AUSTRALIAN MANUFACTURING COMPANIES AND ACADEMIC INSTITUTIONS: A COMPARATIVE ANALYSIS OF STRATEGIC PLANNING

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(Serial No, 32, 1987)

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ABSTRACT

This article compares the findings from two surveys of strategic planning practices in Australia: those of academic institutions and those of manufacturing corporations. The similarities and differences are identified and in broad terms explained by the stage of evolution of strategic planning that has been reached by academic institutions when compared to corporations. Given the recent questioning of the value of strategic planning by corporations, the validity of academic institutions continuing on this path is questioned with the conclusion that the planning process per se is desirable.

INTRODUCTION

For many years it has been widely accepted in Australia that higher education should be available to all citizens according to their inclination and capacity (Martin, 1964). However, such an ideal is subject to obvious practical constraints and while higher education for all is an objective, it is not one that is pursued regardless of cost.

Over recent years administrators of academic institutions have become increasingly concerned about optimizing the employment of institutional resources. Society does not make available to any academic institution sufficient resources to meet all the competing demands, so institutions are under pressure to allocate resources more in line with their long term objectives. Academic institutions need to make choices as to future activities and uses of resources that challenge their traditional objectives and priorities. In this they are not alone.

Strategic considerations are central to the well-being of any organization, be it an industrial corporation or an academic institution. During the past two decades in particular there has been developed a substantial body of literature on strategic plarming, and the tenets therein have been increasingly adopted by business (Yip, 1985; Day, 1983; Boulton et al., 1982; Gray, 1986). The need for academic institutions to turn also to strategic planning so as to more positively address their own futures has been a popular topic for sane time and a number of approaches have been suggested as frameworks for its introduction (Shirley, 1983; Thomas, 1980; Foster, 1983; Behohlav, 1984). These techniques have not been developed uniquely for academic institutions but are modifications of the models and techniques that have been seen to be appropriate for business enterprises. In adopting these techniques academic institutions are following in the footsteps of corporations that have already embraced corporate planning.

This article draws on the findings of two comparable surveys in an attempt to highlight the similarities and differences between the strategic planning practices of Australian corporations and academic institutions, and to assess the applicability and desirability of corporate planning by academic institutions.

The Corporate Sector Survey

In 1984, Christodoulou published a study of the corporate planning practices of 63 major Australian manufacturers, suggesting that:

> "**....** it was considered that a detailed study into corporate planning practices of major Australian manufacturers would make a significant contribution to the theory of strategic planning. Such a study would permit an accurate description of Australian corporate planning practices, major insights into *why* particular strategies and planning practices *occur,* the ability to compare the Australian results with comparable overseas studies and to provide a data base against which further Australian studies could be compared."
>
> (Christodoulou, 1984)

The data Christodoulou used were collected from large Australian manufacturers via a highly structured survey conducted between December 1981 and June 1982. All the data were collected at personal interviews at which the respondent was either the chief executive officer or the next most senior executive responsible for corporate planning. While there is a considerable amount of material available on overseas companies and their corporate planning practices there has been little published research on corporate planning practices in Australia apart from Christodoulou's report. Of the companies that participated in the survey, 84 percent undertook formal corporate planning and of these, two-thirds had planning systems which were strategic in nature and essentially externally oriented.

The Academic Institutions Survey

The survey of institutions of higher education was carried out as part of a Monash University project to extend the work done by Christodoulou to a comparative analysis of the corporate planning activities of public sector institutions in Australia, initially restricted to the State of Victoria.

Consistent with the survey of corporate strategic planning procedures, the objectives seen as appropriate for this study were: to identify the factors which appear to be influencing the strategic planning practices of Victorian tertiary education institutions; to identify and describe the strategic planning practices of these institutions; and to collect survey data which will enable a database of strategic planning practices in Victorian tertiary institutions to be established, thus facilitating further research and analysis.

The Christodoulou survey instrument was modified for academic institutions and administered to those responsible for the corporate planning activities at ten Victorian academic institutions, The institutions surveyed were the entire population of major tertiary academic institutions in the Melbourne and Geelong region, including all the universities in Victoria. They were, Deakin University, La Trobe University, The University of Melbourne, Monash University, Chisholm Institute of Technology, Footscray Institute of Technology, Phillip Institute of Technology, Royal Melbourne Institute of Technology, Swinburne Institute of Technology and Victoria College. These institutions cater for some 69,000 equivalent full-time students (EFTS) and employ approximately 16,000 academic and support staff.

As stated, with the exception of Deakin University, the survey does not cover institutions outside the Melbourne metropolitan area. The *study* does however concentrate on the larger and longer established institutions in Victoria and it is probable that any bias resulting from restrictions in coverage would be in the direction of suggesting a slightly more advanced level of strategic planning than universally exists. As with the Christodoulou study there was no preselection based in any way on the current level of strategic planning or the type of planning undertaken. The Christodoulou *study,* with its comprehensive findings on a wide range of factors relating to corporate planning, and developed as it was from a significant cross section of Australian manufacturing industry, was seen to be an ideal base upon which to develop the *study* of academic institutions. Of the 63 companies which participated in the Christodoulou *survey*, 41 were publicly listed in Australia, and 21 of the remaining 22 were subsidiaries. Their 1980 details show that the

companies surveyed enjoyed a combined revenue of $35 billion and employed over 400,000 people, thus representing a very significant part of Australia's then economic activity. The participants were a representative sample of manufacturing industries frun all geographic areas within Australia. Neither by intent nor default was there any known bias or imbalance toward any group that represented a select school of strategic thought or technique.

The *survey* of academic institutions was conducted on the same basis as Christodoulou's study, that is by personal interviews supplemented where necessary by secondary data such as annual reports and corporate plans. Christodoulou's questionnaire was closely related to those used in the United Kingdom (Al Bazzaz, 1977) and in the United States at Columbia University (Capon et al., 1982), but as it was previously targeted at large manufacturing companies it clearly required modification to reflect the structures and measures of activity and performance relevant to academic institutions. Two key characteristics of all significant Australian tertiary institutions are their non-profit orientation and the non-private ownership. The funds for universities and colleges in Australia are provided almost entirely by the Federal Government following a triennial submission frun each institution wherein it lays claim to its requirements for the following three year budget period. Since 1972 students have not been required to pay any fees other than a small union fee. An administration fee of $250 per student is proposed for 1987.

For many years the growth in student numbers at universities and colleges has been restricted and the number of applications frun students wishing to attend now significantly exceeds the number of available places.

Conceptual Model

In following the questionnaire and survey methods developed by Christodoulou this study essentially adopts a model of the strategic planning process similar to that utilized by Christodoulou. Since this model provides the theoretical framework for the *study* it is useful to briefly describe its main features. In developing the model, various

sources were drawn upon including the works of Ansoff (1965), Hofer and Schendel (1978) and Glueck (1980). However, instead of attempting to elaborate all of the detail and interactions of the strategic planning process as these models try to do, a broader and less detailed model has been developed with a strong systems/contingency viewpoint. This is in line with current organizational theory which is heavily influenced by structural-functionalism and general systems theory. Contingency theorists see organizational structure as being contingent upon contextual factors such as social change and technology. Thus the conceptual model focuses on the organization and its environment and on the formal strategic planning system as a subsystem of the organization. The organization is seen to consist of many subsystems interacting between themselves and the environment. Among these, the focus is on the organization's goals and strategies, its size, structure and ownership aspects, its information and decision processes, and its reward subsystem.

The formal strategic planning *system* is conceived of as both a subsystem of the organization and a system in its own right with component subsystems operating within it. The emphasis is on the tasks, structures, processes and people subsystems of the strategic planning system. In addition, the point is made that the planning process of itself does not necessarily lead to goals and strategies that are implemented. *An* organization may *carry* out a considerable amount of planning activity, but unless this activity leads to management action, the organization's goals are unlikely to be achieved. That is, the organization must be 'strategically managed' in the sense defined in the McKinsey *study* cited by Gluck et al., (1980).

RESULTS

The data in this section are presented under headings that are consistent with the conceptual model on which the survey was based.

Due to the nature of the questions and/or the characteristics of the various planning systems, not all of the ten academic institutions surveyed responded to all parts of the questionnaire. Hence a number of the following percentages are not expressed in steps of ten percent as would otherwise be expected with a sample of ten institutions.

1. Organization: Goals and Strategies

All academic institutions had mission statements whereas only 57 percent of corporations had mission statements. Consistent with industry, half of the institutions have changed their mission statements in recent times. For academic institutions, these *changes* were based largely *on* recommendations from line management. For corporations the most common reason given for change was *the* appointment of a new chief executive officer.

While a number of market-selection strategies are consistent between the two bodies, they differ in two respects. Corporations seek situations where they can attain large shares of a market to a far greater extent than institutions, and markets in which there is a small number of competitors hold less interest for them than such markets do for academic institutions. For both, *existing* products/courses in *existing* markets have been the most important for past growth. For future growth both see a relative increase in the *importance* of new products/courses in *existing* markets. *As* with the corporations, academic responses to questions regarding market entry fall within a narrow range. While there is sane leaning towards being first to market new courses and services, there is no clear indication of policy regarding market entry. Joint ventures and situations where economies of scale are significant are sought by both, with academic institutions attaching marginally more *importance* to these *areas* than does industry.

Ninety-six percent of those corporations which could be classified as "formal planners" and 90 percent of the academic institutions surveyed have corporate *goals.* Both include *goals* that are quantitative in nature. Eighty-eight percent of corporations have quantitative *goals* for income and cash flow, whereas 71 percent of institutions have a goal of growth in EFTS (equivalent full time students), despite funding constraints. Industry categorizes certain *goals as* dominant, with return on investment, return on equity, etc. to the fore. Academic institutions do not consider any particular quantitative goal or *group* of *goals* more important than others; examples include growth in EFTS, budget per student, and staff student ratios. Eighty percent

of corporations and 90 percent of academic institutions had qualitative goals. The predominant qualitative goals for both types of bodies were leadership in quality, service, and for academic institutions, teaching excellence. Academic institutions ranked research excellence quite highly, with societal goals (such as cultivating an *equal* opportunity environment) receiving equal ranking across the two types of bodies.

The mean number of years since there was a significant change in corporate goals was 2.9 *years* for corporations and 2.0 years for academic institutions, but this average for academic institutions may be misleading in that *one* institution last changed its goals 11 *years* ago and five institutions changed their goals in the current year. Unlike the changes for corporations, *changes* to academic goals were not prompted by any perception of unsatisfactory performance but were due generally to greater thought about the organization's activities.

Unlike 22 percent of corporations, no institution reported failing to achieve its goals. For corporations the major reason for *the* performance of the company against its *goals* was given as managerial performance. For academic institutions, *any* poor performance against goals was attributable firstly to the political and regulatory environment, then to managerial performance. Superior performance against *goals* by academic institutions was not seen to be due to managerial performance. In assessing performance against goals competition was considered by academic institutions to be the least important of the factors nominated.

Academic institutions did not place the same *importance* on the evaluative role of corporate goals as did corporations. Corporations, more *so* than academe, saw that corporate *goals* served an important role in the evaluation of past performance, the evaluation of 'second level' objectives and monitoring current performance. (For corporations, the second organizational level is *seen* to be a Division while for academic institutions *the* second organizational level is a Faculty, or School, etc.). Communication to external publics was one role of corporate goals that academic institutions rated more highly than did corporations.

Ninety percent of corporations and 60 percent of academic institutions have second level goals. Not unexpectedly, 44 percent of those corporations with second level goals have identical units of measure for their goals for all second level operating units. Only one academic institution reported identical units of measure between the two levels. The major role of second level goals for corporations is as a standard against which the performance of the business unit might be evaluated. Although assigned a similar role at academic institutions, second level goals are considered more important as a rationing device for capital and other resources than as a performance measure.

2. Organization Size, Structure and Acquisition/Divestiture activities

While 60 percent of companies reported making significant acquisitions of other organizations, with dollar sales attributable to acquisitions being 21 percent of revenue, only three of the 10 institutions surveyed reported any amalgamation. Forty-three percent of companies reported significant divestitures compared to 80 percent of institutions claiming some divestiture. While divestitures for corporations would have represented six percent of the following years revenue, for academic institutions divestitures represented only an average of 117 students per institution - less than two percent of EFTS. For corporations it was clear that the level of acquisition activity was significantly greater than the level of divestiture activity. For academic institutions the reverse applied.

The relationship between the percentage of revenue from products within each stage of the product life cycle for corporations and the fraction of EFTS at academic institutions within each stage of the course life cycle is reasonably similar. For corporations 1.6 percent of revenue is from products in their introductory stage, 14 percent in growth, 77.9 percent in maturity and 6.5 percent in decline. For academic institutions the percentages are 8.3, 11.3, 73.2 and 7.1 respectively. (While the broad pattern of distribution within a life cycle is similar it is interesting to note that there is some disparity among academic institutions. Colleges see a far greater percentage of their students enrolled in courses that are either in the introductory stage or in decline than do universities.)

The mean number of outside directors on the board of corporations was 4.1. For outside members of council for academic institutions the mean was 17.1. Corporate boards of directors met on average 13.3 times a year, and councils 10.3 times a year. The mean age of the chief executive officer of corporations was 52.4 years, and academic institutions 55.5 years.

Although responding in a similar manner to corporations to questions regarding new product ideas and development, academic institutions were less clear on who should be responsible for developing new markets. Responsibility is clearly not seen to be with a special organizational unit, neither is it seen to rest specifically with the second level operating units, as is the case with industry. For both academic institutions and corporations however, when asked where the responsibility lay for a number of activities which may lead to future growth, the general comment was that the responsibility clearly rested with the second level operating units. Within academic institutions, this responsibility lies with the faculties and for corporations with their divisions.

3. Organization: Processes

For both academic institutions and corporations, the development of corporate strategy is predominantly a negotiation process between either top management, and the board of directors and second level management or the chief executive officer and second level management. In both industry and academe, goal setting is seen to be a negotiation process essentially between the chief executive officer, key advisers and second level management. Only six percent of corporations and only one of the ten institutions surveyed indicated a bottom-up process for the development of corporate goals. Additionally it is quite clear from the results that, of all the parties involved, the chief executive officer exerts the strongest influence on the setting of corporate goals. For both academic institutions and corporations the influence of outside members of the board/council is quite low in goal setting. For corporations, both the chief executive officer and second level line management are very

influential in the setting of second level goals. At academic institutions the role of top management and to a lesser extent the chief executive officer are downplayed in favour of second level line managers who are seen to exert the most influence on the setting of goals for their areas.

When asked to assess the influence various conceptual frameworks and techniques have had on the development of their Strategies, corporations indicated that the influence had been very limited. For academic institutions this low degree of influence was even more pronounced. Profit Impact of Market Strategies (PIMS), Product Market Fit Analyses, and the Strategy Centre Concept have had absolutely no influence on corporate strategies at academic institutions over the past five years. It is worthwhile remembering that the two surveys were conducted some years apart and the comparison here is between the present practice at academic institutions and the situation as it was for corporations in 1982. Of those techniques that respondents considered may exert future influence on corporate strategy, academic institutions favoured Policy Matrices (such as those techniques associated with Shell Chemical; General Electric; McKinsey) whereas corporations responded that Product Portfolio Analysis (Boston Consulting Group) was expected to have greater influence.

Respondents from the two organization types indicated a clear difference in the importance placed on various criteria for the evaluation of expenditure proposals. For academic institutions, forecast return on investment and short term cash flow benefits were far less important than for corporations. Forecast EFTS growth was the most important criterion for academic institutions while corporations ranked highly a number of criteria. They were present market share position, forecast market share growth, and the growth of the overall market for which expenditure was requested. While the track record of the unit requesting the funds was seen in a similar light by both bodies, the track record of the manager of the unit requesting the funds was not rated nearly as highly for academic institutions.

Responses to questions regarding the *degree* of influence that various groups have *on* key strategic decisions show a clear difference. While both responded that senior executives promoted from within the organization *exert* the greatest degree of influence on strategic decisions, academic institutions also reported that *senior* executives hired from other institutions were *the* second most influential group. As a group, senior executives hired in from close competition were not seen by corporations to exert a great degree of influence on key strategic decisions.

In assessing the performance of second level managers for industry, the achievement of short term profits is the most important criterion. For academe, it is the operation within short term expense budgets that emerges as the most important.

4. Planni Subsystem: Outputs

The age of *the* corporate planning system varies markedly between the bodies surveyed. By 1986 the number of *years* since inception of the corporate planning *system* at non-university colleges of advanced education was 4.8 years, while at universities it was 17.5 years. This can be compared to corporations where in 1982 the number of years since the inception of planning was 6.3 years. Most corporations and academic institutions have *only* one time horizon in their corporate plans. For corporations this averaged 4.8 years; for academic institutions this average time horizon was 6.1 years, with four institutions planning *over* more than one time horizon. Forty-three percent of corporations review progress against corporate plans *on* a monthly basis, as do 20 percent of academic institutions. Half the academic institutions review progress against corporate plans *on* an annual basis as do 15 percent of corporations. This is perhaps surprising given that 40 percent of institutions report updating their plans more than once a year, compared to nine percent of corporations.

It would appear that strategic plans for academic institutions have a longer time horizon, are updated more frequently and are used as the basis of progress reviews less frequently. There is however, more access to their plans in that all the institutions, compared to only 22 percent of corporations reported that third level personnel and higher had access to corporate plans. Only one institution, compared to 80 percent of corporations, reported having second level plans in a standardized format. The difference was not as marked when respondents were asked to indicate the extent to which corporate planning contributed added value over and above the *second* level planning effort, although those from academic institutions responded more favourably than corporations in nearly all categories. They saw added value from corporate planning in the areas of finance, human resources, student demand, organizational *structure* and physical resources. A pronounced difference was evident however when analysis showed that thirty-four percent of corporations developed formal contingency plans as part of the company's long range planning, while no academic institution reported the development of such plans.

Planning Subsystem: Structure

Eighty-six percent of corporations had at least one person in a corporate planning function whereas for academic institutions 60 percent had no full-time corporate planners. Here the responsibility lay with planning committees. For corporations the backgrounds of corporate planning personnel fell into two main types, either an economics or planning background or alternatively line managers who have joined the planning staff. For academic institutions *the* situation is quite varied with those responsible for planning coming from various disciplines within the academic ranks. Corporations rotate line personnel through the corporate planning department to a greater extent than do academic institutions *and* only 20 percent of academic institutions compared to 40 percent of corporations reported the *existence* of specialized planning personnel at the second level.

Subsystem: Processes and Tasks

As expected academic institutions place far less emphasis on planning for amalgamations/acquisitions and divestitures than do corporations, but academic institutions expend relatively more effort than corporations on action planning or operational planning for one to three years into the future. There was considerable inconsistency between the two organization types in their responses to questions relating to the effort expended on forecasts. When compared to corporations, academic institutions reported a higher degree of effort expended on forecasts in the technological, governmental (legislative, regulatory), social and/or cultural factors, and human resources areas, but reported a lower effort expended on foreign economies/demand, financial markets, industry level demand and competition forecasting.

Virtually no academic institution reported purchasing external forecasts while all corporations responded that they purchase forecasts on the domestic economy. Sixty-six percent of corporations purchase forecasts on financial markets and industry level demand. There is a higher degree of forecast transmission from the corporate planning area to lower levels in academic institutions than there is in corporations. This is particularly so with forecasts of governmental influences. One possible explanation for this can be found in the responses given to questions regarding the ability of second level units to independently obtain forecast information. This was reported as being relatively easy for corporations and reasonably difficult for academic institutions.

Academic institutions expend a marginally higher degree of effort than corporations on activities such as improving the quality of strategic thinking by both corporate management and second level management, and helping second level management formulate goals and objectives and prepare strategy. Corporations, on the other hand expend more corporate planning effort on helping management with acquisition and divestiture plans; reviewing and evaluating second level plans and incorporating these into the corporate plan; developing macro forecasts of the economy, financial markets, political environment

etc; preparing specific studies; re-organizing the company around better defined business units; monitoring and controlling progress versus plans; and particularly, identifying areas of new business opportunity. While both organization types undertake competitive analysis, particularly at the operating level, it is given a greater degree of emphasis by corporations than it is by academic institutions.

There was a number of differences in the perceptions of respondents from the two types of bodies of the nature of the planning process. Academic institutions saw the planning process as a means of resolving conflict more *so* than did corporations. Conversely corporations placed greater emphasis on the planning process being a means for systematically dealing with uncertainty and avoiding unacceptably high levels of risk. Both saw the process as a device for allocating corporate resources. Academic institutions identified a subsequent improvement in the organization's long range resource allocation decisions and described planning as *necessary* to sequence future activities. For both academic institutions and corporations only moderate usage is made of models for planning purposes at the second level. As would be expected there is a different emphasis in the use of models, with forecasting and planning being the prime models at academic institutions and financial models being emphasized by corporations.

In many ways the extent to which various aspects of the corporate planning process are documented is similar for corporations and academic institutions. However no institution has the planning process documented in a formal planning manual, compared to 28.3 percent of corporations, which do have the planning process documented. Only 20 percent of institutions use standard forms for the evaluation of strategic proposals, compared with 47 percent of corporations. Chief corporate planners at academic institutions are more likely to attend a board/council meeting and a capital budget meeting than their counterparts in industry, but far less likely to attend faculty/divisional planning meetings and departmental planning meetings.

7. Planning **Subsystem:** People Influences and *Other* Aspects

Support by the board/council for corporate **planning** and involvement **by** the board/council in corporate planning were *seen* by **respondents** to be lower for academic institutions than for corporations. **In both** instances the influence that outside **directors/councillors had *on*** most **aspects** of corporate **planning** was **low** but for academic **institutions** outside directors were **seen** to play a **very** influential role in the approval of the final corporate plan. For academic institutions the involvement of the CEO is seen to be **higher** than for corporations in the evaluation and approval of the corporate plan but marginally less in the development of ***goals*** and **alternative** strategies and having **planning** accepted **as** a philosophy in the organization. The CEO at academic institutions is seen to *exert greater* influence ***on*** the **format, assumptions,** objectives, strategies, and approval of the corporate plan but less influence than the corporate **CEO** on the **development** of missions for the **second** level units,

The extent to **which** the **corporate** planning **"department"** has the authority to *obtain* substantive and **procedural revisions** in **second** level plans **and to** review, criticize, **accept and reject** second level plans is seen to be quite high for **both corporations and** academic institutions but the corporate planning group at academic institutions exercises *greater* influence on the format, **assumptions,** objectives, and strategies of its corporate plan than ***does*** its counterpart in **industry.** For both **academic** institutions **and corporations** the major area of influence for ***second*** level line **managers** on **corporate** planning is the **development** of missions for **their** second level units. The *two* types of **organization also broadly** perceive a similar **influence** of second level managers on the assumptions, objectives, and strategies **embodied** in the **corporate** plan. The beliefs of *senior* line executives about *the* purpose of planning **are** similar in the findings of the two **surveys** in that **respondents** to **both** surveys **essentially** see the process **as** one of developing corporate strategy **and long** range planning policies.

Over the past five years more than 42 percent of EFTS have been in markets growing at a rate of real growth of greater than five percent. This compares to less than 25 percent of sales in markets growing at a real growth rate of greater than five percent for corporations. Academic institutions sea this percentage as being 37 percent for the next five years while corporations predicted a rate of 22 percent. Corporations responded that on average around 55 percent of sales volume comes from areas where the respondent companies are seen as market leaders. For academic institutions only four percent of EFTS are enrolled in courses where the institutions see themselves as market leaders. As could be expected, corporations reported a significantly higher percentage of sales which fell into categories where major competitors' actions were unpredictable or highly unpredictable. For corporations this represented approximately 15 percent of sales. For academic institutions only five percent of EFTS were similarly categorized.

No difference exists between the two organization types in their assessment of demand uncertainty for their particular markets. Academic institutions saw the historic percentage of demand which was unpredictable as 11 percent and perceive the percentage of demand in the future that could be classified as unpredictable as 13 percent.

A substantial difference exists in the level of governmental regulation that applies to academic institutions and corporations. Seventy-four percent of institutional activities are considered to be highly government regulated, while for corporations the percentage actively subject to regulation which influenced either the companies' sales volumes or pricing policies was assessed at approximately 22 percent. Corporations had severe or significant resource availability problems with around three percent of raw materials over the past five years and expected problems to occur at similar levels over the next five years. Academic institutions saw similar problems for 46 percent of their physical resource requirements, with the situation only marginally improving over the next five years. Problems in securing finance were of a similar dimension with academic institutions rating these as severe both now and in the future. Finance availability presented only minor problems for corporations and it is not anticipated to be a severe problem in the future.

CONCLUSION

Many of the foregoing differences can be viewed as a function of emphasis dependent on the stage of evolution of strategic planning that has been reached by academic institutions when compared to corporations. *Sane* differences may be due more to systemic variations between the two organization types but in many instances they too *can* be viewed as part of an evolutionary process. For example, the measures of accountability to owners or providers of capital has not been nearly as pronounced in academia as in industry - a point common to most public institutions. If, as with academia, there are only measures of production then there is a tendency to adopt a focus and control over the characteristics of that production and not the characteristics of the market that is being served. Institutional management tends to concentrate on the quality of the product even perhaps to the exclusion of what the market requires.

There are, however, indications that this is changing. The emphasis now being placed on "efficiency and effectiveness" in higher educaticn is readily apparent from even a cursory review of recent literature. Cowan (1985), Gevers (1985), Bogue (1982), Sizer (1982), and Hijmans (1982), have all looked at aspects of the effectiveness and efficiency in higher education. Three recent publications in Australia have also centred on this topic. Two have been under the auspices of the Commonwealth Tertiary Education Commission (Linke et al., 1984; and Hudson et al., 1986) while the third has been a substantial publication aimed at assisting the review of academic performance at department and individual level (Roe et al., 1986).

The survey *results* indicate quite clearly that corporate planning is not viewed by academic institutions in the *same* light as it is viewed by corporations. Academic institutions see corporate planning as a means of resolving problems of internal conflict and resource allocation. They see that such planning is necessary to sequence future activities but they do not attribute to planning any substantive role for the subsequent measurement of performance, in contrast to a major use of corporate planning by corporations. The difficulty is in two parts. Firstly, while negative controls such as review against *cost* budgets and ceilings on staff and student numbers are readily apparent in academia, there are only limited rewards for positive achievement.

Secondly, at this stage academic institutions cannot provide a sufficiently precise and detailed profile of internal performance. Therefore, at present no reliable comparisons *can* be made between faculties and departments and between institutions. Such comparisons are essential for any meaningful assessment of educational effectiveness and efficiency to be made and can only be achieved by the use of more refined empirical measures than those currently employed. The current measures are simply EFTS, budget per student and so on, which are essentially measures of size rather than performance. There is no long term measure of the effectiveness of the contribution by each institution to the attainment of its own specific goals or the general needs of society. Although work has been done in this area of performance measurement (Sizer, 1981; Linke et al., 1984) and it is the subject of a wave of current interest, the appropriate criteria still remain unclear. Sizer (1981), for example, proposes a management accounting perspective for the assessment of the performance of academic institutions using the basic accounting theory standards of relevance, verifiability, freedom from bias and quantifiability as the *structure* around which the performance indicators could be established. He concludes however, that "the problems of agreeing objectives, identifying and measuring the component parts of the institutions, and of evaluating performance and effectiveness, suggest that only partial measures of performance are possible, and that a proper balance has to be struck between qualitative and quantitative aspects" (Sizer, 1981, p. 240).

A number of differences in the findings of the two surveys are, on further examination, more apparent than real. While amalgamations and divestitures, for example, are infrequent and usually occur as a result of government action, the impact on the 'higher education industry' and the control exercised is however no less apparent than that *exercised* by the Australian Government over such industries and in such areas as whitegoods, textiles, footwear, motor vehicles, primary industries etc.

Both academia and industry are exposed to external influences, foreseen and unforeseen, on their corporate planning processes. By virtue of *the* specialized nature of the academic disciplines and the conduct of programs within those disciplines, any perception of corporate direction in that discipline tends to *cane* fran within. This is no less true for

technically specialized and discrete divisions of corporations where again there is devolution of autonomy to second level line management. The commonality here is that capital rationing establishes the level of activity and authority is then given for execution of the plans. The same broad perspective still applies; there is a long term longitudinal planning horizon and a shorter term need to laterally balance resource allocation among the portfolio of units (faculties, schools or business units).

Nan-university colleges in particular are recent entrants to the field of corporate planning and lag some five to six years behind corporations in the introduction of planning to their organizations. There are two ways in which this lagged effect can be viewed. The first, being critical of academic institutions, implies that they should be, if not leaders, at least to the forefront of administrative introspection, analysis and planning. The second view is that perhaps the current lag is not long enough. Academe should be even more wary of introducing strategic planning than it has been to date, because, just as there seems to be a significant thrust into strategic planning by academic institutions the corporate sector is seriously questioning the role of corporate planning and its relationship with overall performance (Greenley, 1986; Gray, 1986; Day, 1983; Yip, 1985; Bowden, 1985).

For example, in one of the more recent of a number of articles centred on the inconclusive relationship between strategic planning and corporate performance, Greenley (1986) reviews nine previous surveys of strategic planning within manufacturing companies. Of the nine, five conclude that companies which utilize strategic planning achieve higher levels of performance or end results than companies which do not utilize strategic planning. Alternatively, from the results of the other four surveys it was concluded that higher levels of end results did m t necessarily relate to the utilizatim of strategic planning. Greenley concludes that the conflicting findings obviously indicate that a firm generalization as to the relationship of strategic planning to performance cannot be arrived at, and that although them is a strong a priori case that strategic planning provides a range of both advantages and intrinsic values, empirical evidence is lacking to substantiate the case.

If business, with bottom line measures of dollar profit and return on investment to test the effectiveness of strategic planning, cannot decide on the worth of strategic planning, why should academic institutions, with few such quantifiable measures consider the introduction of such techniques? The answer may be found by asking if the development of an institution's capacity for introspection and sustained self-improvement is a worthwhile achievement regardless of the lack of any directly measurable improvement in performance.

Christodoulou (1984) found that in business *sane* major constraints on the organization's ability to respond to environmental change will influence the extent to which organizations will invest in corporate planning. The three major constraints that *emerged* were organization size, the capital intensiveness of operations, and the level of government regulation. These constraints are no less apparent for academic institutions and the immediate benefit from an institution undertaking the discipline of corporate planning comes frun the awareness of the perspective in which the planning process places the institution. To this extent the process of planning is more important that the plan itself (Day, 1983). Participants in the planning process develop a shared understanding and commitment to action that will align the internal organizational conditions of the institution to the external environmental variables (Greenley, 1986). Strategic considerations pervade all aspects of a corporation's activities (Bowden, 1985) and strategic planming is the process by which organizations consistently align such factors (Gray, 1986). When the procedures are in place to focus attention on identifying and assessing the external environmental variables and the consequential action options, the institution is in a position to adapt constructively to its environment. While higher levels of end results may not be able to be definitely linked to the utilization of strategic planning for corporations, perhaps the elusiveness of the performance measures for an academic environment may lead to a benefit frun strategic planning that a corporation *can only* achieve to some lesser degree. Concentration *can* centre on the process rather than the end result, and from such concentration the process itself may be able to be refined to achieve benefits that are evident, if not measurable.

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