly agree mark for the measures.

Bivariate Analyses

The bivariate section presents the result for the analysis on the tests for the bivariate hypotheses of the study. A total of nine bivariate hypotheses were postulated which sort to determine the association between the dimensions of information life cycle management and organizational excellence of the telecommunication firms. Each hypothesis is tested herein at a 95% confidence interval and significant probability (P) values are adopted as basis for the rejection of the null statement or in the case of insignificant probability (P) values – the acceptance of the hypothesis

Table 3: The analysis of the effect of tasking on organizational excellence

			Customer Focus	Innovation	Commitment	
			Tasking			
Spearman's rho	Tasking	Correlation Coefficient	1.000	.706**	.742**	.772**
		Sig. (2-tailed)	.	.000	.000	.000
		N	95	95	95	95
	Customer Focus	Correlation Coefficient	.706**	1.000	.711**	.701**
		Sig. (2-tailed)	.000	.	.000	.000
		N	95	95	95	95

Innovation	Correlation Coefficient	.742**	.711**	1.000	.693**
	Sig. (2-tailed)	.000	.000	.	.000
	N	95	95	95	95
Commitment	Correlation Coefficient	.772**	.701**	.693**	1.000
	Sig. (2-tailed)	.000	.000	.000	.
	N	95	95	95	95

Source: Survey result 2023

The result of the analysis in Table 3 reveals that tasking significantly influences organizational excellence in the selected organizations:

- I. The analysis reveals a significant relationship between tasking and customer focus at a **correlation coefficient of 0.706** where the P is significant at a 0.000 coefficient. The null hypothesis is rejected in this case.
- II. The analysis reveals a significant relationship between tasking and organizational innovation at a **correlation coefficient of 0.742** where the P is significant at a 0.000 coefficient. The null hypothesis is rejected in this case.
- III. The analysis reveals a significant relationship between tasking and commitment at a **correlation coefficient of 0.772** where the P is significant at a 0.000 coefficient. The null hypothesis is rejected in this case.

Table 4: The analysis of the effect of Data Sourcing on organizational excellence

			Customer Focus	Innovation	Commitment	
Data Sourcing						
Spearman's rho	Data Sourcing	Correlation Coefficient	1.000	.696**	.599**	.786**
		Sig. (2-tailed)	.	.000	.000	.000
		N	95	95	95	95
Customer Focus	Customer Focus	Correlation Coefficient	.696**	1.000	.645**	.670**
		Sig. (2-tailed)	.000	.	.000	.000
		N	95	95	95	95
Innovation	Innovation	Correlation Coefficient	.599**	.645**	1.000	.772**
		Sig. (2-tailed)	.000	.000	.	.000
		N	95	95	95	95
Commitment	Commitment	Correlation Coefficient	.786**	.670**	.772**	1.000
		Sig. (2-tailed)	.000	.000	.000	.
		N	95	95	95	95

N	95	95	95	95
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Source: Survey result, 2023

The result of the analysis in table 4 reveals that data sourcing significantly influences excellence in the selected telecommunication firms:

- I. The analysis reveals a significant relationship between data sourcing and customer focus at a **correlation coefficient of 0.699** where the P is significant at a 0.000 coefficient. The null hypothesis is rejected in this case.
- II. The analysis reveals a significant relationship between data sourcing and innovation at a **correlation coefficient of 0.599** where the P is significant at a 0.000 coefficient. The null hypothesis is rejected in this case.
- III. The analysis reveals a significant relationship between data sourcing and commitment at a **correlation coefficient of 0.786** where the P is significant at a 0.000 coefficient. The null hypothesis is rejected in this case.

Table 5: The analysis of the effect of Data Transformation on organizational excellence

		Data Transformation	Customer Focus	Innovation	Commitment	
Spearman's rho	Data Transformation	Correlation Coefficient	1.000	.674**	.588**	.771**
		Sig. (2-tailed)	.	.000	.000	.000
		N	95	95	95	95
	Customer Focus	Correlation Coefficient	.674**	1.000	.736**	.770**
		Sig. (2-tailed)	.000	.	.000	.000
		N	95	95	95	95
	Innovation	Correlation Coefficient	.588**	.736**	1.000	.782**
		Sig. (2-tailed)	.000	.000	.	.000
		N	95	95	95	95
	Commitment	Correlation Coefficient	.771**	.770**	.782**	1.000
		Sig. (2-tailed)	.000	.000	.000	.
		N	95	95	95	95

Source: Survey result 2023

The result of the analysis in table 5 reveals that Data Transformation significantly influences on organizational excellence in the telecommunication firms:

- I. The analysis reveals a significant relationship between data transformation and organizational excellence at a **correlation coefficient of 0.674** where the P is significant at a 0.000 coefficient. The null hypothesis is rejected in this case.

- II. The analysis reveals a significant relationship between data transformation and organizational excellence at a ***correlation coefficient of 0.588*** where the P is significant at a 0.000 coefficient. The null hypothesis is rejected in this case.
- III. The analysis reveals a significant relationship between data transformation and organizational excellence at a ***correlation coefficient of 0.771*** where the P is significant at a 0.000 coefficient. The null hypothesis is rejected in this case.

CONCLUSION

From the exploratory analysis suggests there is no single, clear-cut approach to defining the scope, objectives, and implementation practices of Information lifecycle management. Rather, a range of business objectives can serve as policy and operational drivers for Information lifecycle management. Three macro drivers emerged from interviews with senior information technology and technology management, technical (database management and storage systems technologies); compliance and records management (regulatory directives); and data warehousing and business intelligence (improving customer relationships). These levels were not mutually exclusive; rather, the majority of firms interviewed had activities underway in more than one level. Some perennial data management issues emerged in our interviews.

Lack of data and records standardization remains an underlying problem with data, making it difficult to share or interpret data across application system boundaries. Conversely, enterprise wide data standardization, an important objective of strategic data planning approaches of the 1980s and 1990s, is not a goal, only the degree of standardization that makes business sense to pay for. Data quality and standardization issues are an operational focus for current data warehousing and business intelligence project implementations. Too, difficult organizational issues are still present in efforts such as Information lifecycle management that focus on managing information and data in the firm. The managerial focus on short-term results, the centralizing tendencies of data and records management, the issues of data ownership and stewardship by line managers, all present challenges to well-intentioned efforts to develop a more cohesive and strategic approach to managing information in firms. Information lifecycle management and its business policy and operational drivers are not short-term investments in either time or money; rather, respondent interviews pointed to the time and sustained commitment required to realize business value.

Recommendations and Policy Implication

A number of implications and questions emerge for information technology, records management, and storage professionals from our exploratory study. For information technology management, there is the critical question of how far the information technology role will or should expand, either consciously or unconsciously, into enterprise information and such traditionally legal, financial and records management areas as regulatory compliance, archiving and disclosure. The potential implications of such a role expansion are large. For records managers, dramatically heightened attention to compliance, regulatory directives, and records management has obvious benefits and risks.

- i. The study recommends that management attention need should be directed to information management life cycle and system integration and information tasking should be considered relevance to the telecommunication firms.
- ii. The telecommunication firms should have well defined sources of information and challenges facing the organizations in information sourcing should be eliminated to achieve excellence

REFERENCES

- Allen, N (2001). Don't waste your storage dollars: What you need to know. *Gartner Group Research Report COM-13-1217*.
- Almutairi, H. (2011). Factors affecting the information behaviour of managers in Kuwaiti civil service: a rational model. *Information Research*, 16(2), 45-63.
- Anand, V., Manz, C. C. & Glick, W. H. (1988). An organisational memory approach to information management. *Academy of Management Review*, 23(4), 796-800.
- Bernstein, P. (2017). *Against the Gods: The remarkable story of risk*. John Wiley, New York, NY, 1998.
- Burns, S., Ferris, J., & Liatsopoulos, D. (2009). The problem and barriers of records and information management in Africa. *SA Journal of Information Management* , 3(2),1-25.
- Doms, M. (2004). *The boom and bust in information technology investment*. *Federal Reserve Bank of San Francisco*, 5(3), 19 - 34.
- Ebbighausen, H. (2011). *How records and information management practices continue to evolve*. North America: Iron Mountain.
- Esterhuizen, D., Schutte, C. & Du Toit, A. (2012). A knowledge management framework to grow innovation capacity maturity. *SA Journal of Information Management*, 14 (1), Art # 495, 10.
- Glazer, R. (2018). Measuring the value of information: The information-intensive organization. *IBM Systems Journal*, 32 (1), 99–110.
- Henzel, S. (2000). The information audit as a first step towards effective knowledge management: An Opportunity for the Special Librarian. *Worldwide Conference on Special Librarianship* (pp. 210-226). Brighton: Special Libraries Association (SLA).
- Jorion, P. (2019). *Value at Risk: The New Benchmark for Managing Financial Risk, Second Edition*. McGraw Hill, NY, 2001.
- Kahraman, C., Kaya, I., & Cevikcan, E. (2011). Intelligence decision systems in enterprise information management. *Journal of Enterprise Information Management (Emerald Insight)*, 24 (4), 350-379.
- Kalusopa, T., & Ngulube, P. (2012). Record management practices in labour organizations in Botswana. *SA Journal of Information Management*, 14 (1), 112-126.
- Kulcu, O. (2018). Evolution of e-records management in practices in e-government. *Emerald Group Publishing Limited* , 999-1009.
- Kulcu, O. (2018). Evolution of e-records management in practices in e-government. *Emerald Group Publishing Limited*, 999-1009.
- Laudon, K. C., & Laudon, J. P. (2010). *Management Information Systems, Managing the Digital Firm: (11th Edition)*. New Jersey: Pearson Education, Inc., Upper Saddle River.

- Love, P. E. & Irani, Z. (2004). An exploratory study of information technology evaluation and benefits management practices of SMEs in the construction industry. *Elsevier: Information and Management* , 6(4), 227 - 242.
- Lyman, P., & Varian, H. (2003). *How much information?* UC, Berkeley, school of information management and systems, 2003; www.sims.berkeley.edu/research/projects/how-much-info-2003/.
- Maceviciute, E., & Wilson, T. D. (2012). The development of the information management research area. *Information Research*, 7 (3), 78-99.
- Maitland, C., Tchovakeu, L.-M. N., & Tapia, A. H. (2019). Information management and technology issues Addressed by Humanitarian Relief Coordination Bodies. *6th International ISCRAM Conference*. Gothemburg, Sweden: 6th International ISCRAM Conference.
- Mata, F., Fuerst, W., & Barney, J. (2016). Information technology and sustained competitive advantage: A resource-based analysis. *MIS Quarterly*, 19 (4), 487–505.
- Meriel, P. (2010). *Personal information management - literature review*. Oxford University Computing Services: JISC- Funded Sudamith Project.
- O' Brien, J. A., & Marakas, G. M. (2008). *Introduction to information systems, (14teed.)*. New York: McGraw-Hill/Irwin Companies, Inc., 1221 Avenue of the Americas.
- Otiike, J. (2010). The proposed freedom of information Act and its effect on access to information in the public domain in Kenya. *6th Annual International Conference, September 7 - 10, 2010*. Eldoret: Moi University.
- Otiike, J. (2010). The proposed freedom of information Act and its effect on access to information in the public domain in Kenya. *6th Annual International Conference, September 7 - 10, 2010*. Eldoret: Moi University.
- Rao, I. K. (1999). Information Management Scope, Definition, Challenges and Issues. *DRTC Workshop on Information Management*. Bangalore: Indian Statistical Institute.
- Ravi, T. M. (2011). The Path to Information Management Nirvana. *Information Management Daily* .
- Reddy, G. S., Srinivasu, R., Rikkula, S. R. & Rao, V. S. (2019). Management information systems to help Managers for Providing decision making in an Organisation. *International Journal of Reviews in Computing*, 2076-3336.
- Robek, M. F., Brown, G. F., & Stephens, D. O. (1995). *Information and Records Management: Document-Based Information Systems* (4th Edition ed.). New York, Columbus: Mc Graw-Hill.
- Robek, M. F., Brown, G. F., & Stephens, D. O. (1995). *Information and records management: document-based information systems* (4th Edition ed.). New York, Columbus: Mc Graw-Hill.
- Robertson, J. (2015). *10 Principles of Effective Information Management*. Step Two Design Pty Limited.
- Saloojee, R., Groenewald, D., and du Toit, A. S. (2017). Investigating the business value of information management . *South African Journal of Information Management*, 7(4),56-76.
- Sebina, P. M. (2017). Information management in Africa to undergo a change. *Assess to Information Network-Africa (ATINA)*. Southwest. Solution. (n.d.).

- Southwestsolution.com*. Retrieved July 15, 2013, from Information-management solution:
<http://www.southwestsolution.com>
- Stair, R. M. & Reynolds, G. W. (2006). *Principles of information systems: A Managerial Approach, (7th ed.)*. Boston, Massachusetts: Thomson Learning Inc.
- Stair, R. M. & Reynolds, G. W. (2016). *Principles of Information Systems, A Managerial Approach, (7th ed)*. Boston, Massachusetts: Thomson Learning Inc.
- Stamoulis, D., Gouscos, D., Georgiadis, P., & Martakos, D. (2011). Revisiting Public Information Management for Effective e-government Services. *Information Management and Computer Security (Emerald Journals)*, 9 (4), 146-153.
- Stewart, W., Coulson, S., & Wilson, R. (2007). Information Technology: When is it Worth the Investment. *Communications of the IIMA*, 7; (3), 111-128.
- Stewart, W., Coulson, S., and Wilson, R. (2017). Information Technology: When is it Worth the Investment. *Communications of the IIMA*, 7(3).
- Trauth, E. M. (1989). The evolution of information resource management. *Information and Management*, 16(3), 257 - 268.
- Tungare, M. (2017). *Understanding the evolution of users' personal information management practices*. Blacksburg, VA, USA.: Springer Berlin Heidelberg.
- Tungare, M. (2017). *Understanding the Evolution of Users' Personal Information Management Practices*. Blacksburg, VA, USA.: Springer Berlin Heidelberg.
- Weintraub, A., Owens, L., & Jedinak, E. (2013). *The enterprise information management Barbell strengthens your information value*. Cambridge M.A. USA: Forrester Research Inc. Web resources: <http://www.southwestsolution.com/markets/information-management-solutions>.