# **Explored and Critique of Contingency Theory for Management Accounting Research**

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#### Abstract

The paper explored contingency theory as it relates to management accounting and organisational system. It traced the theory to US research on leadership behaviour and interpersonal relationships. Though the previous studies about were faulted because of non-best fit in organisations leadership. The theory provides an explanation of organisational behaviour base on contingent factors, thus there is no generalised best fit in leadership style. Also, it is relevant to accounting by its effect on technology and environment. Where management accounting research appreciate its impact on budgeting system and control and information disclosure, among others. However, there is a problem with the theory claim on the static behaviour of organisations and fail to address issues of organisational size. Notwithstanding its shortcomings, the theory is acceptable in leadership studies and management accounting and control research.

**Keywords:** Contingency Theory; Management Accounting System; Best fit; Leadership style.

## 1. Introduction

Contingency theory was developed in 1950 by the findings of leadership behaviour research conducted by researchers from Ohio State University (Donaldson, 2001; Nohria & Khurana, 2010). The report showed that effective leadership behaviour evolves around building good rapport and interpersonal relationships (Consideration); and Initiation of structure that ensures task completion and goal attainment.

Similarly, at about the same time, University of Michigan's Survey Research Center investigated group productivity to assess effective leadership behaviours. The findings are akin to the consideration and initiating structural behaviours identified by the Ohio State studies (Donaldson, 2001). However, termed these leadership behaviours relation-oriented behaviour and task-oriented behaviour. Robert Blake and Jane Mouton in 1964 extended the research to suggest that effective leaders score high on both these behaviours.

Both types of research faulted previous theories such as bureaucracy theory of Weber and scientific management of Taylor, claiming that they failed because they neglected the influence of various environmental contingencies on organizational structure and leadership style. That is there could not be "one best way" or "Best fit" for all leadership styles or organising.

Contingency theory has sought to formulate broad generalizations about the formal structures that are typically associated with or best fit the use of different technologies (Nohria & Khurana, 2010). This perspective originated with the work of (Woodward, 1958) who argued that technologies directly determine differences in such organizational attributes as the span of control, centralization of authority, and the formalization of rules and procedures.

The theory upholds an approach to the study of organizational behaviour in which explanations are given as to how contingent factors such as technology, culture and the external environment influence the design and function of organizations (Bastian & Andreas, 2012). The assumption underlying contingency theory is that no single type of organizational structure is equally applicable to all organizations. Rather, organizational effectiveness is dependent on a fit or match between the type of technology, environmental volatility, the size of the organization, the features of the organizational structure and its information system. The theory was developed from the sociological functionalist theories of organization structure such as the structural approaches to organizational studies by Smith and Farquhar (2000) and Chenhall (2003). These studies postulated that organizational structure was contingent on contextual factors such as technology, dimensions of task environment and organizational size. It is still regarded as a dominant paradigm in management accounting research (Cadez & Guilding, 2008).

The objective of the study is providing a theoretical background to the theory and its relevance in management accounting. A review approach is used to show its application in management accounting research. The study further explored the essential features of the theory as it relates leadership and management of organisations. A critical evaluation of the theory is made to show its flaws in management accounting system. This will enable understanding of the theory and its applicability in management accounting research.

## 2.0 Key features of the theory

The essential feature of the theory is its behavioural approach that relates to the optimal fit of organisational structure based on contingent situations (Bastian & Andreas, 2012). It has no one best way of organising, a leadership style that proved effective in one situation may not be most successful in another. Donaldson (2001), provides that theory is concerned with leadership and situations, matching leadership style to situations. The style is either task motivated or relationship oriented, and situations- leader-member relations, task structure and position power. The leadership style is contingent upon both internal and external environment variables while effective leadership depends on how well the leader's style fits the context.

Therefore it can be said that contingency theory is a class of behavioural theory that claims there is no best way to organize a corporation, to lead a company, or to make decisions. Instead, the optimal course of action is contingent (dependent) upon the internal and external situations.

It is an approach to the study of organisational behaviour, exploring the influence of both external and internal contingent variables such as technology, culture and the environment on functions and design of the organisational structure.

## 3.0 The Relevance of the Theory to Accounting

The adoption of contingency theory in accounting system arises because of conflicting research results which could not satisfactorily be resolved within a universal framework. This serves as a stimulus for the development of contingency formulations. Concepts such as technology, organization structure and environment have been invoked to explain why accounting systems have been found to differ from one situation to another.

## 3.1 The effect of Technology

Different types of production technique, e.g. unit production, small batch, large batch, mass production and process production influenced the design of internal accounting systems(Grötsch, Blome, & Schleper, 2013). Also, the complexity of the task faced by an

organization is relevant to defining an appropriate financial control structure (Daft & Macintosh, 1981)

## 3.2 The effect of organization structure

The structure of the organization affects the manner in which budgetary information is best used. That is Budget-Constraint style (employees evaluated based on meeting budget targets) or Profit-Constraint (evaluation based on long-run effectiveness) (Daft & Macintosh, 1981; Donaldson, 2001; Hirst, 1983).

#### 3.3 The effect of environment

Environmental factors have also been invoked to explain differences in the use made of accounting information. It was reported that the type of competition in a market environment affects the extent of control system employed by an organization. The sophistication of accounting and control systems was influenced by the intensity of the competition it faced (Cameron & Whetten, 2013; Daft & Macintosh, 1981; Fiol & O'Connor, 2003; Govindarajan, 1984).

## 4.0 Contingency Perspective in Management Accounting Research

Contingency theory has been identified as an important area of research in management accounting (Chenhall, 2006). Hofstede classic fieldwork in 1967 was among the earlier management accounting research adopting a contingency perspective. It was found that economic, technological and sociological considerations had a significant impact on the functioning of budgeting systems. In addition, (Chapman, 1997; Chenhall, 2006) report cultural effects on management control systems of an organization.

Drawing upon the contingency theory of organisations, Elsayed and Hoque (2010) identify a set of perceived international environmental factors (competitions, socio-political institutions, and accounting standards), and examine how these factors influence a company's voluntary disclosure levels. They collected data from 100 Egyptian non-financial listed companies; the results of multiple regression analysis indicate that the level of a company's voluntary disclosure is positively and significantly associated with its perceived influence of international socio-political institutions, accounting standards, and the financial institutions. Contrary to the expectations, the findings showed no significant association between voluntary disclosure level and competition. They report that the study contributed to the international accounting disclosure field by providing evidence from Egypt that perceived international environmental factors may influence the type and level of accounting disclosures by organisations, and suggest the applicability of the findings to other emerging countries.

The theory has also been applied to the subunit level of organizational behaviour. Hayes (1977), examined the appropriateness of management accounting in order to measure the effectiveness of different departments in large organizations and found that contingency factors or contingencies were the major predictors of effectiveness for production departments. Hayes' study considered three major contingencies affecting sub-unit performance: internal factors, interdependency factors and environmental factors. The results suggest that the underlying causal variables should be studied rather than just narrowly examining surrogates. It thus implied that a contingency approach should be taken to managerial accounting and the relevant assessment methods should be determined by sub-unit type, sub-unit inter-relationships and the extent of environmental influence on the performance of sub-units. He advocated the use of contingency theory in studies of

organizational assessment and subunit evaluation.

Christ and Burritt (2013), observed that despite increasing interest in environmental management accounting (EMA), theoretically informed projects concerning the current state of EMA development remain scarce. They presented a research aimed to extend current knowledge by investigating whether organisational context could be used to develop a greater understanding of EMA use by Australian organisations. Drawing on contingency theory, the research framework was developed that sought to identify the circumstances under which organisations were more likely to engage with EMA activities, both now and in the future. To test this framework a web-based survey of Australian accountants in business was conducted. The data suggested present and future EMA use was associated with environmental strategy, organisational size and environmentally-sensitive industries. Contrary to expectation organisational structure was not found to be associated with accountants" perceptions of EMA use in their organisations. These findings support the potential of contingency-based research to further current knowledge and understanding of the reasons behind EMA development.

Flamholtz, Bullen, and Hua (2002) reviewed the contingency literature concerned with the issue of control along three perspectives: the sociological, the administrative and the psychological perspectives. The sociological perspective focuses on the entire organization and the larger groups within it. Such as structural mechanism of rules, policies hierarchy of authority or coordinative units of control etc. The administrative perspective focuses on the individuals or departments within an organization. The control mechanisms employed by the administrative theorists are plans, measurement, supervision, evaluation and feedback. The psychological perspective emphasizes goal and standard setting, extrinsic and intrinsic rewards, feedback or interpersonal influence.

Shank (1989), applied contingency principles in investigating the use of managerial accounting systems and information in a strategic way. Also, Banker, Datar, and Kemerer (1991) looked at the impact of structural factors and found that firms which implemented just-in-time (JIT) or other team-work programs were more likely to provide information regarding performance to shop-floor workers.

Merchant (1985), examined contingent relationships between corporate contextual factors, such as the size of the firm, product diversity, the extent of decentralization and the use of budgetary information. Additionally, some studies have investigated the influence of external factors such as the impact of environmental uncertainty. Environmental uncertainty was found to be a major explanatory variable as to whether accounting data was appropriate in evaluating the performance of business units (Chenhall, 2003; Hartmann & Moers, 2003). The literature has shown that contingency theory is applied in management accounting research in order to address three types of questions. These questions are about: first, the fit between organizational control and structure; second, the impact of such fits on performance; third, investigation of multiple contingencies and their impact on organizational design.

5.0 Previous Researches Specific to Contingency of Management Accounting System There are volumes of studies in the contingent literature which deal with this contingency and its impact on Management Accounting System (MAS). MAS has been traditionally seen as a system that produces routine information for product and service costing, budgeting and performance measurement (Chenhall & Langfield-Smith, 2007). Accordingly, it also provides ad-hoc information which meets the short-term and long-term decision-making

needs of management. This will be considered at both contextual variables and broad-based information level.

## 5.1 Research on Organisation's Contextual Variables

In order to enable managers to make more effective decisions in their job setting, management accounting research focused on the contextual variables which influence MAS design (Gordon & Narayanan, 1984; Gul & Chia, 1994; Strandholm, Kumar, & Subramanian, 2004). These are organizational features/structures that are affected by the contingent situation.

Gordon and Miller (1976), provided a comprehensive framework for the design of accounting information systems. They also intended to identify the variables which were critical to organizational performance. Environment, organizational characteristics and decision-making style were suggested to be the main classes of contingent variables. Through discussions and literature review, the researchers indicated the theoretical links between the variables. They advocated a contingency approach which took environment, organizational attributes and managerial decision-making styles into account in the design of an accounting information system.

Gordon and Narayanan (1984), investigated the relationship between an organization's structure and information systems. They found that the characteristics of information perceived to be important by decision-makers were related to Perceived Environmental Uncertainty (PEU). The results of the study suggested that organizational structure and characteristics of information sought by decision-makers were complementary strategies in response to the perception of their environment.

A similar study investigated managers' needs for their organizations' MAS information by Chenhall and Morris (1986) identified four dimensions of information, that is, scope, timeliness, aggregation and integration. Using these four dimensions, developed and tested an instrument to measure the perceived usefulness of MAS information. They argued that managers would prefer strategically useful information which includes broad-scope, timely, aggregated and integrated information. The study found that the type of information perceived to be useful by managers was broad in scope and timeliness. They made an important contribution to management accounting research by arguing that the broad characteristics of MAS would influence the design of MAS. Though, they did not investigate the issue of MAS information adequacy gap as observed by (Strandholm et al., 2004). It concluded that such conceptualization can provide a common basis for comparing MAS in different organizations and industries.

Fisher (1996), the study revealed individual preferences for particular types of information as the level of uncertainty increases. He hypothesized that as PEU increases, the internals on the locus of control (LOC) scale will perceive information that has a wider scope and is more useful than do externals on the LOC scale. Results of the study indicated an effect but the direction of the effect is opposite to that expected. Externals, instead of internals, found information more useful when faced with higher uncertainty. The study pointed out that it is necessary to consider personality variables together with environmental variables.

Gul and Chia (1994), further tested the instrument which measures the perceived usefulness of MAS information. They studied the interacting effects of MAS and perceived environmental uncertainty on business managers' perceptions of their performance. The

results of the study showed that the effects of MAS on performance were dependent on environmental uncertainty. MAS had a positive impact on performance under high levels of uncertainty, whereas there was a negative impact under low levels of uncertainty.

## **5.2** Broad-Scope Accounting Information

Studies that applied contingency approach to management accounting and information system are quite extensive. This is because of the importance attached to information system controls in an organization.

Mia and Chenhall (1994), investigated the impact of broad-based information made to available by MAS in increasing the performance of managers. The study collected data from the managers on the extent of their use of broad-scope information, and their perceptions of the level of uncertainty involved in their task. Report results indicating associations between the extents of managers using broad-based MAS information and their performance.

In another study, Tillema (2005) concentrated on the scope which is a dimension of MAS sophistication and improved the understanding of contingency factors. It revealed that using average scope accounting instrument needs a stable environment and variation in the operating activities. Broad scope accounting instruments require operating activities and energetic environment. Thus, both conditions need institutions which do not favour narrower scope accounting instruments, financial objectives and unclear financial consequences.

Naranjo-Gil and Hartmann (2007) examined MAS and the mechanism of MAS which mediates the relationship between organizational strategic change and top management team composition. The study did not find a significant relationship between top management team heterogeneity and the broad-scope design of MAS. But with Regard to the relationships between MAS and strategic change, the findings of the study showed broad-scope MAS was positively related to a strategic change for organizations. The findings are in line with Chenhall and Chapman (2006)'s studies.

Two recent developments in the field of MAS are revealed by (Aver, Aaver, & Cadez, 2009); Cadez and Guilding (2008). Cadez and Guilding (2008) examined the effect of company size, company strategy and market orientation on the strategic management accounting. They suggested that company strategic choices and company size had a significant influence on the application of strategic management accounting. Moreover, the results of their study support that organizational performance depends upon the fit between organizational structure and context. A further study by Aver et al. (2009) indicated that sociological developments are highly related to accountant's participation in strategic decision-making processes.

# 6.0 Critical consideration of the theory

The theory enjoys unprecedented support in accounting research but it is not free from criticism. This is arising in some particular instances where its appropriate application in management accounting is challenged.

# 6.1 Organisational Change

Contingency theory is challenged as static and fails to deal with organizational change and adaptation (Galunic & Eisenhardt, 1994). The theory, like sociological functionalism more generally, is often considered as being an equilibrium theory, in that organizations are depicted as attaining fit and then being in equilibrium and so remaining static. However, Structural Adaptation to Regain Fit (SARFIT) is a disequilibrium theory of organizations (Donaldson, 2006). In SARFIT an organization only remains in fit temporarily, until the

surplus resources from the fit-based higher performance produce expansion. This increases contingency variables, such as size or diversification, leading the organization into misfit with its existing structure. Thus, in the SARFIT view, fit and misfit is each temporary states that alternate with each other. An organization in fit tends to expand into misfit, which provokes structural adaptation into a fit, which then leads to further expansion into misfit. This cycle repeats itself over time. As the organization moves between fit and misfit so it has resultant higher and lower performance, respectively.

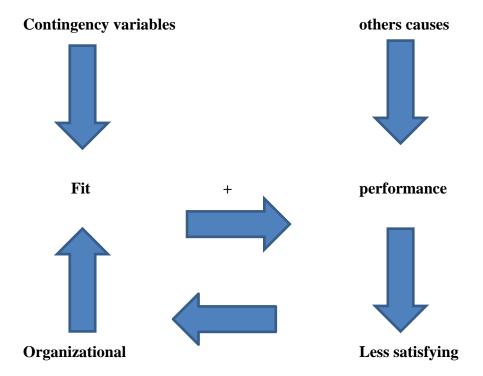


Figure 1 Structural Adaptation to Regain Fit Adopted from Donaldson, (2006)

It is also criticised that is not sensible for organizations to move into a fit with their contingencies, because while the organization is changing its structure to fit the contingencies, the contingencies themselves change so that the organizational structural change does not produce fit (Donaldson, 2006).

It is sometimes also said against structural contingency theory that organizational managers may not know the fit states of the theory and so cannot change their organization towards it (Donaldson, 2001).

## 6.2 Iso-performance

The theory holds that organizations in fit have (as a result) higher performance than those in misfit. However, all of these fits produce the same high level of performance. It has been shown that organizations in fit to each of levels of the technology contingency attained the same high level of performance. Drazin and Van de Ven (1985), the point about the fit line as being one of iso-performance, that is, the equal performance of all the fit points on it (Iso-performance: Fit, Misfit and Performance).

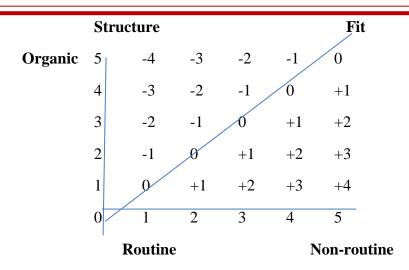


Figure 2 Contingency of Technology

However, if each fit produces the same high performance, why would an organization move from one fit to another? Why do organizations change greatly, such as firm being small and un-formalised to being large and highly formalized if both those states are fits between size and formalization and so yield the same benefit? For movement along the fit line to be organizationally rational there must be some gain from it. These are some questions need to be addressed in future researches.

# 6.3 Organizational size

Most contingency-based MCS research has studied larger organizations but has not considered size variation within larger entities. This is unfortunate as there is evidence from early organizational contingency studies that the relationship between size and administrative arrangements such as specialization, formalization and the vertical span increases with size but at a declining rate (Merchant, 1981). Thus, while it is reasonable to assume that large firms employ formal MCS, it is possible that different types of controls will be appropriate within these large firms, depending on size

#### 7.0 Conclusion

Though with its likely shortcomings, the theory enjoys some level of acceptability among researchers in the study of leadership, accounting controls, and personnel management. One of the strengths of the theory is that it has been empirically tested and found to be a valid and reliable approach to explaining how to achieve effective leadership and controls (Ginsberg & Venkatraman, 1985).

It has also broadened the scope of understanding leadership style, emphasizing the importance of a situational approach to organizing. Therefore no one particular leadership style is successful in all different situations (Hughes, Ginnett, & Curphy, 1998). This allows for assessment of leaders based on circumstances and situational contingencies

It has the predictive ability to organising that most likely to be effective in particular context, mechanistic or organic. For example, stock valuation method. Contingency theory contends that leaders should not expect to be effective in every situation (Hughes et al., 1998). Thus companies should strive to place leaders in optimal situations according to their leadership style, skills, among others.

Contingency theory supplies data on leadership styles (profile) that could be useful to organizations in developing leadership profiles for human resource planning.

#### 8.0 Recommendation for Future Research

Research methodological issues need to be addressed as inter-connectivity among control variables makes results from pure statistical analysis method unrealistic. There is a need for research approach unveiling this complex pattern of interaction. Need for a longitudinal study to illuminate the process by which an accounting system develops and is changed in response to organisational pressure; Anthropological method approach-to allow closer interaction between the researcher and the studied organization; A multi-disciplinary approach to the research is important as those trained in a particular field interpret their observations according to previous experience. This call for Case studies involving a small number of organisations, carefully selected so as to give value to on chosen contingent variables whilst controlling for other, and the close involvement of the researcher with the organisation over a period of time.

Accounting as part of a control system where the accounting information system (AIS) is bound up with many kinds of a control mechanism used by org. to influence behaviours and relationships. Therefore, there is a need for assessing the control measures jointly. However, (Ouchi, 1977; Ouchi & Maguire, 1975) provide that simultaneously use of a wide range of control mechanism serving multiple purposes make it difficult to isolate the effect of any specific control measures.

Therefore, the best approach is to identify those combinations of controls that appear to be particularly suited to certain contingencies, and the utilisations of system controls framework approach.

To achieve organisational effectiveness there is need to investigate the nature of organisational objectives and their effect on performance. This is because objectives serve as a base or criterion against which the effect of different configurations of controls is evaluated, that is the impact of accounting system in aiding performance.

The influence of organizational ideology and its effect on control arrangement. Study evaluating the appropriateness of a particular accounting control system and comparison with a range of measures of effectiveness at, both an organisational level (organisational preference) and an individual level of analysis (AIS preference). It is therefore important to consider a number of dimensions of effectiveness are measured rather than an arbitrary choice of a single dimension.

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