# Ac 410 Presentation Group Essay Contingency Theory

What is contingency theory? What implications does it raise for organization and control? What criticism may be made of it?

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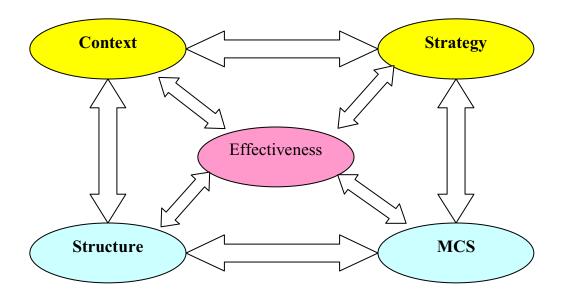
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### 1 Introduction

Fisher (1998) suggests, 'Contingency theory is the design and use of control systems which is contingent upon the context of organisational setting in which these controls operate.' Developing contingency model requires a basis on which to divide competitive settings into discrete classes. Contingency theory also says that a better match between the control system and contextual contingency variable is hypothesised to result in increased organizational (individual) performance. It rose in response to universal approach that argues optimal control design applies in all setting and firms.



Context and strategy both influence the choice of MCS and structure of the company. The overall fit between the four variables can lead to an increase in the overall effectiveness of the firm.

### **2** Four Contingency Formulations

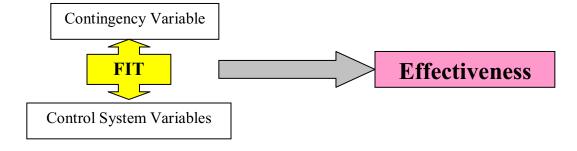
Fisher in his 1995 paper has classified the 4 levels of analysis based on the contingency factors, control and outcome variables included in the study. As the level of the analysis increases, it becomes more complex. Before providing the propositions of each level, we would like to describe briefly the differences between each level:

• Level 1 only involves one element of contingent factor and one control mechanism. However, this level does not tell you anything about the effectiveness. (Test of association).



- Level 2 which is similar to Level 1 except it is a test of effectiveness (congruence) but not only association.
- Level 3 describes the joint effect of a contingent factor and multiple control mechanisms on outcome variable are addressed (Drazin and Van de Ven 1985). This type of analysis assumes there may be complementary or substitution relationships between control variables that may be uncovered by including multiple control mechanisms in the analysis. Control system substitution implies use of different control mechanisms can achieve same desired result, whilst complementary control systems are used in reinforcing fashion.
- Level 4 simultaneously includes multiple contingent factors in determining optimal control design. However, Gresov (1989) noted when several contingency factors are entered simultaneously into the analysis; demands placed on control system might conflict. Designing control system to contingencies involves tradeoffs that preclude a 'fit' to all contingencies.

A diagram to show the concept of effectiveness (congruence) from Level 2 to Level 4:



## 3 Propositions to illustrate the application of the contingency theory based on a Level 2 analysis

There is some systematic relationship between the firm's environment and the way it is organised internally. For example:

- The more uncertain the environment, the more open and externally focused the MCS is. For example, the uncertainty has been related to the usefulness of broad scope information and timely information, less reliance on incentive-based pay, non-accounting style of performance evaluation rather than based on accounting performance evaluation, etc.
- The more hostile and turbulent the external environment, the greater the reliance on formal controls and emphasis on traditional budgets. Also, in the situation where the MCS is focused on tight financial controls (i.e. pressure to meet financial targets) used in uncertain environments, they will be used together with an emphasis on flexible and interpersonal interactions.

But what would be the most appropriate MCS for organizations operating in conditions of uncertainty, turbulence and hostility? According to some of the organisational design literatures, organizations facing extreme pressure will initially tighten control as such pressure is likely to threaten short term survival and then adopt more organic controls. However, we should note that when we interpret studies that have examined the influence of the external environment, the results would often be complicated by the use of different measures of the same environmental construct.

The second point is about technology and MCS which can be subdivided into Standardized-automated processes, task uncertainty and interdependence with MCS. If we look at the relationship between a Standardized-automated processes (complexity) and MCS. We would find that the more the technologies are characterized by less standardized and automated processes, the more formal the controls including reliance on process control, and tradition budgets with less budgetary slack (Slack will be positively related to less automated, less predictable job/batch type technologies). In addition, the

higher the levels of task uncertainty, the more informal the controls including: less reliance on standard operating procedures, programmes and plans, accounting performance measures, behaviour controls; higher participation in budgeting; more personal control, etc.

Thirdly, over the past 20 years MCS research found that there were some relationship between the organizational structure and its MCS:

- Large organizations with sophisticated technologies and high diversity that have more decentralized structures are associated with more formal and traditional MCS (e.g. budgets, formal communications).
- R&D departments compared to marketing departments, which face higher levels of **task uncertainty**, are associated with participative budgeting (involvement of subordinates in setting budgets); and marketing compared to production departments, which face higher levels of **external environment uncertainty**, are associated with more open, informal MCS (e.g. broad scope information).

Please note that when evaluating the contingency relationships between MCS and structure, elements of environment, technology and strategy are likely to have implications on the relationships and, as such, much can be gained by considering them at the same time. This can be done through either the Level 3 or Level 4 analysis (Fisher).

Fourthly, there was evidence suggesting links between strategy and cost control and to formality of performance evaluation which focused on strategy at the strategic business unit level:

- Strategies characterized by conservatism, defender orientations and cost leadership are associated more with formal and traditional MCS, focusing on cost control, specific operation goals and budgets, than entrepreneurial, build and product differentiation strategies.
- Product differentiation and competitor focused strategies are associated with broad scope MCS for planning purposes. Customization strategies are associated with integrated (the extent to which the subunits act in ways that are consistent with organizational goals) and timely MCS for operational decisions.

 Strategies characterized by defender and harvest orientations and following cost leadership are associated with formal performance measurement systems including objective budget performance targets.

Moreover, as our fifth propositions, we would like to discuss the link between a firm's structure and its strategy, rather than focusing on the contextual variables. As firm expands, this will affect the structure of the organisation, for example:

- Defenders tend to have structure emphasis in operational efficiency (mechanistic structure)
- Prospectors tend to have structure emphasis in adaptation to changing environment (organic structure).

Finally, context must be consistent with the strategies adopted, otherwise strategy will fail (i.e. the strategy used must fit the context) for example:

- Small firm in an industry dominated by economic of scale (cost leadership). If the economic of scale is large, then for a small firm, it is wiser to choose a strategy to differentiate rather that choosing to be operationally efficient.
- Large firm is very difficult to adopt changes in some circumstances; it may be
  difficult to think of a strategy in terms of being the first in technological
  innovation, because it is unable to change as fast as compared to the smaller
  firm.

The context may define the limits within which the strategies have to lie; otherwise, it will become ineffective.

Except for the simple pair wise associations among the variables, we need to look at contingency approach in a deeper and broader perspective in order to maximise the performance or overall effectiveness within organization, for example, Level 3 and Level 4 analysis. That is the level of analysis which is important to theory construction within contingency-based research. Care is required in maintaining consistency between the theory, the unit or level of analysis and the source of measurement. If for instance, the usefulness of budgets and environmental uncertainty are sub-unit variables and

experience with budgets is individual level. If an individual level is adopted then the usefulness of budgets at the sub-unit level and the environment uncertainty facing sub unit are inappropriate as uncertainty is assumed to be same for all unit.

#### 4 Further research

Many researchers have suggested research is needed for level 3 & 4 analysis as few empirical results have been reported. Specifically, relationships among contingency variables need to be explored. An important issue is relationship between the contingent factors. Many contingent factors may not be correlated, giving rise to possibility of conflicting contingencies. But current knowledge of contingent relationships does not exist for small number contingent factors. In addition, contingency research should move beyond simple correlation and attempt to determine causality, e.g. the phase of the product life cycle may partially determine environmental uncertainty. Causality analysis implies different statistical techniques (time-series methods) than the typical correlation analysis.

There is also lack of clarity in defining control system leads to difficulty in defining control system boundaries. A broad definition leads to problems of intractability as many firm mechanisms are seen as control related. A narrow definition may limit ability to explore possible relationships and control trade-offs. The MCS should be studied not in isolation with other firm mechanisms (i.e. human resource policies). Consistent with understanding the relationships among contingent factors, the relationships among the control mechanisms should also be studied.

Another issue is poor conceptualisation of outcome (dependent) variables. Many studies do not examine contingency relationships result in higher firms performance and when included are ill-defined. Apart from financial goals, firms may have goals such as survivability or market share and these should be included as performance variables.

Moreover, other outcome variables beyond performance whether use of control system might increase firm performance while negatively affecting other outcome variables, i.e. satisfaction or stress.

### 5 Limitations and Criticism

There are variations in number and type of controls that have been researched which makes it difficult to develop a coherent body of knowledge. For instance Simons (1987) selected 10 financial controls, whereas Govindarjan and Gupta (1985) each focused on one control- incentive bonus schemes and budget evaluation style, respectively.

In strategy settings, Hofer (1975) speculated some contingency variables have priority or dominance over contingency variables. Unfortunately, there is very little evidence on the possible dominance of contingency variables and accounting control research has only examined a small subset of Hofer (1975) 54 contingency variables.

Fisher (1987) suggests that the relationship between the contingent variables is not well understood. For example, uncertainty in external environment is very broad contingent variable and may be correlated with several other contingent factors.

Most research have examined only contingency factor at a time. It is difficult to uncover the relationships and causality among contingent variables using this approach. Many contingent factors have little correlation, giving rise to the possibility of conflicting contingencies. If the demands placed on control systems by contingency factors conflict, simultaneous tailoring of the control system to all contingent factors in a straightforward design is not possible. Trade-offs between the conflicting contingencies must be considered in designing the control systems.

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Contingency research typically relies on cross-sectional analysis based on arm's length questionnaires. These certainly appear to provide statistical rigour but they have limited ability to uncover patterns of causality and process. Even if results pointed definitively to contingent patterns of accounting and information system design, we know little about how those designs came about into being, what motivates people in organisations actually had in choosing one design rather than another, how they perceived constraints on their action and how accounting systems were actually used.

Finally, Chenhall (2002) suggests future contingency-based frameworks can be advanced by integrating insights from alternative theoretical perspectives into organisational adaptation and functioning, that is theory from economics and psychology, as well as organizational theories.

### 6 Conclusion

It is likely to be more effective if all the 4 variables (context, strategy, structure and system) fit together. Therefore, it is not sufficient to only concentrate analysing solely on the 1<sup>st</sup> or the 2<sup>nd</sup> Level of (Fisher's definition) Analysis. All variables are interrelated and should not be viewed in isolation (so further research will be necessary). But bear in mind there may have a conflict of interests if taking into account too many variables simultaneously, and the process to measure their effectiveness in terms of improvement on performance or operational efficiency will become a more difficult task for researchers. Finally, one must bear in mind that although there are many evidence to support the propositions we discussed in the previous sections, their effectiveness or reliability may vary due to the differences in cross country cultures or organisational believes. And that is the main point of contingency theory; we must adopt different management control systems according to what our environment is like, how our strategies vary or what nations we are. There is no universal approach or a fixed set of rules about the choice of management control systems for you to follow in reality.