

**SWP 6/97 LOGICAL OR PROCESSUAL?
DEFINING INCREMENTALISM**

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ABSTRACT

Incrementalism can be explained as the outcome of both clearly intentional managerial actions and less intentional organisational processes. Using data gathered through a large scale survey, these two explanations of incrementalism are explored. The results indicate that organisational context, such as size, maturity, and sector, influence the cause of incrementalism.

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Two overarching and potentially contrasting explanations for the process of incrementalism can be identified in the literature. Perhaps the pre-eminent view is that which explains incremental strategy development as a process of managerial intent and which is most aptly characterised by Quinn (1980). Here managers have a view of an organisation's future position but realise they cannot "know" how the future will unfold and so move towards this position through an intentionally managed process of incremental adaption. The alternative view suggests that incrementalism is the outcome of organisational processes (Braybrooke & Lindblom, 1963; Johnson, 1988) related to the political (Pettigrew, 1973), cultural (Johnson, 1987; Spender, 1989) and cognitive (Weick, 1979) aspects of an organisation. While these two views can be clearly defined and may be presented as competing, there is a lack of research which has expressly evaluated their utility in explaining incrementalism or explored the organisational context in which either may occur.

This paper assesses the validity of these two explanations. Previous research has tended to utilise case based methodologies. These have inevitably limited the number of diverse contexts which could be explored; a limitation which may have led to the assertion of competing explanations. To address this limitation and to fully explore the extent to which the two explanations are competing a survey approach is utilised. Responses from over 1500 senior managers in 200 UK organisations allows a clearer understanding of the various ways in which incrementalism develops in organisations. It concludes that they are not competing but rather their occurrence is related to organisational context. Size, maturity, and sector are especially important variables that influence the cause of incrementalism.

Incrementalism as a Realistic Descriptor of Strategy Development

Strategy can be described as coming about adaptively through the process of incrementalism (Braybrooke & Lindblom, 1963) in a step by step manner, focusing on what is familiar, implementable and which moves only slightly from the status quo (Mintzberg, 1973). In the late 1950s Lindblom (1959) suggested that managing strategies through logical, sequential, planning mechanisms was unrealistic. He argued that given the complexity of organisations and the environments in which they operate, managers cannot consider all possible options in terms of all possible futures and evaluate these against pre-set, unambiguous objectives. This is particularly so in an organisational context in which there are likely to be conflicting views, values, and power bases. Rather, strategic choice takes place by comparing options against each other and considering which would give the best outcome and be possible to implement. Lindblom called this strategy building through

'successive limited comparisons', but argued that it took place in the everyday world of managing, not through deliberate planning systems.

Incremental strategy development involves an adaptive response to the environment with strategy emerging through a process of evolutionary change. Through a never-ending series of small steps strategy is altered as actions are changed to cope with, and adapt to, the environment, these changes being made in a continuous rather than sequential manner (Chaffee, 1985). In this way, the relationship between the organisation and its environment is maintained. These small continual changes aggregate (Lindblom, 1959), and so reduce the need for large or major shifts in strategy.

EXPLANATIONS OF INCREMENTALISM

Though there is general agreement on the observed nature of incrementalism, the source and consequence of incrementalism have been described in two distinct ways. At issue is the question of how rational and directed this process can be.

Incrementalism as Managerial Intent

Incrementalism can be seen as a purposeful, intentional, and proactive process, characterised by what Quinn (1980) describes as "Logical Incrementalism". There exists a 'logic' in incremental strategy development approximating to 'learning through doing' in decision-making and implementation within an organisational context of external and internal complexity. The limitations of comprehensive analysis are accepted and it is not assumed that strategic decisions can be aggregated into a single decision matrix requiring simultaneous analysis in a holistic manner. Indeed, it is recognised that the formal processes of an organisation are unlikely to be able to analyse and plan all possible strategic variables concurrently (Allison, 1971; Cyert & March, 1963).

Strategy emerges through a constant process of analysis, re-analysis and modification throughout the development and implementation of strategy in order to keep in line with the environment. This involves a conscious and managed assessment and re-assessment of the organisation, its resources, and environment. Formal planning procedures and techniques may be employed to integrate and assess organisational requirements, threats and opportunities. While the individual steps and phases of the process are managed proactively (Schilit & Paine, 1987), the whole process is not sequentially managed by one individual (Quinn, 1980), nor is the process necessarily orderly, discrete and sequential (Quinn, 1982). Strategic choice takes place through an ongoing process of comparing

options against each other and considering which would give the best outcome and be possible to implement.

A key point is that managers have a view of where they want the organisation to be in the future and try to move towards this position in an evolutionary way (Quinn, 1980). They do this, for example, by attempting to secure a strong core business but also by experimenting with 'side bet' ventures. Because the overall strategic goals and objectives of the organisation are likely to be fairly vague, general and non rigid in nature (Quinn, 1980), they do not operate to stifle ideas, prevent potentially advantageous experimentation (Quinn, 1978), or indicate to other organisations what the future course of action is likely to be. Further, the delays that are part of the process enable a clearer understanding of the influence of a precipitating event; allow additional investigation of options and their consequences; and generate more substantial expert critique and managerial input (Quinn, 1980). This process allows the organisation to handle emergent issues and monitor long term direction, constantly re-assess the environment in order to reduce risk and increase opportunity. As Quinn (1982: 613-14) points out "In the hands of skilful executives . . . incrementalism can be a purposeful, powerful management technique for integrating analytical, behavioural, political and timing aspects of strategy formulation". Logical Incremental is used to describe this form of incrementalism for the remainder of the paper.

Incrementalism as Organisational Process

Another group of writers have focused attention on how political and cultural processes occurring within an organisation inevitably lead to the incremental emergence of strategy, whether or not it is managed in the way Quinn (1980) suggests. Here strategy development is characterised by bargaining and political activity (Pettigrew, 1973), and the shaping of strategic decisions by the routines of an organisation (Nelson & Winter, 1982). An organisation's prior history and current modes of operation are thus much more important in the description of incrementalism. Organisational routines for example, have been described as providing "solutions looking for issues to which they might be the answer" (Cohen *et al*, 1972). Further, incrementalism has been seen as a cognitive process in which collective managerial cognition results in enactment, selection and retention processes (Weick, 1979) taking form in incremental processes of strategy development. While the cultural and political process of incrementalism are likely to operate in combination, the two components of the process are described separately below. Throughout the remainder of the paper incrementalism emerging from an organisation's cultural and political process is referred to as Process Incremental.

The Political Process. Organisations are political entities and, as such, powerful stakeholder or interest groups influence the inputs into decisions and the strategy followed (Hickson *et al*, 1986). These stakeholders or interest groups, which are likely to have different concerns (Pfeffer & Salancik, 1978; Feldman, 1986) and attempt to achieve their own ends (Cyert & March, 1963), may be in conflict. These differences being resolved through bargaining, negotiation and compromise with the result that goals and objectives, strategic issues and strategies themselves are derived from this process rather than an analytically neutral assessment and evaluation. Further, the level of influence stakeholders are able to exercise differs (Heller *et al*, 1988) and is often conditional upon an organisation's dependency upon such groups for resources (Pfeffer & Salancik, 1978; Schwenk, 1989) and the potential difficulty in replacing the present stakeholder as the source of that resource (Hinings *et al*, 1974).

While stakeholders can exert influence over the process of decision-making this is not constant from decision to decision (Hickson *et al*, 1986). The decision situation determines the level of stakeholder involvement and both their level of influence and the dynamics of that influence. Stakeholder power and influence can also be acquired by other groups. For example, boundary spanners dealing with the external environment can attain greater levels of influence over strategy (Jemison, 1981; Schilit & Paine, 1987) by virtue of the organisation's dependency on the external group with which they deal.

Influence over strategy may also be gained through the provision of information. Information is not politically neutral, but rather is a source of power, particularly for those who control that which is seen to be important. This influence comes from the ability to resolve, reduce, and manage uncertainty (Schwenk, 1989), or by 'filtering' information to reflect the priorities and preferences of the interest group providing that information. Similarly, organisational systems may be restricted to reduce information flow and so legitimize the demands of particular groups (Pfeffer & Salancik, 1978). The result is that decisions are taken based on the preferences of the information provider rather than on objective information (Pfeffer & Salancik, 1978).

The decision to adopt a strategy is not based solely on the merit of an argument. Rather it is shaped by the power of the group proposing and sponsoring a strategic option. Coalitions form to pursue shared objectives and to sponsor different strategic options (Narayanan & Fahey, 1982). These options are fought for, not only on the basis of the extent to which they are beneficial to the organisation but also because they have implications for the status or influence of different stakeholders. Through compromise and

mutual adjustment a generally acceptable strategy will emerge (Mintzberg & Waters, 1985).

The Cultural Process. Strategy is not chosen within a detached 'rational' void. Its development is linked to the past, is related to managerial experience and expectations, and represents the assumptions and beliefs which exist within an organisation. Strategy is attributable to cultural influences. Shared frames of reference, which are an organisation's taken-for-granted beliefs and assumptions, enable an organisation and the world in which it operates to be understood. Frames of reference at the organisational level or paradigms (Johnson, 1987) enable new situations to be perceived in ways which are not unique (Schon, 1983). These frames of reference, which approximate to collective cognition, exist at an organisational level, but also on an industry wide basis (Huff, 1982; Spender, 1989), in the form of commonly accepted 'recipes' and within institutional types (DiMaggio & Powell, 1983). Managers may, then, be influenced by a number of frames of reference when developing strategy.

These frames operate to simplify dealings with the complexity of situations, provide a ready-made frame for the interpretation of new situations (Weick, 1979), enable decisions to be made in a way which make sense and provide a guide to appropriate behaviour (Gioia & Poole, 1984). Their usefulness increases as situations become more ambiguous and the efficiency of formal decision-making processes decreases (Beyer, 1981).

The values and assumptions of a group are, in turn, underpinned by routines (Walsh & Ungson, 1991), rituals (Meyer & Rowan, 1977; Trice & Beyer, 1985), stories (Schank & Abelson, 1977) and other symbolic artefacts which represent and reinforce a "way of doing things around here" (Deal & Kennedy 1982), embed frames of reference in organisational activities (Johnson, 1988) and provide a repertoire for action; but one which is likely to be resistant to change (Johnson, 1988; Greenwood & Hinings, 1993).

An Integrated Process of Cultural and Political Influence. The incremental nature of strategy development emerges out of the political sub-systems and the channels through which strategic options must pass on their way to acceptance. Influence is exerted to restrict participation in the process and encourage the adoption of a framework of understanding which particular individuals or groups favour (Walsh & Fahey, 1986). Here the exercise of power limits the application of alternative frames of understanding (Eisenhardt & Bourgeois, 1988) to facilitate the understanding of a situation in a manner favourable to the powerful groups (Corner *et al*, 1994) resulting in the development of an "appropriate" strategy. Where power cannot be exercised to impose a frame of

understanding, a common consensus of understanding will be developed through processes of negotiation and compromise. It is here that views are changed, opinions are evaluated and strategic authority is secured. As such strategy emerges gradually as strategic commitment is gained across the organisation and the various power groups negotiate and determine the final nature of the strategy.

This interrelationship between the political and cultural aspects of an organisation is such that discontinuous change, likely to disturb the political equilibrium and organisational culture, so threatening the influence, status and possible existence of some groups is likely to be resisted. Those groups most closely associated with an organisation's 'way of doing things' and its paradigm, or whose position is threatened by a move away from the status quo and their natural constituency of power, are likely to operate to resist discontinuous change and promote more incremental change from within the existing paradigm and power structure.

RESEARCH QUESTIONS

From the above it is clear that where incrementalism is seen to characterise the strategy development process it can be associated with managerial intent or the cultural and political processes of an organisation. Much of the literature in this area discusses a small number of cases (Johnson, 1988; Quinn, 1980) and while useful in providing insight into the process, an extended assessment is required of the extent to which the two forms of incrementalism exist in organisations. This leads to the first research question:

- To what extent are these two forms of incrementalism actually seen to exist in practice?

If the nature of incrementalism is not characterised by one pre-eminent form, a secondary question arises concerning the conditions under which each form occurs:

- Under what conditions do either of the two forms of incrementalism occur?

It has been argued that context is important in studying strategy development because context will impact on the manner in which strategy develops (Pettigrew, 1985). Further, it is suggested that organisations change their strategy development processes to cope with changing and more challenging environments (Miller & Friesen, 1978). The impact of the external environment on an organisation has long been acknowledged (Dill, 1962; Emery

& Trist, 1965; Terreberry, 1968) and the type of decision-making process which organisations utilise has been related to issues of uncertainty (Jones *et al*, 1994; Lindsay & Rue, 1980), task complexity (Pava, 1986) and industry sector (Kingsley & Reed, 1991).

While the external context is important so too is the internal context. Organisational structure has been related to decision-making processes (Fredrickson, 1986; Langley, 1989; Mintzberg, 1979; Shrivastava & Grant, 1985). Similarly, organisational size may impact upon process. Increases in size affect the nature of an organisation, adding complexity, more elaborate structures, and greater formality of process through systems to aid planning and control (Quinn & Cameron, 1983).

A further question, of crucial importance to the strategy field (eg Galbraith & Schendel, 1984; Hart & Banbury, 1994) relates to aspects of organisational performance:

- If there are indeed different incremental forms will organisational performance differ between them?

This question addresses both performance *per se* and also acts as an indicator for strategic drift. The notion of strategic drift is strongly connected with the second form of incrementalism noted above (Johnson, 1988). The argument is that over time through incremental refinements to strategy an organisation will become mis-matched with its environment, such that small scale iterative change is no longer enough to ensure alignment. Within Process Incrementalism, strategy emerges out of an organisation's culture, its dominant paradigm, and desires of its power groups. Shared frames of reference and standard operating procedures are employed to interpret the environment and generated solutions. These frames of understanding though may not be appropriate for the situation to which they are applied with inappropriate solutions being produced. The strategic options generated from within the dominant framework of an organisation are also supported and justified by information and analysis produced from within that system. Further, organisations resist change even when to do so poses a threat (Hedberg *et al*, 1976) and when the pursuit of incremental change no longer delivers success (Tushman *et al*, 1986). This, then, is likely to lead to strategic drift, resulting in the need for large scale change to realign organisation and environment. Because the required change is unlikely to be initiated until formal indications of decline are noted, the response is likely to be faster in organisations where more formal processes of external environmental assessment are utilised than in organisations which are more internally orientated in the strategy development process. Suggesting that Process Incremental organisations, where

strategy is driven more from within an organisation, would be more prone to strategic drift than the more externally driven Logical Incremental organisations.

This paper addresses these three research questions by drawing on a large scale survey of UK senior managers.

METHODOLOGY

Sample

The data which provide the basis for the analysis presented in this paper are derived from a research project which has collected data from over 1500 senior managers operating in more than 200 organisation across both the public and private sectors in the UK. The specific sample consists of 71 organisations operating in the UK private sector and for which incrementalism is seen, by senior managers within these organisations, to be a dominant and major component of strategy development. These 71 "incremental" organisations were selected from the 200 on the basis of attaining a score of at least one half standard deviation above the mean on the scale used to measure the process of incrementalism. For the 71 organisations the data comprised completed questionnaires from 374 senior managers, with an average tenure of 11 years.

An important assumption underlying this research is that to gain a fuller understanding of organisational processes and reduce the potential for bias due to a reliance on a single viewpoint the use of multiple respondents, providing multiple viewpoints on the process from within the same organisation, is useful. By collecting multiple data on the process, we are following a trend which looks across the top team (Hambrick & Mason, 1984; Murray, 1989) rather than looking at a single individual. Indeed, the use of single respondents as the source of data has been questioned (Ireland *et al*, 1987; Phillips, 1981; Venkatraman & Grant, 1986). By gaining information from multiple sources within the same organisation aggregation is required to move the unit of analysis from that of the individual senior manager to that of the organisation. This inevitably involves some level of simplification, however, it avoids the risk of idiosyncrasy and is justified as the unit of analysis is the organisation.

The 71 organisations operate within the manufacturing (39.4%), general service (33.8%), financial service (10%), professional service (16%) sectors. The size of the organisations range from 16 to <50,000 employees. Turnover ranges from less than £1M (2.8%), £1-

10M (14.1%), £11-100M (43.7%), £101-500M (15.5%), £501-1,000M (12.7%), to over £1,000M (11.3%).

Operationalisation of Concepts - The Measures

Data were collected by a self-administered questionnaire. Although self-report data is thought suitable for measuring perceptual phenomenon, the suitability of self-report measures of process issues may be open to question. However, the use of self report measures of such phenomenon may be defensible in some circumstances (Howard, 1994). Justification is derived from the assertion that the behaviour exhibited by individuals is as attributable to their perception of a situation as to any objective reality (Oppenheim, 1979), especially in fields such as this where the managers themselves are intimately involved.

To operationalise the notion of incrementalism, and its logical and cultural / political components, 28 items were used. Incrementalism was assessed through a six item scale (example item '*Our strategy develops through a process of on-going adjustment*'). The organisational process component was assessed using two scales, one relating to political aspects of the process comprising seven items (eg '*Strategy develops through a process of bargaining and negotiation between groups or individuals*'), and the other relating to the cultural aspects comprising seven items (eg '*The strategy we follow develops from "the way things are done around here"*'). To assess the notion of managerial intent a scale relating to the more intentional / planned aspects of strategy development was utilised. This was based on eight items (eg '*We make strategic decisions based on an analysis of our business environment*'). The key characteristics of the four dimensions are presented in Appendix A. The rationale and development of these scales, their underlying structure and reliability have been outlined and demonstrated elsewhere (reference will be provided by authors on request). In terms of the reliability of the scales for the present data set, levels of internal reliability ranging between 0.62 - 0.88, as measured using Cronbach alpha, were obtained (See Table 1).

These 28 items were located within a larger questionnaire concerning strategy development, organisational context and related issues. Respondents were asked to respond to each item using a 7 point Likert scale ranging from 1 (*you strongly disagree with the item in relation to your organisation*) to 7 (*you strongly agree with the item in relation to your organisation*).

The independent variables which related to the contextual aspects of the organisation, for example issues concerning the nature of the operating environment, industry sector, managerial activity and performance (as defined by profitability and sales growth) were

assessed through the same questionnaire as the nature of incrementalism. Assessment of context and performance was based on managerial perception.

Form of Analysis

To address the first research question and ascertain to what extent incrementalism is related to managerial intent, organisational process or both, cluster analysis is employed. Cluster analysis lends itself well to dealing with problems in the strategy area (Datta, 1980) and the technique has been widely used in strategic management research (eg Galbraith & Schendel, 1984; Hambrick, 1984; Harrigan; 1985). Because as a process of classification cluster analysis operates to identify empirically those cases which are most closely related across a number of variables and locates these within the same cluster it is ideally suited to the requirements at hand. Namely, that through this process an inductive classification of organisations is made from which the underlying nature of incrementalism can be explored.

Incremental strategy process clusters were developed on an organisational basis using aggregated data from the multiple respondents for each organisation. Hierarchical clustering using Wards method within the SPSS-X package was utilised. Standardised data were used in the cluster analysis. In all subsequent analysis non-standardised data were used.

To address the second and third research questions discriminant function analysis is employed. This identifies those contextual factors which characterised the Logical Incremental and Process Incremental organisations as significantly different.

RESULTS

The cluster solution suggests two incremental strategy process forms, based on managerial perceptions, which fit with the two overarching explanations of incrementalism. The characteristics of both clusters in terms of their means on the four scales are shown in Table 2. The means for each of the clusters on the dimensions is shown as a reference point for interpretation.

In the development of clusters there are no clear guide-lines for defining and determining the cluster boundaries nor the appropriate number of clusters to extract (Punj & Stewart, 1983). Consequently some assessment is required as to whether the resultant groups do differ in reality (Datta, 1980) or represent natural groupings in the data (Punj & Stewart, 1983). To assess this both a MANOVA and a discriminant function analysis were

performed. The results from both indicate that the two clusters significantly differ from each other on the classifying variables. Through the discriminant function analysis 97% of organisations are correctly classified. While not surprising these results support the notion that the two clusters represent meaningful groupings of the data. The context validity of the two incremental process clusters is demonstrated below. This description of the two clusters is made based on the managerial perceptions of the strategy development process as reflected by the respective scores on each scale and its constituent items.

The **Managerial Intent or Logical Incremental** cluster comprises 43 organisations or 60.5% of the data. Within this form, incrementalism is associated with high scores on the intentional / planned scale and low scores on the cultural and political scales, as compared to the Process Incremental cluster.

The strategy development process is seen to be driven by the pursuit of a "vision" of an organisation's future, which guides strategic direction and is operationalised by way of strategic objectives. Potential strategic options are developed to aid the achievement of these ends. This may be through standardised procedures or through less structured and defined processes. The limited number of options developed are assessed against each other and the objectives to be achieved, with consideration being given to the mechanisms for their achievement. Here assessment is focused equally on the issues of implementation as on the definition and development of strategic options. This process involves a significant degree of environmental monitoring and as such organisational members are highly sensitive to their operating environments. Indeed, strategic decisions and the resulting strategic direction is based on the recurring analysis of the environment.

While the process clearly involves the collection and assessment of information and the definition of strategic objectives, this occurs under the influence of an iterative adaptive approach to the environment. Strategy is seen to be adjusted to match changes in the market place; changes which are sensed through constant analysis. While there are clear strategic objectives, the means of attaining these can be altered as changes occur in the operating environment, such that strategy develops through a process of ongoing adjustment and iterative refinement. The resulting small scale changes help keep an organisation in line with changes in the business environment. Consequently, early commitment to a strategy is likely to be tentative and subject to review, only being finalised once a strategy's impact on the organisation is known.

The second incremental form relates to **Organisational Process** or **Process Incremental**. This cluster, which consists of 28 organisations (39.5%), is characterised by higher scores on the cultural and political scales and a lower score on the intentional / planned scale.

Here managers see strategy development as being influenced by the political and cultural processes of the organisation. Processes of negotiation, debate and compromise around particular issues characterise the way in which strategic problems are defined and solutions developed. Involvement and influence in the process is guided by power and position. The greater the power a group can exercise the greater their influence and chance that their favoured strategic option will be adopted as strategy. Influence and power is enhanced through the control of critical resources or sensitive information. Influence is also gained by virtue of position and the exercise of the associated power or it may be derived from association with the dominant paradigm. As such the vested interests of particular internal groups colour strategy.

These political processes are seen to operate in conjunction with cultural influences and past experience. A "way of doing things" and the associated beliefs and assumptions influence strategic direction. Strategy is directed by routines and procedures which are based on, and are a reflection of, organisational history. Cultural influences are then likely to influence the identification of issues and options, and mediate the choice of strategy. Further, commonly held beliefs and assumptions allow the various power groups to relate to each other within routines which are taken-for-granted. The culture which permeates an organisation and its members provides a common understanding and an established power structure through which political activity is exercised. As such changes which go against the culture and which threaten the paradigm and power structure are likely to be resisted.

The emergence of strategy is seen to be incremental in nature, developing through a process of on-going adjustment, and gradual response to changes in the business environment. It is this series of continual small scale changes which enables an organisation to keep in line with its business environment; an environment which those within an organisation may perceive they are unable to influence. Response to strategic issues tends to be slow and tentative, with issues being dealt with only when they begin to exert a significant effect on an organisation, its paradigm, and its power structure.

It is clear from the above that the two forms of incrementalism, Process Incremental and Logical Incremental are both seen by managers to characterise strategy development in organisations. Across the 71 organisations surveyed the greater proportion are characterised by Logical Incremental, though Process Incremental is seen by the managers

to characterise a substantial number of organisations: A ratio of 3:2, Logical Incremental to Process Incremental organisations is identified.

Contextualising Incrementalism

The results of the discriminant function analysis presented in Tables 3 & 4 indicate that significant differences are identified between the organisations characterised by Logical Incrementalism and Process Incrementalism in relation to operating context. These differences are identified in relation to both internal and external issues, for example the nature of the business environment, industry sector, organisational size, and managerial activity within the strategy development process. While this table also indicates that differences are seen in relation to performance, this does not provide a clear cut answer to the third research question. The discriminant function produced, which accounts for 52% of the variance, is able to classify 83% of the organisations correctly.

The organisations characterised by Logical Incrementalism are seen to operate in more stable environments than organisations in the other cluster. Their markets are likely to be mature in nature or moving towards a state of maturity and tend not to be overly fragmented. In terms of sector of operation, the organisations characterised by Logical Incrementalism are three times more likely to operate in the area of manufacturing and six times more likely to be in financial services than the Process Incremental organisations. Those organisations operating in the general service sector were equally as likely to be characterised as Logical Incremental and Process Incremental organisations.

The operating environment of the Process Incremental group of organisations is seen to be more unstable and tends to be less mature in nature than is the case for the Logical Incremental organisations. The level of fragmentation in the market is seen to be higher than for the Logical Incremental group. The area of operation also differs, in that the Process Incremental organisations are three times more likely to be operating in a professional service type arena.

The size of organisation in both incremental forms differ significantly. As measured both through level of turnover and number of employees the Logical Incremental organisations are the larger. Their average number of employees is 5164 as compared to 1584. Perhaps not surprisingly given the size of the organisations or because of the greater use of planning activities the Logical Incremental organisations are more likely to have a dedicated planning department.

The activity of managers within the two forms of incremental organisations also differs. A greater level of formality to the activity and mode of involvement in developing strategy is seen in the Logical Incremental group while in the Process Incremental group activity is more informal in nature. With this greater degree of informality in the process, structured and set patterns of activity are not seen to be the main ways through which effective involvement in the process is accomplished. Significant differences are also identified in terms of breadth of involvement, that is to say that in the Logical Incremental group, involvement is more wide spread and not restricted to those in the more senior organisational positions or positions of power. However, in the Process Incremental group involvement is more limited and restricted to those individuals and groups who have some level of power or who are tied into the strategy development process through routines or organisational culture. In this group involvement is likely to be related to power and position. This lack of involvement and exclusion from the process may even include groups or individuals centrally located within the organisational structure but who possess little or no "real" influence.

While in general the market in which the Logical Incremental organisations operate are seen to be of a more mature nature, there is still a high degree of competition, at a level perceived to be greater than within the Process Incremental organisations. Further, a greater level of growth in sales is seen to be associated with the Logical Incremental organisations as opposed to the Process Incremental group. The general level of profitability, as compared to similar organisations, is not seen to differ significantly between the two incremental process groups.

DISCUSSION OF FINDINGS

It is clear from the above that both the Logical and Process forms of incrementalism describe the process by which organisations develop strategy. As such they would not appear to be competing explanations of incrementalism, but rather describe different aspects of the same phenomena. The occurrence of either is seen to relate to the context of an organisation.

Organisational Focus

A clear difference between the two forms of incrementalism described in the literature relates to a sense of logic and rationality underlying an organisation's incremental adjustment of strategy. Logical Incremental organisations are characterised by a clear sense of overall strategic direction, the application and utilisation of planning techniques,

and an underlying rationality related to the external environment. Indeed, managers are seen to spend considerable time and resources monitoring and analysing the environment and the impact this has on strategy. They realise they cannot know what changes will emerge or necessarily how these changes will impact strategy so they counter this through constant efforts to understand the environment, how it is changing and subsequently responding incrementally to these changes. Within this form of incremental strategy development the primary drivers of strategic change therefore come from a process which has an external focus and orientation.

By contrast the major driving forces for strategic change within Process Incremental organisations are more internally focused, being derived from within an organisation's cultural and political processes. This is not to suggest that external monitoring does not occur, nor that organisations characterised by this form of incrementalism are detached from the world in which they operate. Rather it is that a strategic response and understanding of a situation is likely to be moderated and interpreted through an internally derived frame of understanding which reflects both the political and cultural aspects of an organisation.

This does not suggest that one form of incrementalism is more intentional and rational than the other: this is dependent on the viewpoint taken. From the point of view of an external observer, the rationality of Logical Incrementalism may be more readily discernible than the rationality of Process Incrementalism. However, when viewed from a managerial stance there may well be a logic and rationality to strategic action in Process Incrementalism which is embedded in an organisation's experience, way of doing things and in what is taken-for-granted. This presents a paradox in interpretation and understanding strategic actions between a viewpoint derived from outside an organisation and one which is defined from within an organisation. Indeed, the rationality of the process and strategy might be seen to be greater by those within the Process Incremental organisations than in Logical Incremental organisations as the latter have a greater external focus and consequently discern a greater disparity between their strategy and external forces for change.

Operating Environment

Clear differences are identified between the two incremental forms and the environments in which they operate. In making sense of these differences two underlying aspects to the discriminators emerge. Some of the discriminators are objective and the others are more subjective or perceptual in nature.

On the more objective side differences are identified in relation to organisational size and ownership structure. Sector of operation is also seen to be associated with particular forms of incrementalism. For example, in the professional service arena there is a predominance of Process Incremental organisations. Unlike many organisations where an individual's involvement in decision-making at an operational level may be strongly influenced by role and function, partnerships, which are likely to characterise these professional service firms, operate in a less structured manner. The collegiate structure and associated authority and control structures are based in and built on the partnership structure (Hinings *et al*, 1991). The system of strategic authority may run counter to the activity of the partners, with their high levels of autonomy and discretion, yet who must yield in long term matters to the collegiate forum. As such the emergence of interest groups to block and halt undesirable change is likely. Decision outcomes are more likely to reflect the influence and desires of various individuals and interest groups, the strength of which may change given different issues or projects. Not surprisingly then, the process of strategy development is seen to be primarily driven by political and cultural processes and, arguably as a consequence, manifests as an adaptive or incremental response to the environment.

Further, Process Incrementalism as seen within professional service firms may result from their "professional nature" which can produce normative pressures for isomorphic change (DiMaggio & Powell, 1983). The movement of staff between firms, the similarity of recruitment and training processes, of promotion criteria, and the restrictions for entry into, and progression through, a profession means that those who reach the top are likely to be similar (DiMaggio & Powell, 1983). This process is such that individuals are socialised into "knowing" what is appropriate and expected; and are provided with a common understanding and an established power structure through which political activity can be exercised. Indeed, where change has been instigated which threatens the values or paradigm of an organisation and its key decision-makers in a professional firm setting, change has been seen to fail (Hinings *et al*, 1991).

In the interpretation of the more subjective aspects of the operating environment care is needed. The data presented here is self reported and when managers interpret their operating environment they are likely to be influenced by particular frames of reference. As such the predominance of an internal or external organisational focus might impact on managers' perceptions of the environment. The stability of operating environment perceived as characteristic of Logical Incremental organisations is such that this would seem to describe a relatively benign market, in which experimentation within an overarching intentional approach can be followed. Indeed, the stability of the environment for the Logical Incremental organisations is such that managers in these organisations are

likely to see themselves in such a position that they can influence their environment. Arguably, the intentional approach of constant monitoring and assessment may allow this group influence over their operating environment or at least give an illusion of such control (Schwenk, 1984). This group, though, is more likely than the Process Incremental group to identify limitations in their business environment. Given that the strategy development process, in the Process Incremental organisations, is primarily driven by internal processes combined with a tendency to do things in a manner in which they have always been done, the world external to the organisation is likely to be seen as less significant than internal routines in setting strategy.

If the operating environment is interpreted by managers using their organisational frame of reference, then their understanding of that environment and consequently the descriptors of that environment they employ may align with an organisation's situation. Consequently where an organisation may be under performing, as compared with its competitors or its previous performance, this might be interpreted by those within an organisation as the result of an increasingly hostile and unstable operating environment. The conditions of the external environment are, then, moderated by an organisation's present situation.

Managerial Activity

Distinctions are also identified in terms of the activities of senior managers within these two incremental forms. Within the Logical Incremental form breadth of involvement in strategy development is more widespread. Responsibility for strategy development is not located solely within a small group of individuals, rather it is undertaken by a more broad-based and diverse group of organisational members. Less breadth of involvement is seen within the Process Incremental organisations, where involvement is more restricted. This process of restriction does not necessarily favour those at the top of an organisation but rather operates to limit involvement to those individuals and groups with power or which are most closely associated with an organisation's culture and paradigm.

Just as breadth of involvement between the two forms differs, so too does the mode of involvement. In Logical Incremental organisations this is more formalised and is reflected in the presence of planning routines which may perform the role of facilitating the greater breadth of involvement. The mode of involvement is less formal in the Process Incremental organisations. Routes of involvement are less clear cut and, given the political activity associated with this form of incrementalism, more informal approaches may be more common ways of attaining influence. Indeed, individuals or groups within institutionalised positions of an organisation's formal system may not necessarily be involved in developing strategy; rather individual and group involvement is determined

through an organisation's informal systems which reflect its cultural and political structures.

Strategic Drift

The phenomenon of punctuated equilibrium (Tushman & Romanelli, 1985; Tushman *et al*, 1986) is now well established in the literature. Johnson (1988) argued that processes of strategy development rooted in what has in this paper been described as Process Incrementalism, results in strategic drift and hence accounts for the phenomenon of punctuated equilibrium. This research permits a practical exploration of this contention.

In relation to organisational performance a significant difference is identified in relation to sales growth, with the Logical Incremental organisations demonstrating higher levels: however a significant difference is not identified in relation to profitability. Consequently the notion that there will be differences in performance between the two forms is supported but not conclusively proven.

In a similar vein, if these two measures of performance are taken as a surrogate for strategic drift, then the notion of different rates of drift (Johnson, 1988) between the two forms not fully supported. However, a caveat is required here in terms of the limitations of this research. The measurement of both process and performance variables at a point in time do not take into account time lag effects between strategic drift and a downturn in performance. Further, the reliance on managerial perceptions of performance is problematic. While strategic drift may occur such that an organisation may be mismatched with its environment, this may not be reported by managers. They may be sheltered from this fact or "interpret" information to rationalise this as a situational glitch or counter-trend.

Having said this, in this research the descriptors of Process Incrementalism closely correspond to the descriptors used by Johnson (1988) as do the descriptors of Logical Incrementalism to those used by Quinn (1980). The form of incrementalism Johnson (1988) described was rooted in studying organisations where performance had suffered over time whilst Quinn's (1980) description of incrementalism was based on organisation's with higher performance over time. Further, the sense of internal and external focus in driving strategic change is similarly supported by previous research, with the more external and high performing organisations being associated with Quinn (1980) and the more internal focus and lower performance with Johnson (1987; 1988) and Grinyer and Spender (1979). Further case evidence is provided by Pettigrew and Whipp (1991) which (though they did not use the terms themselves) suggests that more Logical Incremental approaches are adopted by higher performing firms and more Process Incremental approaches by lower

performing firms. Given this and the closeness of the descriptors of the two incremental forms outlined here, there is some support for an alignment of Process Incrementalism with strategic drift and of Logical Incrementalism with more sustained performance.

FUTURE RESEARCH AGENDA

From this research it is clear that attention on the nature of strategic drift, punctuated equilibrium and the two forms of incrementalism is required. This is particularly so if the assertion that Process Incremental organisations are more prone to drift is to be tested. In doing this there is a need for longitudinal research which addresses the limitations discussed above and which employs more appropriate measures of drift. Much of the research which has looked at drift or punctuated equilibrium has been case based (Johnson, 1987) or has used aggregated data (Romanelli & Tushman, 1994). To understand clearly the relationship between forms of incrementalism, strategic drift and an organisations ability to deal with required levels of change, there is a need for cross sectional data which tracks the process over time and which recognises both forms of incrementalism. By adopting such an approach and utilising more direct measures to assess drift, support might be provided for the notion that the more internally focused Process Incremental organisations are more prone to drift than the more externally orientated Logical Incremental organisations.

An extension to this research to explore the process - context relationship more closely may also enable clearer relationships to be identified between the form of incrementalism and organisational environment and particularly how this relationship operates. To be effective future research must recognise both the complexity of the incremental strategy development process and its variance by context. A triangulation of approaches utilising case study method and questionnaires on a longitudinal basis may shed greater light on the nature of the incremental process and the relationship to organisational context.

Further, this research has established a link between process and context based on perceptual data. Future research might usefully replicate this by using more objective measures and data. This research provides indications of the relationship between incrementalism and context, a starting point from which it may be possible to build a contingent model to account for variations in incrementalism.

CONCLUSION

The descriptions of both Process Incrementalism and Logical Incrementalism derived from the large scale survey employed here link closely with the differences in the case based descriptions of Quinn (1980) and Johnson (1988). The nature of incrementalism differs and as such it cannot be seen as a singular phenomena. It is clear from the findings that two patterns of incrementalism are commonly seen to occur that correspond to theoretical explanations of incremental strategy development processes in terms of managerial intent and organisational process. These forms are seen to be related to particular contextual variables relating to environmental stability, sector of operation, formality of organisational decision-making, breadth of participation, and aspects of organisational performance in relation to growth. Further, the division between these two forms of incrementalism is argued to relate more closely to their orientation; that is whether they are more internally or externally focused in relation to their drivers of strategic change than to any clear sense of logic and intention.

Through clearer descriptions of the decision process and a greater appreciation of the non-rational aspects of strategic thinking better decision-making can be assisted (Duncan, 1987). There is then an intrinsic value in describing the strategy process in order to more clearly understand the process and its mechanisms of activity. This is advantageous to managers, not least because efforts to effect strategy or change the process will be more effective if directed through, or at, the process as it actually exists within an organisation.

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TABLE 1

The Internal Consistency of Strategy Development Dimensions

Dimension	Number of Items	Coefficient Alpha	Scale Mean
Incremental	6	0.66	4.40
Intentional / Planned	8	0.90	4.05
Cultural	7	0.75	4.33
Political	7	0.75	4.30

TABLE 2
Cluster Means on Strategy Development Dimensions

Strategy Development Dimensions	Cluster / Incremental Form		Mean	SD
	1	2		
Incremental	0.53	0.53	0.53	0.29
Intentional / Planned *	-0.93	0.57	-0.02	0.94
Cultural *	0.64	-0.01	0.25	0.69
Political *	0.52	-0.34	0.01	0.88
Nos. Organisations	28	43		

* significant at 0.01 level

TABLE 3
Cluster Means on Contextual Variables

Contextual Variables	Cluster / Incremental Form		Mean	SD
	1	2		
Number Employees *	1584	5164	3763	7983
Size of Turnover *	3.46	3.73	3.62	1.13
Status - Independent *	0.56	0.31	0.41	0.49
Stability *	3.89	4.42	4.21	1.11
Competitive High/Low *	2.28	2.02	2.12	0.94
Maturity *	3.45	2.68	2.98	1.19
Fragmented *	5.20	4.93	5.04	1.24
Hostility	3.73	3.57	3.63	1.07
Market Growth	4.52	4.46	4.48	0.99
Breadth of Involvement *	3.50	3.97	3.78	0.92
Formality *	1.89	1.60	1.72	0.51
Planning Department *	0.22	0.40	0.33	0.47
Profitability	3.54	3.86	3.74	1.13
Sales Growth *	3.23	3.50	3.39	0.69

* significant at 0.01 level

TABLE 4
Discriminant Function Analysis Statistics

Variables	Standard Co-efficients	Wilks' Lambda	Signif.
Maturity	0.81185	0.89911	0.008
Breadth of Involvement	-0.34187	0.78883	0.001
Number Employees	-0.65873	0.70155	0.001
Stability	-0.62816	0.65926	0.001
Status - Independent	0.35987	0.61793	0.001
Sales Growth	-0.60919	0.58839	0.001
Formality	0.42181	0.55448	0.001
Size of Turnover	0.69271	0.53111	0.001
Planning Department	-0.33951	0.51225	0.001
Competitive High/Low	0.39235	0.50102	0.001
Fragmented	0.31750	0.48422	0.001

N=71

Note: The variables Hostility, Market Growth, and Profitably failed to make a significant contribution to the discriminant function and were not selected for inclusion in the SPSS-X stepwise procedure.

Canonical Discriminant Functions

Eigenvalue	1.065
Canonical Correlation	0.718
Wilks' Lambda	0.484
Chi-squared	44.601
D.F.	11
Significance	0.001

APPENDIX A

Key Characteristics of the Four Dimensions

Incrementalism

- Strategy develops in an evolutionary way
- Strategy emerges from the everyday world of managing
- Strategy is continually adjusted to match changes in the operating environment
- Early commitment to strategy is tentative and subject to review
- Strategy development, evaluation and assessment are intertwined
- Strategy develops through small scale change

Intentional / Planned

- Strategy is formulated in a deliberate and purposeful manner
- Strategies are the outcome of rational procedures
- Broad strategic goals guide actions
- Strategy emerges through a constant process of analysis, re-analysis and modification
- Planning techniques are used in the assessment and development of strategic options
- Constant environmental scanning keeps the organisation in line with its environment
- Strategies are closely monitored throughout their implementation

Political

- Strategy is formulated by negotiation and bargaining between interest groups
- The interest groups seek to realise their own desired objectives
- Interest groups form coalitions to further their desired strategy
- Influence on strategy formulation increases with power
- Power comes from the ability to create or control the flow of scarce resources
- A strategy acceptable to the most powerful interest groups is developed
- Those individuals who control information gain additional influence over strategy

Cultural

- Organisational ways of doing things impact strategic direction
- A core set of shared assumptions based on past experience and history guide strategic actions
- Organisational history directs the search for and selection of strategic options
- Strategy not in fit with the culture is resisted
- The shared assumptions guide
 - the selection of goals and objectives
 - the identification of strategic issues
 - the selection of information

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