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Translating Theory into Practice:
Evolving towards an integrated Quality Compliance Model in Statistical Work

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Abstract

The purpose of this paper is to develop an integrated model of Quality Compliance (QC) to elucidate the influence of Compliance with quality standards and practices in statistical and data related work. The ISO Compliance Management Framework, Compliance and Social Cognitive theories serve as a starting-point to develop the integrated conceptual model linking Quality Compliance with standards used to facilitate statistical activities and data implementation programmes. Based on extensive review of current literature, key aspects of the ISO Compliance Management Framework, Compliance and Social Cognitive theories are examined to determine their influence on compliance with quality standards in statistical and data related work. These findings provide a basis for developing a model to advance Quality Compliance literature and empirical research. One of the practical implications of this study is the adoption and use of an integrated Quality Compliance Model by organizational leadership, data project leads and information managers to support systemic performance and productivity at all organizational levels. In addition, organizations can use this model approach to guide baseline compliance assessments, track quality compliance efforts in business or data related activities and to periodically re-assess the effects of any quality compliance change.

Keywords: Quality Compliance, Compliance Management, Standards, Efficacy, Culture, Leadership, Learning and Development, Performance

INTRODUCTION

Quality remains and continues to be one of the top ranking strategic issues in all major organizations. However, today's organizations are faced with increasingly sophisticated and informed stakeholder expectations (Moonsamy & Singh, 2014). Also, the standards by which organizations are judged are continuously evolving as are customers' needs and requirements. Consequently, the alignment of quality with today's business challenges is widely criticized. Compliance with regulations and standards is a critical issue (Becker, Delfmann, Dietrich, Steinhorst, & Eggert, 2016). Globally, statistical organizations value compliance with quality standards as a key driver under its strategic goal on Quality Assurance. Compliance is central to maintaining sound production systems that deliver quality statistical information to key stakeholders and end users (Uganda Bureau of Statistics, 2014). In spite of the increasing volume of literature on the linkage between compliance and performance, relatively little attention has been focused on the effect of these two perspectives towards Quality compliance in statistical and data related work. Although the relationship between Compliance and Performance (Das, 2014; Dickinson & Sullivan, 2013; Lama, 2013; Prorokowski &Prorokowski, 2014) has been previously explored, the study of the relationship of quality compliance with statistical and data related activities has not been studied in any greater depth. Most studies on compliance were empirical and qualitative in nature and showed a strong emphasis on explaining variations between member states. However, these studies were not well grounded in theory (Versluis, 2010), despite attempts by Europeanization scholars to identify more established theoretical frameworks departing from the 'goodness of fit' hypothesis and a (rational or sociological) institutionalist perspective (Chelli, Jacques, & Durocher, 2014). In a study of 29 infringement cases, Falkner, Hartlapp, Leiber, & Treib (2004) showed that different explanations were attributed to compliance for example, deliberate opposition, administrative shortcomings, and interpretation problems. Despite the differences in argumentation on non-compliance, there was an overlap in the solutions offered to address compliance problems depending on the school of thought (Downs & Trento, 2004). The different compliance theories were not competing; the mechanisms were most effective when combined (Börzel, 2002; Checkel, 1999). As Underdal (1998) argued, the question was not which model was 'true', but how much of the variance in compliance each model could explain. Alternatively as Coleman and Doyle (2004) stated, the question was not whether the various models on compliance were true, 'but when they were true'. Thus, studying Quality Compliance in-depth, is pertinent to the literature on Compliance and Performance since it provides a theoretical base to explain the manner in which it can leverage control of the organization's operational systems and processes to drive outward performance and growth (James, 2012). In order to bridge the gap and provide organizations with pragmatic guidance in dealing with compliance with quality standards, this paper proposes an integrated model approach to developing, implementing and maintaining a quality compliance system for statistical and data related activities and programmes.

LITERATURE REVIEW AND RELATED WORKS

Although many authors have written about the significance of compliance in management, relatively little interest has been focused on how Quality Compliance (QC) operates. In order to understand QC, it is important to first define Compliance and Quality. There have been various definitions of Compliance. ISO (2014) delineated compliance as meeting all the organization's compliance obligations (p.1). Checkel (1999) defined compliance as the extent to which agents acted in accordance by and fulfillment of the prescriptions contained in rules, standards, and norms while Snell (2004) described compliance as an organizational outcome traditionally understood as conformity or obedience to the law and associated regulations. Similarly, Quality has been variously defined as excellence (Tuchman, 1980), value (Abbott, 1995; Feigenbaum, 1951), conformance to specifications (Levitt, 1972), conformance to requirements (Crosby, 1979), fitness for use (Juran, 1974; 1988), loss avoidance [Taguchi (cited in Ross, 1989)], and meeting and/or exceeding customers' expectations (Gronroos, 1983; Parasuraman, Zeithaml, & Berry, 1985). (See Reeves & Bednar, 1994, for a comprehensive review of quality definitions.) A universally accepted definition of quality is elusive because broad definitions (e.g., meeting/exceeding customers' expectations, excellence) are difficult to operationalize, and more limited definitions(e.g., conformance to specifications, loss avoidance) are not sufficiently comprehensive to capture the richness and complexity of the construct (Reeves & Bednar,1995). With the increased attention organizations are placing on quality and compliance, the ISO 19600 standard provides general guidance on compliance management with recommended practices to assist organizations implement specific compliance-related requirements, quality standards, regulatory and policy frameworks (ISO, 2014). Embedding compliance and quality within the organization's culture is highly dependent on the leadership, the values, acknowledgment, and implementation of measures to promote compliant behavior (ISO, 2014). The importance of leadership in promoting quality and compliance was further discussed by Juran and Blanton (1999). They observed that the main impetus for the prominence of quality during the past decade was attributed to its vital contribution to an increasingly globalized business environment. Juran and Blanton (1999) reiterated that management now understood the importance of quality, having understood the threat and consequences of product failure, the rapid shift of power to the buyers and the demands of global competition in costs, performance, and service. Further, the ISO (2008) features the ISO 9000, a series of quality system standards first published in 1987. The standards were based on the eight quality management principles of customer focus, leadership, people involvement, process approach, system approach to management, continual improvement, factual approach to decision-making and mutually beneficial suppliers. The ISO 9000 series is the most popular meta-standard in management and is still considered a passport to the global business (Lo, 2008). The standard brings to light key quality management principles of leadership and people involvement that are fundamental to Quality Compliance within the organization.

Compliance Theory

Similar to the ISO Compliance Management Framework, Lunenburg's (2012) Compliance theory explored leadership as a crucial proponent of Quality Compliance. The theory classified organizations by the type of power they used to direct staff involvement and compliance behavior. The types of power were categorized under three expectable combinations namely, coercive-alienative, utilitarian-calculative, and normative-moral. While all three types of power were useful in obtaining subordinates' cooperation in organizations (Lunenburg, 2012, p.1), the relative effectiveness of each approach depended on the people's involvement (Lunenburg & Ornstein, 2012). According to Etzioni (1997), organizations that employed coercive power had hostile reactions from participants leading to alienative involvement, while utilitarian power often resulted in calculative participation were people desired to maximize personal gain. Normative power on the other hand habitually created moral association where participants were committed to the socially beneficial features of their organizations (pp.3-4). Similarly, Mahoney and Thelen (2010) underlined compliance as a crucial factor in institutional change. While compliance theory brought to light the anticipated combinations of leadership power and people involvement, it did not take into account individual motivators and human factors that affect culture and Efficacy beliefs. This created the assumption that all participants involved in the organization were united by a single driver (Rossi, 2010).

Social Cognitive theory

The Social Cognitive Theory by Bandura (2001) suggested that organizations embodied endowments, efficacy belief systems, self-regulatory influences and distributed structures through which personal influences were exercised, rather than residing as a discrete entity in a particular place. Efficacy beliefs are critical in understanding an organization's culture and how people act on the outcomes of their prospective performances based on their beliefs. As a core feature of human agency (Bandura, 2001), efficacy is fundamental in determining how people's attitudes and perceptions influence their levels of compliance with quality standards, regulations and related requirements. Accordingly, efficacy becomes a critical aspect to consider while developing quality compliance systems within an organization.

A Conceptual Quality Compliance Model

Based on the above literature review, a conceptual model emerged to map out sequential steps for quality compliance management within the organization for statistical and data related activities. The linkages between leadership, People, Culture and Efficacy beliefs towards compliance as underlined in the Compliance and Social Cognitive theories are illustrated below.

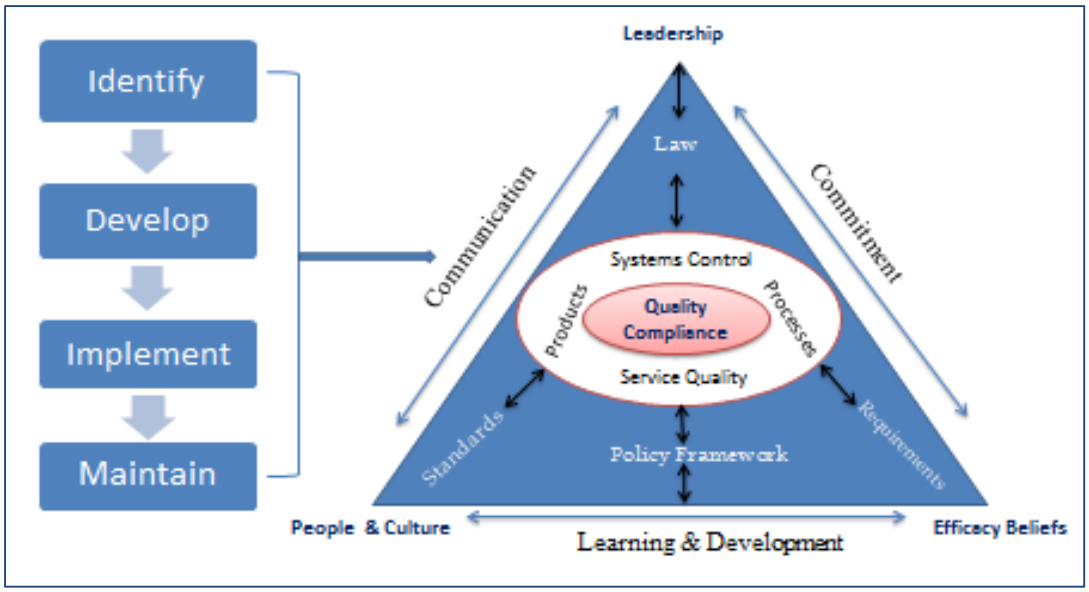

Figure 2. Model approach for quality compliance with standards

Source: Primary data

The model approach in figure 2 above describes three prerequisite levels as follows;

i. The internal level mirrors how quality compliance is managed *(how it is defined in context of existing standards and laws, policies and regulations, how compliance issues (gaps) are identified and addressed* within the organization's systems, controls, process levels, products and or services, *how compliance strategies are set, implemented, and compliance improvements maintained*).

ii. The intermediate level provides an enabling environment for quality compliance management within the organization. An effective organization-wide quality compliance management system will result in the organization being able to demonstrate its commitment to compliance with relevant laws, including legislative requirements, policy frameworks, regulations and standards for quality. (*This level takes into consideration a systemic approach to documentation management and access controls for all organizational staff)*

iii. The external level displays the pillars for quality compliance which include leadership, people, culture and efficacy beliefs. Evidence from research by (Bandura, 2001; Dickinson and Sullivan, 2013; Ong, Kathawala, & Sawalha, 2015) showed the significant role of these pillars in compliance measurement, and how they impact on organizational performance from a quality compliance perspective. Embedding compliance in the behavior of people working within the organization is primarily the result of leadership commitment and communication at all levels. This can be supported by a clear

value system that promotes compliant behavior through continuous learning and development.

This model approach therefore, is applicable to any organization implementing or planning to implement a Quality Compliance Management System.

Managerial implications

In today's global environment, the strategic relevance of quality management systems and related standards in driving performance has never been clearer. It is evident that compliance is essential to revitalizing the organization's productivity and performance (James, 2012). Many organizations are starting to implement quality compliance systems. The practical contributions of this research are that organizations planning to implement quality compliance will be able to apply different components of the model within their own systems and processes to strengthen their compliance levels.

Academic implications

With the emergence of Quality and Compliance as a research area, many studies have increasingly focused on exploring compliance-perception relationships and organizational behavior (Benn, Dunphy, Griffiths, & 2007; Magd &Nabulsi, 2012; Parker, 2002; & Pfeffer & Salancik, 2003). Despite of the increasing volume of literature on the linkage between compliance and performance, Quality compliance as a focus area remains under studied. This study proposed a new integrated model which includes key components that will guide the execution of Quality Compliance practices within the organization. The model draws largely from the ISO Compliance Management Framework, the Compliance theory and Social Cognitive theories.

Originality/value

The study sought to advance compliance research, contributed to existing quality and business management literature and provided quality practitioners, business leaders and academicians with a systematic approach to quality compliance for their organizations. Also, organizations from various business or public sectors could use this framework to conduct baseline compliance assessment and periodically re-assess change.

CONCLUSION

In conclusion, this paper attempted to fill a gap in literature by leveraging leadership role in compliance management, people's efficacy beliefs and organizational culture to create an original integrated conceptual model approach for quality compliance within the organization. Findings from an earlier explanatory mixed methods study

with a correlational design within a statistical organization, provided baseline for the conceptual model on quality compliance to establish itself in practice. Nonetheless, future studies are required to test the application of the model within any organizational setting. In effort to maintain quality compliance practices, organizations should undertake baseline assessments to identify compliance gaps, set mitigation strategies, design – communicate- deploy organization-wide quality compliance policies and programmes.

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