

O F

# **WORKING PAPER SERIES**

M A N A G E M E N T

A process-based assessment of organisations

Ruth Kiraka Karen Manning

10/2003

#### A PROCESS-BASED ASSESSMENT OF ORGANISATIONS

## Ruth N. Kiraka and Karen Manning

#### Abstract

The argument presented in this paper is that a process-based view is useful for identifying good management practices because of its holistic multi-dimensional view of organisations. This view involves identifying both the external and internal organisational factors affecting processes. With regard to the external environment two forces driving processes are discussed: (1) processes involve responding to the environmental influences; (2) processes focus on stakeholder satisfaction. On the internal environment, the relationship between processes and the internal environment is two-fold: (1) processes drive or are driven by the strategy of the organisation; (2) processes determine or should determine organisational structure. The theoretical model developed provides a useful tool for managers to consider in their thinking about and planning for the future of their organisations.

#### 1 Introduction

This paper seeks to examine the relevance of a process-based perspective in evaluating the achievements of organisations. The argument is that a process-based view is useful for identifying good management practices because of its two characteristics. First, it provides a convenient, intermediate level of analysis by combining individual tasks and activities in the organisation as a whole, thereby facilitating the necessary integration to ensure that the realities of work practice are linked explicitly to the organisation's overall functioning. Second, it emphasises the links among activities, showing that seemingly unrelated tasks are often part of a single unfolding sequence (Garvin 1998).

However, the efficacy of the process approach is limited by multiple factors that affect processes, to demonstrate that this perspective is more intricate in its visualisation, analysis, implementation and assessment than it appears. This paper provides a framework for examining the process perspective and discusses the challenges in managing the process approach.

## 2. Defining Organisational Processes

In the broadest sense, processes can be defined as a collection of tasks and activities that together – and only together – transform inputs into outputs (Garvin 1998, p. 33).

Garvin (1998, p. 35) makes a useful distinction between two kinds of work processes: (1) *operational* processes that create, produce and deliver products and services that customers want, and (2) *administrative* processes that do not produce outputs for customers, but that are still necessary for the running of an organisation. Operational processes may include the development of new products and services, and service delivery to customers, while administrative processes may include strategic planning, budgeting and performance measurements. While the operational processes produce goods and services for the external customer, the administrative processes generate information and plans for internal groups. However, the aligning and coordination of

these two forms of processes is vital if the organisation is to function effectively (Crowston 1997, p. 159).

Most literature on processes focuses on operational processes. In their definitions, for example, Davenport (1993, p. 5), Hammer and Champy (2001, p. 38), Nickols (1998, p. 16) and Vanhaverbeke and Torremans (1999, p. 42) use the term 'process' to refer to the structured, patterned, purposeful activities through which organisations transform one or more kinds of inputs into outputs, which are of value to the stakeholder. To this definition Braganza and Lambert (2000, p. 177) and Laudon and Laudon (2000, p. 78) note that process is the linking of strategy to operational activities. Tasks are carried out by linking together the functions of organisational units, guided by a set of objectives and strategies. Processes cross functional boundaries of organisational structures to deliver outputs to stakeholders.

Nickols (1998, p. 15) argues that process consists of two equally important components:

- The *transactions*—that define the relationship *between* an organisation and its external environment, and the process involved in exchanging outputs for inputs; and
- The *transformations*—that define the processes involved *within* the organisation of converting inputs into outputs [Emphasis added].

In defining organisational processes, these authors point to four important characteristics of process:

- Processes involve obtaining from the *external environment* the necessary inputs so as to sustain the functioning of the organisation;
- Processes focus on *stakeholder satisfaction* they aim to create an output that is of value to the end-user. Stakeholders represent significant justification for developing a process-based view of organisations;
- Processes involve the conversion of inputs into outputs, tied to *strategic* intent and actions; and
- Processes involve *cross-functional* linkages that cut horizontally through the *organisational structure*.

These four dimensions of processes form the basis against which further discussions are presented and a theoretical model developed in this paper. However, before discussing these dimensions, a review of the challenges of using a process perspective in organisational management is presented.

## 3. Challenges of the Process Based Perspective

Organisations pursuing the process approach appear to have made only partial or marginal success, and in some cases failure (Crowston 1997; Cook 1996; Davenport 1993; De Cook & Hipkin 1997; Edwards C. et al. 2000; Garvin 1998; Ghoshal & Bartlett 1995; Hall & Rosenthal 1993; Nickols 1998). The problems have been traced to a number of sources. One is in the difficulty of identifying processes (Davenport 1993; Nickols 1998; Rummler & Brache 1995), and a second is in the way of managing and redesigning processes (Crabtree et al. 2001; Cook 1996; De Cook &

Hipkin 1997; Edwards C. et al. 2000; Garvin 1995, 1998; Ghoshal & Bartlett 1995). These two problems are discussed below.

# 3.1 The Difficulty of Identifying Processes

Justification for the process perspective is based on the premise that the determination of organisational processes forms a crucial component in assessing the achievement of organisational goals. Yet organisational processes represent a difficult challenge in identification and analysis because they are often unknown quantities, have no names, are not represented in organisational charts, and examples are often disputed. The exercise of identifying processes is not always a straightforward one and is often difficult to define or apply (Nickols 1998, p. 16).

Rummler and Brache (1995, p. 8) note that processes are cross-functional, spanning the "white space" between the boxes on the organisational chart. Processes often tend to fall into the 'cracks' between functions. Rummler and Brache propose that the only way to truly understand the way work gets done is to view an organisation horizontally (as a system), rather than vertically (as a hierarchy of functions). When an organisation is viewed horizontally, business processes can be seen and understood. But as the horizontal view of the organisation has not been given sufficient attention, processes have remained obscure and poorly understood (p.63).

Processes are also difficult to identify because their boundaries are often not defined. Processes are *selected portions of larger streams of activity*. Process boundaries must be *set* or established in this larger context, before they can adequately be identified [Emphasis in original] (Nickols 1998, p. 18). As boundaries are arbitrary, managers are faced with the task of defining them, and often these definitions will be contested, resulting in discrepancies and internal conflicts (Davenport 1993; Kumar & Nti 1998).

Process identification and analysis is also based on the assumption that the organisation has:

- A well-articulated strategy as processes have strategic relevance. They are the way through which strategy is implemented (Davenport 1993, p. 31-34);
- Clearly defined end-users. Processes are a set of related activities that produce a result of value to an end-user (Braganza & Lambert 2000, p. 179; Garvin 1998, p. 33; Nickols 1998, p. 16; Vanhaverbeke & Torremans 1999, p. 42);
- An existing and/or potential resource base (Nickols 1998, p. 15).

Where some or all of these three components are not clearly articulated, the task of process identification becomes increasingly complex and uncertain.

Crabtree et al. (2001, p. 164) observe that process identification is difficult because there are significant situated work practices where the processes are produced. Organisations sometimes draw up process maps in an attempt to identify a definitive way to engage in a particular activity. However, such a perception of definitiveness quickly becomes obsolete as organisations realise that the formulation of best practices relies on *ad hoc* considerations of situated actions and work practices that nowhere figure in a well-designed process map. This argument brings to light the fact that numerous *contingent* considerations such as costs, increases in workload or the

number of managers who concur with a particular process, exist in arriving at a process. Identifying processes is therefore complex and is dependent on multiple factors and actors. Managers need to enter into negotiations and compromises in defining processes in their organisation, based on their existing and tried work practices (pp.166-167).

# 3.2 Challenges in Managing the Process Approach

A focus on organisational processes has been criticised as being prescriptive, simplistic, mechanistic and formulaic (De Cook & Hipkin 1997; Edwards C. et al. 2000) because it fails to acknowledge the existence of multiple factors that influence process determination and outcomes.

For example, the process perspective has been criticised for its failure to reflect on the fact that while managers may express frustration with current inefficient, rigid, and ambiguous systems in their organisations, and may thus be open to a different perceptive, such ambiguities and inefficiencies have their appeal. Under uncertain conditions, the negative consequences of their actions, as well as the causes are difficult to detect and evaluate, thus providing managers with a sense of psychological security (De Cook & Hipkin 1997, p. 666). It can therefore not be assumed that a process perspective will always be welcomed or supported by organisational managers.

Approaches have also failed to appreciate the significance of a shared understanding at senior management levels regarding an appropriate mode of operation and the outcomes that are expected from a process. Unless managers develop consensus on organisational context, an appropriate approach to address organisational needs and strategic interventions, process oriented initiatives are less likely to secure benefits (Edwards C. et al. 2000, p. 30; Hammer & Stanton 1999, p. 110; Rummler & Brache 1995, p. 7).

The process perspective has also been criticised for its apparent de-manning of the organisation (De Cook & Hipkin 1997, p. 669; Hammer & Stanton 1999, p. 108). This has been traced to the need for new styles of management that include the ability to coach, collaborate, communicate, motivate, negotiate and work as a team player (Garvin 1995, p. 84). Those maintaining traditional management styles of command, control, resource allocation and assigning responsibilities may find themselves rooted out of organisations as these styles have no place in a process organisation (Garvin 1995; Cook 1996; Hammer & Stanton 1999; Ghoshal & Bartlett 1995).

The trend towards de-manning has also been linked to the need to respond to stakeholder expectations. The pressure by stakeholders on organisations to reduce costs and maximise profits, coupled with the need by organisations to maintain stakeholder support has been perceived as an important driving force behind supporting process initiatives (De Cook & Hipkin 1997, p. 662). The result has been a trend towards downsizing, reorganising work teams and a move towards increased used of information technology (Crabtree et al. 2001, p. 171; Rummler & Brache 1995, p. 124). This focus on downsizing and profit maximisation may be why some organisations have had failure with the process perspective, as no genuine attempts

have been made at process analysis (De Cook & Hipkin 1997; Hammer & Stanton 1999).

Schmidt and Treichler (1998, p. 59) reinforce this view by arguing that a process orientation requires more rationale and planning than currently exists. The approach has often been indiscriminate and superficial. Seldom have attempts been made at critical conceptualisation (Hall & Rosenthal 1993, p. 122).

Garvin (1998, p. 35) points to another limitation of the process perspective as its almost exclusive emphasis on operational processes, neglecting the ongoing administrative processes—managerial coordination, oversight and control of the reconfigured processes. Operational processes have often been targeted for improvement, while the supporting administrative processes have been overlooked, resulting in incompatibilities and inconsistencies (Garvin 1998, p.35). Unless, administrative processes are redesigned too, not much can be gained from the improvement programs. A broader focus in process redesign is therefore essential (Garvin 1998; *Harvard Business Review* 1995; Hall & Rosenthal 1993).

Grint (1994) also argues for a holistic view to process determination and evaluation. The fact that a process does not work well, for example, may be due to micro-political conflicts within the organisation, or changes in the marketplace rather than any inadequacies in the process itself. Thus, any evaluation and possible process redesign must take into consideration all relevant major conditions inside and outside the organisation that impact on process outcomes and performance. In an era of a volatile and rapidly changing environment, 'non-strategic' improvement programs could generate a much improved process that is no longer relevant to the environment (*Harvard Business Review* 1995, p. 80). Thus, it is necessary to evaluate the changes in the environment in order to identify and plan rationally and realistically whether to redesign existing processes or develop new ones that are relevant to the organisation and its environment (Edwards C. et al 2000, p. 30).

These criticisms of the process perspective identify that previous studies have failed to take into account important factors such as:

- The internal *strategic* and *management* capabilities and decisions in organisations;
- The existence of *external factors* that influence process determination and outcomes;
- A critical view of the role of *stakeholders* in determining process initiatives and outcomes;
- A holistic approach towards process initiatives one that involves elaborate planning and critical conceptualisation.

The criticisms are valid because they recognise the need for a multi-dimensional view of processes, that is characteristic of process definition that was discussed previously.

The conceptualisation of the process perspective brings to light two important issues. One is that organisational processes involve more than simplistic mechanistic steps in doing things – there is strategic planning, managerial coordination, resourcing and the need for consensus on initiatives. A second is that an internal perspective, that is, only looking at processes without linking them to the external organisational context

that they intend to respond to, is an inadequate analysis of determining how processes are realising intended outcomes or need to be changed.

What is required is a theoretical framework that integrates these components – organisational processes, the internal organisation context and the external environment, assesses how processes are determined, and evaluates how process outcomes are influenced by these contexts. In order to develop such a framework, the following section provides further discussions of the four dimensions of processes identified earlier in the paper.

## 4. Dimensions of Organisational Processes

Within an organisational framework, one can formulate a variety of hypotheses concerning the effects of changing contextual conditions on organisational processes. For example, "As condition X changes, Y new patterns or classes of action are predicted (Pentland 1995, p. 553)." This view of organisational processes as being linked to external and internal contextual factors is useful to the extent that it offers structural alternatives for managing organisational operations (Ciborra 1996).

# 4.1 The Effect of the External Environment on Process

The 'environment' refers to the context in which the organisation operates. There are macro environment factors and task environment factors that affect processes. The macro environment factors represent the broad conditions and trends in which organisations operate. They include the political-legal climate, the economic conditions, technology, socio-cultural climate and the international context (Bartol et al. 2001; Bedeian 1993; Daft 1997; McKenna 1999). These factors affect the functioning of organisations and therefore need to be considered, although their impact may not necessarily always be very clear (Robbins & Barnwell 1998).

The task environment factors are the specific outside elements with which an organisation interfaces in doing its work (Bartol et al. 2001; Bedeian 1993; Daft 1997; McKenna 1999). Specific to organisations, the task environment includes factors such as customers and clients, competitors, suppliers, government agencies and labour supply.

Bartol et al. (2001, p. 66) represent this organisation-environment relationship as shown in Figure 1 below.



Source: Adapted from Bartol et al. (2001:66)

Figure 1. The organisation-environment relationship

## 4.1.1 The macro environment

The political-legal climate refers to legal and governmental systems within which an organisation functions. Trends in legislation, court decisions, politics and government regulation are important political-legal environment aspects (Bartol et al. 2001, p. 67). The economic climate involves systems of wealth production, distribution and consumption. Within any economic system organisations are influenced by economic factors over which they have little control, such as inflation and recessions (Bartol et al. 2001, p. 66). Not-for-profit organisations for example, find a greater demand for their services during economic decline but receive fewer contributions. They must adapt to these changes in economic conditions (Daft 1997, p. 78).

The sociocultural climate represents the attitudes, values, norms, beliefs, behaviours and associated demographic characteristics of the population within which an organisation operates (Bartol et al. 2001, p. 68; Daft 1997, p. 78). Multinational organisations are particularly faced with the problem of sociocultural differences between countries (Bartol et al. 2001, p. 68). At another level, Bedeian (1993, p. 73) views the social environment of an organisation as the societal views regarding an organisation's behaviour – that is, whether the organisation is pursuing socially acceptable goals in a socially acceptable manner. In order for an organisation to survive, the society has to perceive it as legitimate and worthy of support. This facilitates the organisation's ability to acquire resources and deflects questions about its right to provide, competency in providing, and effects of its goods and services on the social structure of the community.

The technological climate includes scientific and technological advancements in the production of goods and services (Daft 1997, p. 77). Technology is of particular importance because it has been and continues to be the main source of increases in productivity, which means it can either provide a competitive advantage to organisations that can use it effectively, or pose a threat to those that lack it (Bedeian 1993, p. 74). To remain competitive therefore, organisations need to understand current technology developments affecting their ability to offer desirable products and services (Bartol et al. 2001, p. 65).

The international element includes changes in countries other than the organisation's home country with potential to influence the organisation, as well as the opportunities presented by these foreign countries (Bartol et al. 2001, p. 68; Daft 1997, p. 76). The international environment provides new competitors, customers and suppliers, as well as shaping social, technological and economic trends. It also represents an everchanging and uneven playing field compared to the domestic environment, pushing organisational managers to learn new rules to cope with goods, services and ideas circulating around the globe (Daft 1997, p. 77).

The difficulty in interpreting and responding to the macro environment is that first, organisations are influenced by multiple ideologies represented by the different environmental factors (McKenna 1999, p. 98). For example, nonprofit organisations while often having altruistic (social) values, may find that other ideologies, especially the economic and political inevitably influence their behaviour, because of their interactions (and interdependence) with these ideologies. Managing an organisation therefore requires not just an understanding of the dominant ideology relating to that organisation, but of others as well (McKenna 1999).

Second, the effect of the macro environment on the organisation is considered remote and sometimes not clearly understood. However, it is a very real one. Organisations that have traditionally focused on the domestic environment need to develop a broader view, if not in their production and delivery of goods and services, at least in their thinking and planning (Turner & Hulme 1997).

#### 4.1.2 The task environment

As shown in Figure 1, the task environment is important to any organisation for two reasons:

- The results of an organisation are always to the task environment the end-users of a product or service are 'out there'. For an organisation to survive, it must meet the needs and expectations of these groups, and do so competitively (Hammer & Champy 2001, p. 21; Nickols 1998, p. 18).
- The resource base for the organisation is also 'out there' in this environment. Resources are gathered from the environment, and results are sent back to the environment. Nickols (1998, p. 15) refers to this environment-organisation interdependence as a *transactional* relationship.

Such a view of the task environment as a component of organisation processes is of strategic importance as it helps organisations to position themselves well to respond to changing contexts, through identification of drivers for change. In other words, it is

important to articulate the organisational contexts of which critical processes are a part, and then adopt a holistic approach to process design (Edwards, C. et al. 2000, p. 30; Short & Venkatraman 1992, p. 19).

Another way to look at the task environment is to view it as a group of external stakeholders important to an organisation. As shown in Figure 1, the task environment consists of these stakeholders (they include customers and clients, suppliers, competitors, government agencies and labour supply). Bryson (1999, p. 5) defines a stakeholder as 'any person, group or organisation that can place a claim on an organisation's attention, resources or output, or is affected by that output.' Thus, while the task environment may generally be viewed as having the necessary resources for the organisation, 'stakeholders' refers specifically to the individuals or institutions who have an interest, and who affect and/or are affected by the outputs of that organisation.

Given that processes aim at adding value to the stakeholders of an organisation, activities constitute a process when linked explicitly to stakeholder expectations (Braganza & Lambert 2000, p. 179; Cook 1996, p. 2; Nickols 1998:16). This means that when the expectation of a stakeholder changes, the process that meets that expectation needs to adapt accordingly (Braganza & Lambert 2000, p. 182). A key function of stakeholders is therefore to provide information for the organisation's processes. Information should be gathered from the most important stakeholders—the existing and potential end-users of an organisation's outputs (Davenport 1993; Hammer & Champy 2001).

Nickols (1998, p. 16) suggests that taking the stakeholder satisfaction approach may be one way of addressing the dilemma of process identification discussed previously. Organisations may start by identifying existing or potential outputs targeted at stakeholders and then working backwards from there to identify the processes or activities that yielded those outputs.

The stakeholders, however, do present obvious problems for process definition and design. Any and all aspects of processes would be viewed in terms of self-interest by each of the stakeholders. They have different expectations and views on priorities, which suggests there would probably be a conflict in demands as to how processes ought to be defined and designed (Hudson 1999, p. :49). And as process boundaries can be set anywhere the organisation chooses (Nickols 1998, p.18), the result might be that the organisation has to prioritise and choose processes that benefit the most influential stakeholder(s) (Perrot 1999). Inevitably, the organisation is likely to benefit some stakeholders more than others, giving rise to the satisfaction of some and the dissatisfaction of others (Bedeian & Zammuto 1991). Decisions over prioritising of stakeholders, or which processes to give most emphasis to, often manifest themselves in unhealthy internal organisational conflicts over allocation of resources (Braganza & Lambert 2000, p. 181).

Prioritising and meeting stakeholder expectations is therefore a challenging task because it results in the dissatisfaction of some stakeholders, and in internal organisational conflicts. The alternative is to attempt to satisfy the expectations of all stakeholders. The likely outcome of such an approach would be that scarce resources

would be over-stretched, resulting in all stakeholders being poorly satisfied (Braganza & Lambert 2000).

In spite of the complexity in stakeholder satisfaction, Daft (1995) argues that the management and survival of an organisation is a complex, multi-dimensional concept. Research studies have shown that an assessment of the satisfaction of multiple stakeholder groups is an accurate reflection that the organisation is engaging in effective processes (Tsui 1990). Organisations do care about their reputation, and do attempt to share in stakeholders' views of what the organisation should be doing and how, thereby meeting the expectations of several interest groups (Fombrun and Shanley 1990). As such, managers need to constantly assess stakeholder significance in the light of each issue, product or service in order to better manage stakeholder needs and expectations and to guide the amount of time and resources allocated to them (Perrott 1999; Hudson 1999).

Organisations need to increase their attention to developing an appropriate response to the macro and task environments. This represents a significant part of an organisation's survival and success as it provides for viable process determination that can increase the likelihood that stakeholder expectations will be met.

With regard to the external environment, therefore, there are two important forces driving processes:

- (a) responding to the environmental influences as they are interpreted by the organisation;
- (b) addressing stakeholder expectations.

The other two dimensions of processes identified in the definition are those of the internal environment—organisational strategy and structure.

## 4.2 The Effect of the Internal Environment on Process

Organisational *strategy* represents the determination of goals and the adoption of courses of action and allocation of resources necessary for carrying out the goals (Lewis 1999, p. 10). Organisational *structure* represents the division of labour into tasks and coordination of those tasks to accomplish an activity (Mintzberg 1999, p. 178).

# 4.2.1 The strategy

Thompson and Strickland (2001, p. 10-11) define strategy as a blend of (1) deliberate and purposeful actions, (2) as-needed reactions to unanticipated developments, fresh market conditions and competitive pressures, and (3) the collective learning of the organisation over time. The aim is to be successfully competitive, satisfy customers and achieve organisational objectives (p.10). Strategy represents broad statements of direction and intent and as such creates the framework through which different activities should be carried out to deliver a unique mix of value (Porter 1996, p. 64).

Organisational processes ought to be tied to such strategic intent and actions, to ensure that unique value is delivered to the end-user (Schmidt & Treichler 1998, p.

58). Davenport (1993, pp. 117-118) describes strategy as the backdrop against which process vision is created and driven. A well-defined strategy provides a context for process innovation and the motivation to undertake it. Processes that do not link strongly to strategy may have the wrong focus, or be too narrow to achieve the intended outcomes (Cook 1996, p. 34). As such, processes must be defined and developed with regard to their contribution to the overall organisational strategy (Garvin 1995; Edwards & Peppard 1997).

Schmidt and Treichler (1998) argue for a reciprocal relationship between strategy and process. In the 'process follows strategy' relationship, processes are a means to an end with regard to strategies. Strategies are implemented by means of processes (p.60).

Explaining the strategy-process link in the opposite direction—the 'strategy follows process' relationship—Schmidt and Treichler (1998, p. 61) use the concept developed by Burgelman (1983) of 'strategic context determination'. Strategic context determination refers to the process through which middle-level managers attempt to convince top management that the current concept of organisational strategy needs to be changed so as to accommodate new business activities that fall outside the scope of the current organisational strategy.

The key to understanding the activation of this process is that corporate top management knows when the current strategy is no longer entirely adequate but does not know how it should be changed. Middle management therefore has the responsibility of working with an agglomeration of activities related to a new product, service, process or system. The role of top management becomes one of acquiring resources to fit in ongoing venture activities. Once the activities can be accepted as viable, they are fitted into the corporate strategy. Thus, an activity, a process or a system becomes part of strategy rather than strategy determining the process or activity (Burgelman 1983, p. 238-9).

Crowston (1997, p. 58) suggests that the strategy approach may be useful in addressing the dilemma of identifying processes discussed previously. The starting point is to examine a wide range of organisations in the same sector/sub-sector. The efficacy of this approach is based on the premise that organisations belonging to the same sector will perform similar basic activities, as defined by the sector to which they belong and have similar overall strategies. These overall strategies provide the basis for identifying broad processes. Different activities and systems of coordination within organisations account for the different details within processes. Such diversity can help to build theory on the determination and coordination of organisational processes.

The challenge presented to management is that the relationship between strategy and process is a reciprocal one. First, whereas it is important that processes support the strategy because they are critical for its implementation, it is equally important that managers explore the impact of processes for strategy formulation. The influence of process-oriented projects on the determination of the context of the strategy bolsters the strategy follows process proposition. This view has largely been ignored by process development experts and practitioners (Schmidt & Treichler 1998, p. 62).

Second, because of their very nature, process initiatives that seek to change strategy are likely to encounter serious difficulties because they attempt to achieve objectives that may have been categorised by top management as impossible. Because such initiatives require unusual, even unorthodox approaches, they tend to create managerial dilemmas. There is a sense in which the success of changing strategy based on new process initiatives is dependent upon the conceptual and political capabilities of managers at middle management, and developing consensus at this level becomes important for new process initiatives to be accepted (Burgelman 1983, p. 241).

#### 4.2.2 The structure

For the purposes of this paper, the term 'structure' is used to define the formal pattern of interactions and coordination designed by management to link tasks of individuals and groups to achieve organisational goals (Bartol et al. 2001; Dawson 1996; Mintzberg 1999). Mintzberg (1999, p. 178) defines structure as consisting of two fundamental and opposing requirements: the *division of labour* into various tasks to be performed, and the *coordination* of those tasks to accomplish the activity [Emphasis in original]. The parameters of designing an organisation's structure are job specialisation, formalisation, centralisation, departmentalisation, reporting relationships and liaison with outsiders (Mintzberg 1999, pp. 180-186).

Structures as defined above tend to be based on either a function or a product with managers in charge of these divisions, and with little or no process orientation. However, since processes that produce value for the end-user cut across several departments, product or function-based structures have difficulties meeting end-user needs seamlessly across different functions because no one "owns" the issue of how long it takes or how much it costs to fulfil end-user requirements (Davenport 1993, p. 159). As such, they may be viewed as constraining process initiatives (Pentland 1995, p. 547). Departmental heads only report to higher-level managers, so that a customer perspective can be realised only at that level. Frontline managers will be reluctant to take the same perspective since they are not accountable for the outcome of other departments taking part in the same process (Vanhaverbeke & Torremans 1999, p. 44).

Process-centred organisations have the ability to overcome this problem since, by definition, processes bring the customer to the fore (Davenport 1993:159). The characteristics of key processes as cross-functional de-emphasises the functional structure of an organisation and structuring along processes becomes completely different from redrawing lines and boxes on the organisational chart (Braganza & Lambert 2000, pp. 180-184; Vanhaverbeke & Torremans 1999, p. 44).

Taking a process-oriented view is perceived as being incompatible with the traditional, hierarchical, functional organisation structures, as it encourages members to interact horizontally and consider how the actions of one organisational unit affect those of another. Functional units, their processes and responsibilities are articulated in such a way as to ensure that they contribute to meeting process outcomes through facilitating cross-functional interaction (Forssén 2001:259; Navaratnam & Harris 1995:16).

According to *Leader to Leader* (2000, p. 29-30) process-based view of organisations will affect traditional organisational structures in three different ways: (1) turning the structure on its head so that there are bottom-up initiatives; (2) linking and leveraging of assets across functions; (3) focusing on continuous self-renewal, where organisational change is not through architectural organisational design changes, but continuous learning. The result will be re-inventing processes rather than organisational structures.

The effect of structure on process probably presents the biggest challenge for managers. As Davenport (1993, p. 160) notes, although the problem of rigid functional organisations is well recognised, the proposed solution—to abandon any form of structure beyond the self-managing team—is frequently worse than the problem, or at least is less well defined. Nickols (1998, p. 16) and Davenport (1993, p. 162) warn that designing structures around processes is difficult because examples to follow and learn from are scarce, and managers are not sure where to start and how to go about redesigning their organisations. Caution therefore needs to be exercised around process-based structuring.

Vanhaverbeke and Torremans (1999, p. 47) note that setting up a process-centred organisation is a major challenge because of the difficulties in implementing it. The resources involved in identifying, redesigning and testing a process, determining what works and then implementing it may not justify the need to change. Majchrzak and Wang (1996, p. 93) have shown that simply changing organisational structure from functional units to process-centred departments is not enough to guarantee performance. Departments need to cultivate collective responsibility and collaborative culture.

Davenport (1993, p. 166), Hammer and Stanton (1999, p. 111) and Vanhaverbeke and Torremans (1999, p. 41) note additional dilemmas with the process-based structures. Functional skills are important to a process orientation, as is concern for product management and running of strategic business units. Additionally, just as key process activities can fall between the 'cracks' of functions, so too can important functional activities fall between the 'cracks' of processes, even broadly defined processes (Davenport 1993, p. 166). A change in mind-set therefore needs to be implemented with regard to how to integrate process and functional structures. Hammer and Stanton (1999, p. 111) suggest a coexistence and partnership between vertical and horizontal management structures. Vertical management systems may need to be reworked, but they cannot be altogether disbanded. This view of structure changes the perception of how functional structures constrain processes, and instead demonstrates that structures—though of different kinds—are inevitable for the management of processes (Pentland 1995, pp. 546-548).

Owing to the shortcomings of designing organisations around processes, functional structures continue to be used and determine processes in organisations. However, the process-based structure is still being promoted as an effective way to organise activities. Davenport (1993, p. 160) argues that process-based organisations are a powerful compromise between the need to maintain structure and the desire to adopt a flexible approach to the way work is done. The idea behind redesigning an organisation around processes is therefore not to abolish organisational structure completely, but to redefine it.

Vanhaverbeke and Torremans (1999, p. 42) and Kirchmer (1999) distinguish two key ideas underpinning a process-oriented organisational structure. First, the organisation is divided into basic organisational units, which are organised around the core processes (such as order fulfillment process). This implies that the units are based on a customer-oriented process and that the organisation will be structured along the main objective of these units. Second, other units (such as coordinating and administrative departments) are gradually added to support and ensure the core units can operate in the most effective and efficient way. As such, both operational and administrative processes are designed and structured simultaneously, providing a comprehensive and effective organisational structure.

The relationship between processes and the internal environment is therefore two-fold:

- (a) processes drive or are driven by the strategy of the organisation to achieve goals;
- (b) processes determine or should determine the structuring of organisations.

The relationship between the external and internal environments and process may be demonstrated as shown in Figure 2 below.

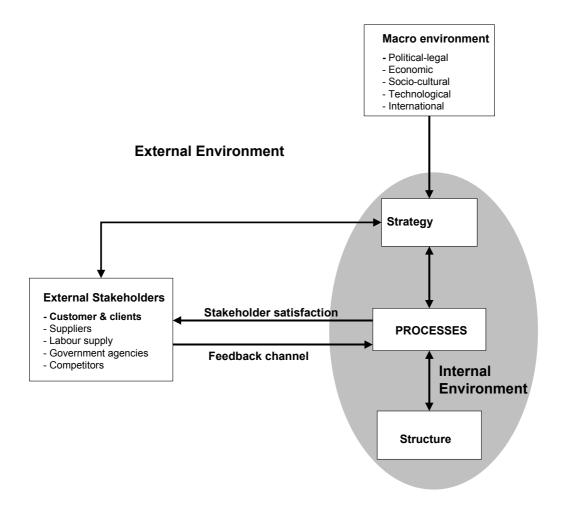


Figure 2. Theoretical model showing the relationship between process, macro environment, external stakeholders, strategy and structure

The theoretical model provides a useful tool for organisational managers to consider a multi-dimensional view of organisations. Such a view, while it may not always result in a change in the production and delivery of goods and services, is beneficial in thinking about and planning for the current and future direction of the organisation.

#### 5. Conclusion

Organisational processes have strategic relevance and the transformation of inputs into outputs involves the division and coordination of tasks within the organisation to achieve strategic outcomes. Organisational strategy and structure are therefore important considerations for managing processes.

The effect of the external environment – the macro environment and external stakeholders are also important. The relationship between an organisation and its external environment in exchanging inputs for outputs is important to the extent that it influences how processes progress and the outcomes are achieved.

An examination of these internal and external components that affect processes provides the necessary data for identifying good organisational management practices as defined through goal achievement and stakeholder satisfaction.

A number of areas could, however, benefit from further research. Further research is required to identify organisational processes in different sectors as this area has remained obscure. The strategy follows process perspective described by Burgelman (1993) represents an important aspect of using processes to create competitive advantage and also requires further exploration. Designing organisations around processes remains a significant challenge for managers and more practical examples are needed.

#### References

- Bartol, K. Martin, D. Tein, M. & Matthews, G. 2001, *Management: A Pacific Rim Focus*, McGraw-Hill, Sydney.
- Bedeian, A. G. 1993, *Management*, Dryden Press, Fort Worth.
- Bedeian, A. G. & Zammuto, R. F. 1991, *Organisations: Theory and Design*, Dryden Press, Chicago.
- Braganza, A. & Lambert, R. 2000, 'Strategic Integration: Developing a Process-Governance Framework', *Knowledge and Process Management*, vol. 7, **no.** 3, pp. 177-186.
- Bryson, J. M. 1999, 'A Strategic Planning Process for Public and Non-Profit Organisations'. in *Strategic Management in Public and Voluntary Services: A Reader, ed J. M. Bryson, Elsevier Science, Amsterdam, p.1-15.*
- Burgelman, R. A. 1983, 'A Process Model of Internal Corporate Venturing in the

- Diversified Major Firm', *Administrative Science Quarterly*, vol. 28, (June), pp. 223-244.
- Ciborra, C. U. 1996, 'The Platform Organization: Recombining Strategies, Structures, and Surprises,' *Organization Science*, vol. 7, no. 2, pp. 103-118.
- Cook, S. 1996, Process Improvement: A Handbook for Managers, Gower, Aldershot.
- Crabtree, A. Rouncefield, M. & Tolmie, P. 2001, 'There's Something Else Missing Here: BPR and the Requirements Process', *Knowledge and Process Management*, vol. 8, no. 3, pp. 164-174.
- Crowston, K. 1997, 'A Coordination Theory Approach to Organizational Process Design', *Organization Science*, vol. 8, no. 2, pp. 157-175.
- Daft, R. L. 1995, *Organisation Theory and Design*,: West Publishing Co, Minneapolis/St. Paul.
- Daft, R. L. 1997, Management, Dryden Press, Forth Worth.
- Davenport, T. H. 1993, *Process Innovation : Reengineering Work through Information Technology*, Harvard Business School Press, Boston.
- Dawson, S. 1996, Analysing Organisations, Macmillan Press Ltd, London.
- De Cock, C. & Hipkin, I. 1997, 'TQM and BPR: Beyond the Beyond Myth', *Journal of Management Studies*, vol. 34, no. 5, pp. 659-675.
- Edwards, C. Braganza, A. & Lambert, R. 2000, 'Understanding and Managing Process Initiatives: A Framework for Developing Consensus', *Knowledge and Process Management*, vol. 7, no. 1, pp. 29-36.
- Edwards, C. & Peppard, J. 1997, 'Operationalising Strategy through Process', *Long Range Planning*, vol. 30, pp. 753-767.
- Fombrun, C. & Shanley, M. 1990, 'What's in a Name? Reputation Building and Corporate Strategy', *Academy of Management Journal*, vol. 33, pp. 233-258.
- Forssén, M. 2001, 'Life Cycles of Organisational Bottom-up Development Ideas', Knowledge and Process Management, vol. 8, no. 4, pp. 249-261.
- Garvin, D. A. 1995, 'Leveraging Processes for Strategic Advantage', *Harvard Business Review*, vol. 73, no. 5, pp. 76-88.
- Garvin, D. A. 1998, 'The Process of Organization and Management', *Sloan Management Review*, vol. 39, vol. 4, pp. 33-50.
- Ghoshal, S. & Bartlett, C. A. 1995, 'Changing the Role of Management', *Harvard Business Review*, vol. 73, 1, pp. 86-96.
- Grint, K. 1994, 'Reengineering History: Social Resonances and Business Process

- Reengineering', Organization, vol. 1, pp. 179-201.
- Hall, G. & Rosenthal, J. 1993, 'How to Make Reengineering Really Work', *Harvard Business Review*, vol. 71, no. 6, pp. 119-131.
- Hammer, M. & Champy, J. 2001, Reengineering the Corporation: A Manifesto for Business Revolution,, Nicholas Brealey, London.
- Hammer, M. & Stanton, S. 1999, 'How Process Enterprises Really Work', *Harvard Business Review*, vol. 77, no. 6, pp. 108-118.
- Harvard Business Review, 1995, 'Beyond Total Quality Management and Reengineering: Managing through Processes', *Harvard Business Review*, vol. 73, no. 5, pp. 80-81.
- Hudson, M. 1999, Managing without Profit: The Art of Managing Third-Sector Organisations, Penguin Books, London.
- Kirchmer, M. 1999, Business Process Oriented Implementation of Standard Software:

  How to Achieve Competitive Advantage Efficiently and Effectively, Springer-Verlag, New York.
- Kumar, R. & Nti, K. O. 1998, 'Differential Learning and Interaction in Alliance Dynamics: A Process and Outcome Discrepancy Model', *Organization Science*, vol. 9, no. 3, pp. 356-367.
- Laudon, K. C. & Laudon, J. P. 2000, Managing Information Systems: Organisation and Technology in the Networked Enterprise, Prentice-Hall, Upper Saddle River, NJ.
- Leader to Leader 2000, 'Closing the Strategic Generation Gap', *Leader to Leader*, Winter, pp. 27-32.
- Lewis, G. 1999,, 'Strategic Management Concepts'. in *Australian and New Zealand Strategic Management: Concepts and Cases*, eds G. Lewis, A. Morkel, G. Hubbard, S. Davenport & G. Stockport, Prentice Hall, Sydney, pp. 5-36.
- Majchrzak, A. & Wang, Q. 1996, 'Breaking the Functional Mind-Set in Process Organisations', *Harvard Business Review*, vol. 74, no. 5, pp. 92-99.
- McKenna, R. 1999, New Management, McGraw-Hill, Sydney.
- Mintzberg, H. 1999, 'The Structuring of Organisations, in *Australian and New Zealand Strategic Management: Concepts, Context and Cases*, eds G. Lewis, A. Morkel, G. Hubbard, S. Davenport & G. Stockport, Prentice Hall, Sydney, pp.176-195.

- Navaratnam, K. K. & Harris, B. 1995, 'Quality Process Analysis: A Technique for Management in the Public Sector, *International Journal of Public Sector Management*, vol. 8, no. 1, pp. 11-19.
- Nickols, F. 1998, 'The Difficult Process of Identifying Processes', *Knowledge and Process Management*, vol. 5, 1, pp. 14-19.
- Pentland, B. T. 1995, 'Grammatical Models of Organizational Processes', *Organization Science*, vol. 6, no. 5, pp. 541-556.
- Perrot, B. E. 1999, 'Managing Strategic Issues in the Public Service', in *Strategic Management in Public and Voluntary Services: A Reader*, ed J. M. Bryson, Elsevier Science, Amsterdam, pp.221-234.
- Porter, M. E. 1996, 'What Is Strategy?' *Harvard Business Review*, vol. 74, no. 6, pp. 61-78.
- Robbins, S. P. & Barnwell, N. 1998, *Organisation Theory : Concepts and Cases*, Prentice Hall, Sydney.
- Rummler, G. A. & Brache, A. P. 1995, *Improving Performance: How to Manage the White Space on the Organisation Chart*, Jossey-Bass, San Francisco.
- Schmidt, S. L. & Treichler, C. 1998, 'A Process-Based View and Its Influence on Strategic Management', *Knowledge and Process Management*, vol. 5, no. 1, pp. 58-63.
- Short, J. E. & Venkatraman, N. 1992, 'Beyond Business Process Redesign:

  Redefining Baxter's Business Network', *Sloan Management Review*, vol. 34, no. 1, pp. 7-21.
- Thompson, A. A. & Strickland, A. J. 2001, *Strategic Management: Concepts and Cases*, McGraw-Hill, Boston.
- Turner, M. & Hulme, D. 1997, *Governance, Administration and Development:*Making the State Work, Macmillan Press Ltd, London.
- Tsui, A. S. 1990, 'A Multiple-Constituency Model of Effectiveness: An Empirical Examination at the Human Resource Subunit Level, *Administrative Science Quarterly*, vol. 35, no. 3, pp. 458-483.
- Vanhaverbeke, W. & Torremans, H. 1999, 'Organisational Structure in Process-Based Organisations', *Knowledge and Process Management*, vol. 6, no. 1, pp. 41-52.