“I believe that budgeting provides managers with a wonderful opportunity to rejuvenate their organizations. There is no other managerial process I am aware of that translates qualitative mission statements and corporate strategies into action plans, links the short-term with the long-term, brings together managers from different hierarchical levels and from different functional areas, and at the same time provides continuity by the sheer regularity of the process”

Umapathy, 1987

7.1 SUMMARY OF THE STUDY

This study was largely motivated by the limited amount of research investigating the sophistication of budgeting practices, and the lack of development that explains and predicts combination of budgeting practices across organisations. Arising from this, this study sought to address the diversity in budgeting practices and its sophistication, with a view of providing insights into the budgeting practices of the public listed companies in Malaysia.

An attempt was made in this study to define budget sophistication. The researcher has defined budget sophistication by looking into the evolving nature of the budgeting process and the Pike definition of sophistication. Budget sophistication is defined along twelve different dimensions; nine for budget planning sophistication and three for budget control sophistication. Based on the twelve budget sophistication
dimensions, cluster analysis was used to classify firms into homogenous groupings based on budget plan and control sophistication characteristics.

Another objective of this study is to investigate the motivations for organizational adoption of budgets which primarily premised on the theory of contingency which states that the appropriateness of different management control systems, including budgets, is dependent upon the setting of the business. Researches based on the contingency theory have examined the mode of organizational control that is appropriate for the organizational environment and its size, structure, strategy and age.

The final objective of this study is to find the relationship between the level of budget sophistication and organizational performance. It is generally considered that budgets are used as a means of enhancing financial performance. Some budget proponents often claimed that the use of traditional budgeting which is equivalent to a fixed performance contract often restricts organizational adaptiveness to the rapidly changing environment and thus often resulted in lower organizational performance. In addition, case studies on budgeting in organizations in developed countries, which have move on to the call of beyond budgeting and abandon the use of the traditional budget, have shown that these organizations generally enjoyed a better organizational performance.

The results of the cluster analysis revealed important insights into the budget practices of Malaysian firms. The study investigated the four empirically derived budgeting practices combination, labelled as “Unsophisticated Plan, Less Tight Control”,
“Unsophisticated Plan, Tight Control”, “Sophisticated Plan, Less Tight Control” and “Sophisticated Plan, Tight Control”. This research conducted the clustering of budgeting practices thus provides a novel analysis of the relationships between elements of a budget planning and control package. The results suggest four distinct and unique contemporary budget practices configurations. Thus, one of the major conclusions that can be drawn from this research is the consistency of findings with prior literature that suggests that budgeting practices design differs significantly across firms.

While these configurations provide an interesting analysis in themselves, this study was not able to explain and support the research findings suggesting that systematic differences in budgeting practices will occur due to the relationship with the contextual factors. The outcome of ANOVA tests and discriminant analysis is largely unexpected. The ANOVA results show no statistically significant difference between clusters in terms of strategy, size, age, structure or environmental uncertainty. Discriminant analysis was also unable to provide any assistance in extrapolating differences between clusters. The resulting discriminant function was statistically insignificant, with the accuracy of predicting cluster membership no better than chance. Further, in comparing each of the four budgeting combinations to organizational performance, also yielded no significant difference in performance.

Nevertheless, this study presents evidence that majority of the public listed companies in Malaysia are still incorporating budgets in their management control system and that the sophistication of the budget planning and control practices varies. Public
listed companies in Malaysia appear to adopt increasingly more sophisticated budget planning and control practices.

7.2 CONTRIBUTION OF THE STUDY

This exploratory study has attempted to study a complex area at a broad level of analysis. The complexity of this study is mainly attributed in finding the appropriate measures for budget sophistication which are not well developed and relatively not so refined. Even though the study is considered a preliminary study in the area of budget sophistication, the results are somewhat encouraging. For instance, the study found that a budget plan that is highly integrated with the strategic plan, flexible and more interactive will result in a more sophisticated budget plan. The researcher believes that, with the introduction of new terms and definition of budget sophistication, it will lead to a new and better understanding of the characteristics of budget sophistication.

In view of the wide variation in budgeting practices among organizations, the use of clustering techniques and the results of the cluster analysis are useful in explaining the different configurations of budgeting practices among organizations. In this instance, the study thus confirmed that budgeting practices differ significantly across organizations and that these design would fit the organizational needs. This result contributes by adding further insight into how budget planning and control mechanisms actually cluster and operate as a package in organizations.

The study also found that majority of public listed companies in Malaysia does not intend to change their budgeting practices in the near future. The may lead to several
interpretations on the perceived usefulness of budgeting as a management control tool in public listed companies. The results suggest that despite the claims on various weaknesses of a budget, these companies still use budget as a management tool to steer organizational direction and use of its resources. The results of this analysis may also suggest that organizations adopt different budgeting practices configuration in order to fulfill the control functions demanded by particular circumstances.

7.3 LIMITATIONS OF THE STUDY

There are, however, several limitations to this study that need to be considered in light of the results. Firstly, the measurements use, in particular, to measure budget sophistication may need further refinement. This is largely because many of the questions were adapted from other studies for the purpose of analysis in studying budget sophistication. The inability to replicate several findings from previous research in the relationship between the contextual factors with budget sophistication and the subsequent resultant relationship between budget sophistication and organizational performance highlights further investigation into the use of a new construct to measure variables used in the study.

Secondly, as noted by Bedford (2004), while cluster analysis provides a technique to capture the potential richness of diversity of budgeting practices, its application is inherently more subjective than conventional interaction approaches that use regression analysis. Chatfield & Collins (1980) reiterated that there are numerous clustering methods available, and each may provide substantially different structures, and also though analysis may find purportedly distinct clusters, but these clusters may be, in fact quite spurious. Lastly, the moderate response rate due to the limit in the
time given to respondents to respond to the questionnaire and the extensive length of
the questionnaire, may have limited more significant findings.

7.4 SUGGESTIONS FOR FUTURE RESEARCH

There are a number of directions that future research could take in order to further
investigate related issues of budget sophistication. As the underlying assumptions
remain appealing, on the argument that variations in the contingency factors would
lead to different configuration of budgeting practices, emphasis of future study could
be placed on investigating this relationship and developing a more modern
contingency theory for budgeting practices. As little is known about the relationships
between multiple contextual variables in this study, a specific study on one contextual
variable and its effect on the budgeting configurations may provide greater insight
into what relationships might be expected and why these occur. Hansen, Otley and
Van Der Stede (2003) argued that one important contingency factor is the degree of
environmental uncertainty. Each organization occupies a different position on this
continuum. In a more stable market where long-term trends can be forecast with some
precision, a planning solution might still be the best. In a rapidly moving and
unpredictable market, it may be that control solutions based on agility are appropriate
(e.g., in the fashion industry, where fashion trends are fickle and difficult to predict).

Field studies may also be conducted to clarify the degree to which budgeting practices
design can be explained by contextual variables or whether the design and use of
budgeting configurations are largely determined by institutional elements rather than
the contextual variables. A field study would be able to observe in detail on the
interaction between all the contextual variables and the budgeting practices as well as
the effect of budgeting practices on organizational performance and objectively uncover these linkages.