SWP 3/97 A CRITICAL ISSUE IN BUSINESS PROCESS RE-ENGINEERING: FOCUSING THE INITIATIVE

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The application of business process re-engineering in organisations continues unabated. A central issue that has not been sufficiently considered is the method of identifying and choosing the processes to re-engineer. If the claimed benefits of substantial performance improvement are to be secured, it is vital that a classification of process exists to facilitate selection of those most likely to deliver such benefits. This article considers the need for such a classification and the responses presently available in the literature and concludes that this is both a critical and a neglected matter. A classification scheme explicitly linking processes to business strategy is presented. The paper concludes by illustrating how the scheme was employed by one organisation during their re-engineering initiative to yield significant benefit.

The interest in, and application of, business process re-engineering continues unabated. Organisations of all types and in all industries are looking towards the re-engineering of their processes to dramatically improve their performance with research continuing to illustrate that re-engineering is high on the corporate agenda.[1]

Yet despite the popularity of re-engineering, the indications are that the failure rate for those seeking to redesign their business processes is high.[2] This is perhaps to be expected, given the significant improvement in performance demanded by such programmes and the relative newness of the concept. A reason for failure may be associated with the poor state of some organisations beginning such a programme in the first instance. A further reason is perhaps due to the tremendous change which is inevitably required to migrate from a traditional functional-based organisation towards one with a process orientation. A significant issue is what actually constitutes failure. The rhetoric of process redesign advocates the setting of 'stretch targets', yet achieving a 20% improvement in performance when a 80% level was targeted might will be interpreted as failure: however perhaps 20% improvement was all that is possible.

The early literature on BPR is generally descriptive, focusing on what BPR *is* and *why* it is necessary rather than expressly considering the broader organisational implications.[3] This is to be expected, especially given its origins in observations of how some leading corporations were implementing IT in innovative ways.[4] The cases described in the early literature, for example Ford, Rank Xerox, American Express, and Hewlett Packard independently recognised the need to focus on processes in leveraging benefits from IT. Attaching a label 'business process re-engineering'[5] to these observations made the phenomenon available to a wider audience. Add to this the subsequent evangelical rhetoric which resulted in the *end* result becoming an instant objective for many more organisations. We now have the benefit of these organisations' experience in undertaking BPR as they sought to move towards this 'utopia'.[6]

As our understanding of re-engineering improves, guidelines to support organisations in re-engineering are becoming readily available. Guidance for success and pitfalls to avoid have been developed: for example, top management commitment, changing mindsets, the criticality of communication, aiming for quick hits, etc. are just some of the prescriptions which have been proposed. However, despite following this advice, in our research and consulting we observe that many organisations are not translating performance improvement as a result of redesigning processes into bottom-line results. Evidence suggests that many organisations are re-engineering processes which make little contribution to business success as a whole, even if the processes selected are successfully redesigned.

This paradox has been addressed in some way by the suggestion that two factors - *breadth* of process in crossing organisational boundaries and the *depth* of organisational issues considered - are critical in translating short-term, narrow-focus process improvements into long-term profits.[7] Performance improvements reported in the literature are very often expressed relative to the process being re-designed rather than the business unit as a whole. While such results may look impressive in the context of the process, in reality they have little impact on the organisation's profitability. The central message is to connect an organisations' process redesign initiative to its strategic business direction.

In this article, we present a classification of business processes which we have developed from our research and consulting which assists in understanding the role of various processes in delivering the business strategy and hence in identifying priorities for re-engineering. This framework provides an explicit connection between an organisation's strategy and its processes. To this end we articulate an approach to align strategy and customer expectations with processes. As a result of our research we have developed generic strategies to provide guidance in managing the different categories of processes and highlight how, over time, processes migrate and can become more or less important to the business. We conclude by illustrating how one organisation has successfully used this classification scheme to enable it to identify its processes and provide focus to their re-engineering initiative.

Contrasting business transformation and business process re-design

Research and company experience with process redesign clearly highlights that such initiatives should underpin the strategic direction of the organisation.[8] Yet even where an organisation recognises the criticality of this link they experience tremendous problems in operationalising it. In order to begin to develop this connection we first make a clear distinction between *business process redesign* and *business transformation*. The majority of writers use either one term or the other or, more commonly, use them interchangeably. We try to be somewhat more precise in our usage and advocate making a clearer distinction. This is not merely a semantic distinction but one which has great implications for those engaging in a re-engineering initiative.

We use the term business transformation (BT) to refer to the total re-engineering of a business unit. This is very much a top down activity, beginning with the business strategy and identifying the processes which deliver that strategy. It involves the development of an organisational architecture and entails identifying and linking the strategy of the business with the required organisational processes to ensure that this strategy is actually delivered, both today and in the future. Figure 1 illustrates how one company has looked towards articulating a process architecture to underpin the delivery of its business strategy.

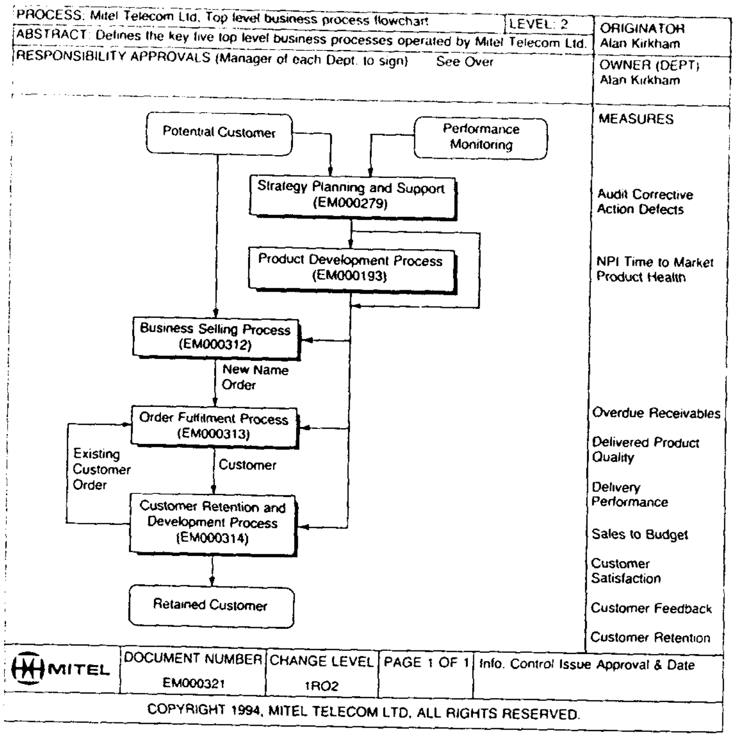

Figure 1 Process underpinning business strategy at Mitel Telecommunications.

In contrast, we treat business process redesign (BPR) as the redesign of a *particular* organisational process. The identification of a process to be redesigned may be derived as a result of business transformation (and we strongly recommend that it should be) or it may be any existing organisational task selected by management as deserving of attention. In short, BT is concerned with understanding the relationship between organisational processes and the business strategy to identify underlying processes; BPR involves the actual redesign and implementation of a process or set of processes. Indeed, much of the writings on BPR uses the rhetoric of BT yet the examples they quote relate to only a part of a business unit and then often the part is of minor importance. The essence of this distinction lies in the scope of the project at origination. The redesign of a business unit, or at least identifying the process architecture, equates to BT. Redesigning a particular process within a business unit is BPR. The focus of BT is therefore to identify processes and then to select candidates for redesign; hence BT can lead to the re-engineering of some or all processes for that business unit.

The selection of those processes to redesign raises interesting discussion questions but management often explain the choice in terms of their existing organisational understanding and the strongly desired improvements expressed by their customers. In some situations the very selection of the process to redesign provided the beginnings of failure; some organisations choose to redesign around existing organisational activities and whilst this may display apparently significant cost reduction, it may make little contribution to profits. For example, consider Ford's much publicised reductions in accounts payable staff numbers due to redesigning the accounts payable process[9]; did the 75% headcount reduction in this functional area contribute very significantly to Ford's world-wide profit? We would argue that the actual redesign was successful and exhibited all the hallmarks of BPR but delivered little tangible monetary benefits in the context of the *whole* Ford organisation.

Defining process and activities

Before beginning to explain the nature of process classification, it is worthwhile understanding what is being classified: namely what we mean by a process. We view a process as an organisational mechanism that exists to satisfy one or a collection of stakeholders expectations from the organisation. Processes are a *logical* construction, as opposed to their *physical* manifestation which translates the 'what' defined at the process level into action; these we term activities. This distinction between logical and physical is familiar to those engaged in the design of databases, but we have also found it useful in understanding processes. The processes (i.e. the logical view) provides the conceptual basis for defining the activities (i.e. the physical view) which will deliver a particular outcome. For example, an organisation may have an 'acquiring customer process' which may consist of activities such as market research activity, customer credit evaluation activity, and a direct mail activity.

We use the word 'stakeholder' intentionally. It is a popular dictum today for organisations to seek to become 'customer focused' and indeed many BT initiatives are centred around this objective. However, too strong a focus on the customer is to neglect the complex web of relationships that make possible the operation of an organisation. We prefer the broader term 'stakeholder' and define them in the conventional way, as anyone who can significantly influence the success or otherwise of the organisation. Examples would be customers, suppliers, shareholders, employees and government.

Expectations are identified by 'questioning' the stakeholders through a variety of mechanisms. It is useful, for later classification, not only to identify what stakeholders 'expect' from the organisation but also what would 'delight' them if it were made available. This solicitation task can be time consuming but is a vital ingredient . If expectations are missed or inappropriate expectations are selected then the whole of the transformed organisation will be mis-aligned. Usually, much of the information already exists to support this task, such as market research reports, customer focus interviews and such. It is very likely that a certain level of conflict will exist between stakeholders' expectations (e.g. that between selling price and profit) but such conflict is healthy if it leads to debate and consensus. However, if it is not dealt with at an early stage it can lead to mixed objectives for the resultant processes to satisfy.

BT is often seen as involving "breaking the china"[10] and of challenging every concept, assumption, purpose and principle underlying the design of a process. It is equally important to surface and examine the assumptions which underlie stakeholder expectations. In particular, whether these assumptions are valid in relation to the current business strategy. A critical question is whether the organisation has any desire to satisfy these expectations because if not, stakeholders will exercise their power over the organisation, for example customers may choose to defect.

We have found that companies often find it difficult to articulate the link between strategy and process directly. Indeed, in his recent book Hammer[11] recognises this fact acknowledging that process identification is almost certainty the most intellectually challenging component of the entire transformed enterprise. Unfortunately, he offers little by way of guidance. We have found that those charged with identifying processes from strategy often find it easier to go through stakeholders and their expectations as the first pass and then examine the resultant processes in relation to the strategy.

Figure 2 illustrates the relationship between strategy, stakeholders, expectations and process. In this model, the interplay between strategy and stakeholders is crucial; strategy defines some stakeholders and the expectations of these stakeholders then shape the strategy. Indeed, the organisation may seek to manipulate these expectations through marketing. When consolidated, expectations define the organisation's processes. It is the execution of the activities which constitute the processes wich deliver these expectations and in turn satisfy stakeholders. In effect, this approach is defining the organisation's processes but indirectly via stakeholders and their expectations rather than defining processes directly from strategy.

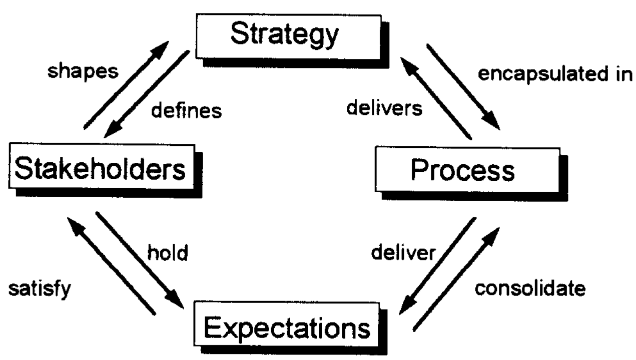

Figure 2 Strategy, stakeholders, expectations and processes.

The consolidation of stakeholder expectations and restatement into organisational processes is undertaken in a particular way but involves much management consideration and discussion. The method employed is to select each stakeholder expectation in turn and ask if an already identified process will be tasked to satisfy that expectation. For example, with the first expectation a process will need to be created (as by definition no process can yet have been created) and this will take the form '*to* *verb noun*'; an example of this may be 'to educate visitors' which results from an expectation on the part of visitors to a zoo to be educated. For a second expectation, management need to decide if it is to be met by the existing process or if a new process needs to be originated. This decision involves considering if an existing process fully meets the expectation being classified and the degree of importance of that stakeholder and that expectation to the organisation. If no existing process can be tasked to deliver the expectation then a new process is originated. If an existing process only partly includes the expectation and if satisfying the expectation is critical to our organisation then a second process will be created; otherwise it will be subsumed into the first process. Each time an expectation is subsumed into a process, or a new process is originated, the list of performance measures for that process will be updated to reflect the enlarged scope of the process or the slightly amended process focus. The link between expectation and process should be documented for later consideration.

To reiterate, processes are seen as consolidations of stakeholder expectations and reflect *what* the organisation will do (i.e. the logical view). It does not include an indication of *how* it will be undertaken or *who* is to do it; this is determined by the transformation process. In this regard, activities are organisational responses to make processes happen (i.e. the physical view); they do not of themselves satisfy any stakeholder but a co-ordinated collection of activities, namely a process, does. As we have already seen, processes themselves do not actually do anything: they exist to provide focus for achieving a desired outcome (i.e. an expectation). They are a device which enables a grouping of the activities which will be required to be performed, if the outcome is to be achieved. In other words a collection of activities is the physical manifestation of a process.

In developing activities from processes organisations typically adopt one of two approaches.[12] The first, is to examine the current organisational activities undertaken to satisfy expectations and then to look at ways that 'non-value adding' aspects can be eliminated, closely related activities combined, where appropriate new activities originated, or where new technology permits new ways of working. The second demands much more of a creative approach and permits 'out of the box' thinking in relation to the possible ways the process could be operationalised. The existing activities are ignored and possible ways of meeting the expectation developed, through the use of brainstorming, benchmarking or other creative techniques. Existing activities can then be compared to those resulting from the brainstorming to reveal the extent of the transformation.

Selecting processes for redesign

From our research and consulting, there is evidence that all organisational processes do not contribute equally to the delivery of the business strategy. Consequently, and obviously, organisations should seek to select those processes to redesign that are likely to provide substantial benefits. Much practical activity and research effort is concerned with individual process improvement and subsequent implementation but, of course, improving non-critical processes seldom yields substantial benefit!

Consider an organisation that has identified its process as outlined above and is about to begin a detailed transformation project. It soon realises that the task it has undertaken is enormous and that just to understand all of its processes in detail will take many months. However the directive has come from the Board, so something has to be done. Analysis teams form; middle management become interested, as they can see the potential benefits; charts of processes begin to appear on walls; every activity appears to be related to everything else. Soon, computer based drawing tools are required to capture the richness of processes; pilots are undertaken to determine the appropriate methods for portraying processes. Time passes, complexity increases, consultants arrive to assist, whilst internal management turn their attention to running the business. Eventually, management interest wanes and the central issue becomes that of how to stop all of this effort without losing face!

Another possibility for this all too true scenario is that after processes are identified, a focusing tool is employed to determine which processes deserve immediate attention, which can be left for a while and which do not merit redesign attention. Such focus not only provides an invaluable direction for redesigning particular activities but also for the ongoing management of the emergent processes. Some processes presumably are critically important and deserve ongoing senior management attention, whereas others can be more sensibly delegated, and maybe some are more appropriately outsourced for others to perform.[13]

Categorizing business processes

Processes are not homogeneous and this has been highlighted by a number of researchers. This literature can be divided into two broad areas: those that suggest generic processes and those that suggest classification schemes. Generic processes include, new product development and launch, managing customer relationships, supply chain and operations, customer order fulfilment and management planning and resource allocation [14] Whilst such processes may well exist in all organisations, it is surely the importance attached to each and the method by which each is operationalised that differentiates the organisation and provides the benefits. Some processes may well exist in all organisations but what does this tell management about which deserve their attention for redesign?

A number of classification schemes have been developed. One proposes the distinction between operational and management processes[15]. Yet does not every process need to be managed (i.e. have a management aspect) and does not every process need to achieve something (i.e. it has operational aspect)? Surely then, all processes contain an operational and a management aspect and the two are intimately intertwined and hence our research found this distinction intellectually appealing but lacking in practical application. A more useful classification distinguishes between core processes, support processes, business network processes and management processes.[16] The earlier comments related to management processes apply here too but, importantly, it would seem additionally that for some firms, business network processes may well be core processes. Classifications in which an item is multiplied classified can cause confusion.

The Process Triangle

Whilst some of these classifications may be useful in creating a conceptual framework or assist in identifying processes, they give little indication of the importance of that process in achieving the business strategy and how the process should subsequently be managed. The scheme proposed here is an attempt to classify the contribution of the process to delivery of the strategy. It is not intended to be merely a conceptual tool but a practical instrument that is capable of immediate employment in ongoing BT projects. (See table 1 for the intellectual inheritance of the Process Triangle).

Organisations have processes that directly relate to their chosen area of *current competitiveness* and the outcome of these processes is recognised and valued by customers. The emphasis of these processes is on delivering value to customers and the focus of the process is on satisfying customer requirements.[17] This first category of process we term *competitive processes.* The 'delights' previously identified from the stakeholder analysis will be helpful in locating such processes. For example, if a car manufacturer is competing on the choice available to customers, the customisation process would form the organisation's competitive process. If we desire to compete on cost, then those processes in which we intend to be very significantly lower cost than our competitors will form the competitive processes. Some organisations claim to be significantly lower cost for all processes but, firstly, this seems an unattainable objective and, secondly, if true would mean that all processes deserve to be classified as competitive: not impossible but unrealistic.

However, arguably sustainable competitive advantage does not exist; rather, competitiveness appears to require a continuous process of innovation. Therefore, in the long run competitive processes will become obsolete, and will no longer provide advantage maybe as competitors begin to copy them. Any organisation must therefore have the ability to continually regenerate and renew itself in the face of ever changing customer requirements and technological changes. A category of processes is therefore required to address this need. *Transformation processes* are those that *create the capability* to operate effectively in the firms chosen industry *in the future.* Such processes develop the capability (the combination of people, process, and technology) that will deliver tomorrow's business strategy.

This notion of "tomorrow" and "the future" will depend upon the planning cycle and horizon of the business unit in question but, for many units, this could be considered to be an 18-24 month period. Customers may not even recognise nor presently desire these capabilities but, if the organisation's business strategy is "correct" the need will emerge through time, perhaps with a little assistance from marketing focused activities. Capabilities may well not be directly recognised by competitors and certainly are not easily or quickly created and, hence, they are the longer term competitive attributes of the business. For example, Motorola believes that long term competitiveness in their industry depends upon responsiveness, adaptability and creativity.[18] To develop these organisational attributes, Motorola has put in place transformation processes to generate these qualities. Usually such processes are termed management development and training programmes but we see these as activities supporting transformation processes.

A further class of processes we term *qualifying processes.* These are processes whose output is valued by stakeholders but are *not an area in which we aim to compete.* Inadequate performance in these areas would create organisational disadvantage and so a performance level at least equal to the average of competitors is desirable but performance at a standard above this level is wasteful of resource, as it is not a chosen area for competition. Notice that this category can include any stakeholders expectations and hence processes that directly contribute towards satisfying employees, shareholders or any other stakeholders expectations may be here classified. Such processes are important to the business and will likely justify a strong co-ordination of the activities constituting the process.

For example, quality was a competitive imperative in the auto industries in the 70's and 80's when UK domestic production was sometimes inferior to imports but in the 90's this is much less so. Customers expect quality and to be told it is the major selling point of a car is usually insufficient on its own to stimulate sales. Hence the quality process is no longer a competitive process but still requires active management and hence for most car manufacturers it would today be seen as a qualifying process.

The remaining class of processes, we term *underpinning* processes as these are not directly recognised by stakeholders but provide an underpinning that facilitates the operation of the three other kinds of processes. In reality, such processes are not really processes at all, by our earlier definition, but are collections of similar activities that are grouped together and are operationalised jointly. For example, a number of processes will require the hiring of clerical and support staff and to satisfy this a single underpinning process will be developed. It may be that this single process does not meet the exact requirements of any of its 'customer' processes but this loss should be more than recouped by the efficiency benefits gained. These underpinning processes are the legacy of a functional structure that the organisation does not desire to treat as a process usually because of efficiency or political reasons. It would be difficult to imagine an organisation that would not organise some of its activities in this way, as the disadvantage of multiple similar activities embedded in other qualifying, competitive and transformation processes could potentially be extremely expensive.

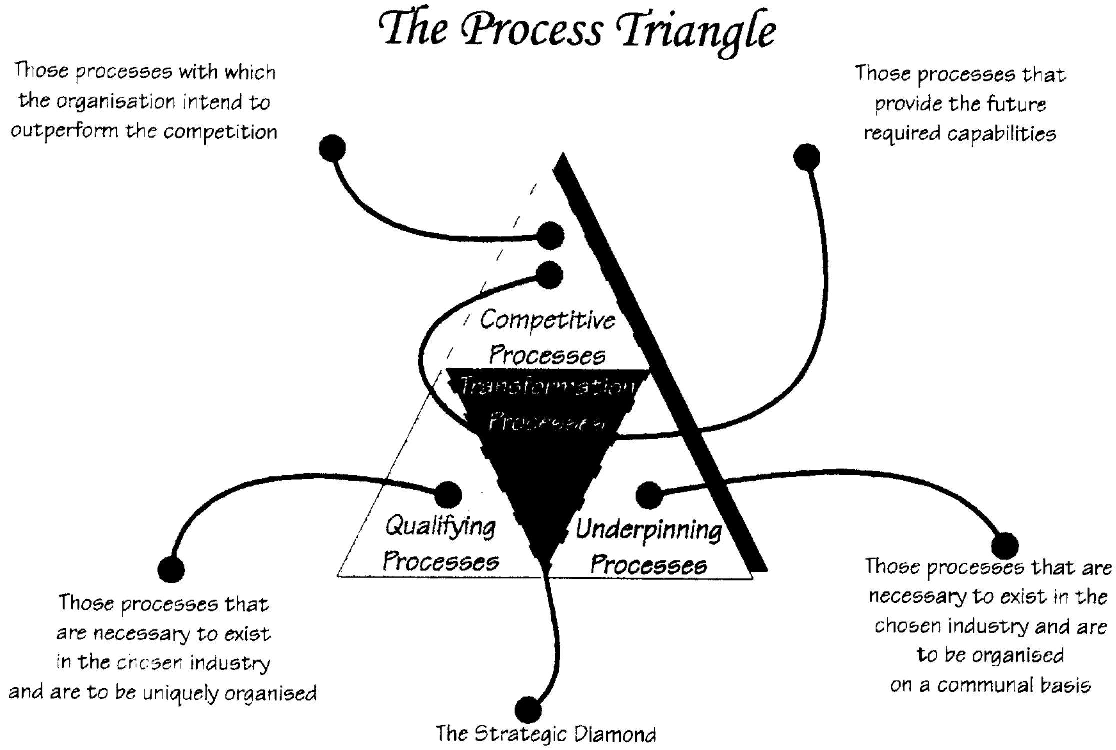

Figure 3 The Process Triangle.

Figure 3 portrays the various types of process and displays these in the form of a triangle. The reason for this shape is that the centre, namely the transformation processes, provides the capabilities (people, technology and process) for all other processes. The output of a transformation process through time migrates outwards to the other three classes of process.

Within our framework, we term the combination of transformation processes and competitive processes as the *strategic diamond*, as these are the very two groups of processes that *directly* contribute towards business strategy. Competitive processes deliver today's business strategy and transformation processes create the capability for future competitiveness.

Users of the triangle are often concerned about applying the classification in practice. Figure 4 portrays the questions to be considered in classifying processes in this way. It should be borne in mind that the actual classification of a process is often achieved after much senior manager debate and much reference to the written and "unofficial" business strategy. In fact, such a discussion amongst senior mangers is often very productive in clarifying the business strategy itself.

Positioning Processes

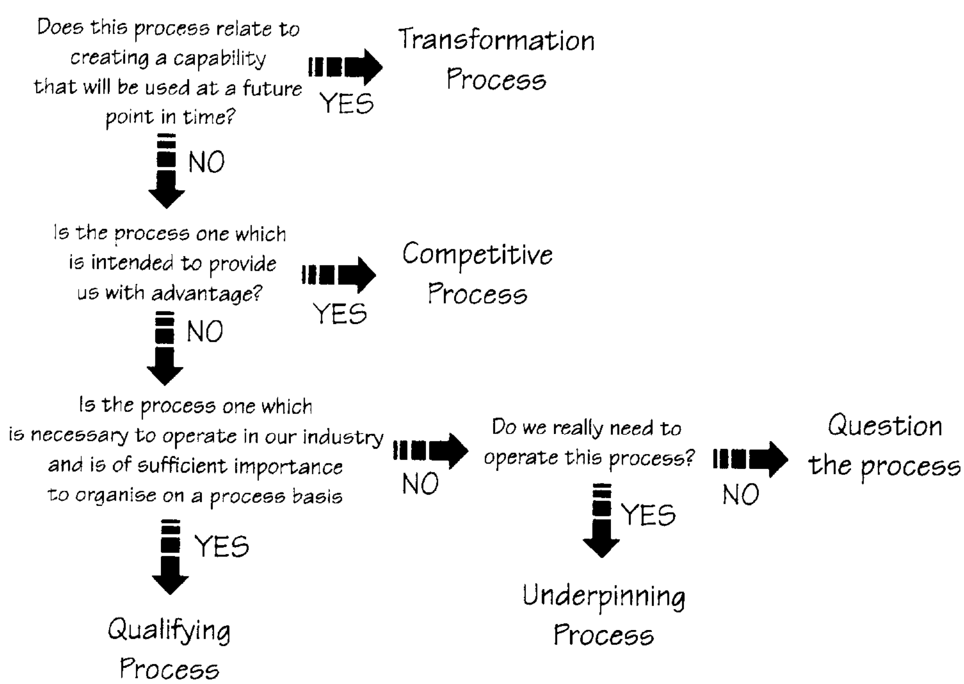

Figure 4 Positioning processes.

As simple as it sounds, organisations have strategies with no obvious process to turn them into actions. For example, a large law firm had a clear strategy focused on being competitive by better *matching* a client's needs to the services it offered than any of its competitors. The actual legal services offered were not intended to be any better than the competitors; the matching process was to be a competitive process and the provision of various legal services were, for them, qualifying process. Considerable investment was made telling potential clients of the benefits of the organisation's capability in matching their needs to service offerings but the nearest senior managers could come to identifying a process to ensure this actually happened was that of the receptionist. This organisation's strategy was delivered by the receptionist and security staff during the receptionist's lunch period! While this might seem a very extreme example it highlights the consequences of the lack appropriate processes to operationalise strategy. Further, the management of competitive processes is not always entrusted to the level of seniority that one might expect. Could this be a contributory factor to explain why some business strategies remain as desires and visions and seldom become reality?

Process category	Defining characteristics
Competitive	Processes focused on delivering value to the customer in excess of that delivered by competitors, and thus have an emphasis on customer requirements. Antecedents in Michael Porter's competitive strategy and positioning the firm in response to industry conditions. Kenichi Ohmae writes about the importance of '..serving customers' real needs'.
Transformation	Processes clearly focused on creating future capabilities. Emphasis on learning and improvement for continued competitiveness. Corporate renewal is a key theme. Draws inspiration from the work of Gary Hamel and C.K Prahalad in 'creating the future' and Peter Senge's work on the learning organisation.
Qualifying	Process focus on delivery of minimum requirements to be a player in the industry. Antecedents in the discipline of operations management, where such factors are often referred to as hygiene factors.
Underpinning	Processes focused on providing support for other three process categories. Antecedents in functional management and Taylorism where efficiency is paramount.

Box 1 The intellectual inheritance of The Process Triangle.

Migration of processes

A process is of a particular class at a particular point in time: but processes can change their classification through time. In our research we have identified five observable movements.

First, a transformation process may have served its purpose, in that it has created some desired capability or enhanced an already existing capability. The process element created moves into the appropriate category and that particular transformation process is dissolved; its purpose in life is complete. The process for the ongoing maintenance of the capability will have been created as part of the transformation process. This movement of the *results* of an transformation process to another process could also be similarly exemplified by movement to a qualifying process or to an underpinning process.

Second, through time, if an organisation is gaining advantage from applying a competitive process eventually the competition will copy it and maybe even improve upon the process or customer requirements may change. If the organisation is unable to further improve the process to sustain the advantage, then the process should be reclassified as a qualifying process. This process must continue, as the output is recognised and expected and stopping it would create a disadvantage. However, it should no longer continue as a competitive process as it now does not support the chosen basis of competition.

Third, an organisation may have an existing qualifying process that it feels could be significantly improved to provide competitive advantage as customers would be 'delighted' by this process. If we intend to implement the improvement to provide advantage, then the process should be reclassified as a competitive process.

The final two movements are special cases. The migration of processes from any of the other classes to the underpinning class is an instance where a whole process does not migrate, as in the second scenario above nor do the results of processes, as in the first scenario above. Rather it is similar activities which are currently undertaken in two or more separate processes which the organisation decides could be better undertaken together and are combined into a single new underpinning process. The purpose of so doing is to gain efficiency benefits without loosing functionality to the original processes.

Finally, an underpinning process, if it is badly operationalised for a significant period, may become visible to a customer through its total inadequacy or its inability to integrate with other activities that form part of the process. An attempt must be made to improve the performance of this process and failing this it should be dis-assembled and the component activities relocated as part of the original process.

Benefits of this classification

The benefits associated with understanding an organisation's processes are manifold: some arise from the action of discussing and agreeing whereas others originate from the techniques employed. The focus here is upon the classification tool and hence the benefits are restricted to those resulting from using the Process Triangle. However, the point should not be lost that the discussions of what constitutes a stakeholder, their expectations, the assumptions which underlay these expectations, and the resultant processes, and how all of this is acting in support of the business strategy is of itself very valuable.

Classifying and communally agreeing a classification facilitates the allocation of organisation resources in accordance with the process's importance. For example, a UK textile manufacturer sought to achieve world class excellence in its manufacturing facility. However, a brief conversation with its customers clearly revealed that it was the quality of its designs which was crucial in winning orders. Analysing this situation revealed that excellence in manufacturing is irrelevant if orders are not being received. The company was treating design as a qualifying process, whereas, in reality, it was a competitive process and should therefore have received significantly more resources and management attention. In the manufacturing process, the company needed to be at least as good as others in the industry, and it should therefore be classified as a qualifying process. However, if the firm can combine average cost manufacturing, i.e.

the qualifying process, with superior design, i.e., the competitive process, then it has potential to create a very significant competitive advantage.

A further benefit of classifying process is as a means to focus a re-engineering effort. Initial thoughts are often to focus upon competitive processes to gain current competitiveness and then to turn to the transformation processes to form the foundation for the future. However, beware, as it would be somewhat fruitless to ignore current areas of stakeholder dissatisfaction. For example, what is the point in a car manufacturer having superb design studios that visualise cars which are attractive to customers, if the inbound logistics process is effectively delaying the building of these vehicles. This logistics process may be a qualifying process but it cannot be allowed to be performed unsatisfactory. In summary, the triangle provides the classification but individual organisational circumstances determine the particular priorities for redesign and as these circumstances change through time, so will an organisation's redesign priorities.

The triangle also provides guidelines for the ongoing management of processes in addition to focusing redesign effort. Competitive processes and transformation processes deserve senior management attention; maybe a director should become the process owner. Qualifying processes and to a greater extent underpinning processes are candidates for outsourcing; why divert management attention to such matters when they could be focusing upon the strategic diamond? Outsourcing, however, is not suited to the strategic diamond processes, as it is difficult to imagine that using an agency could make us the leader in the industry, as if they did, they could presumably do the same for our competitors quite soon afterwards and hence the advantages would be short lived. However it may be most appropriate to outsource activities that comprise any process but refrain from outsourcing *all the activities associated with transformation or competitive processes.*

Even when organisations have identified and positioned their processes they are often unsure of which particular processes to re-engineer first. We have found it useful to ask companies to examine their processes *vis-a-vis* competitors. Plotting processes against performance as illustrated in figure 5 permits the organisation to immediately identify and prioritise actions. The matrix can also be used to obtain customer feedback and it is interesting to contrast the data obtained from an organisation with that obtained from its customers.

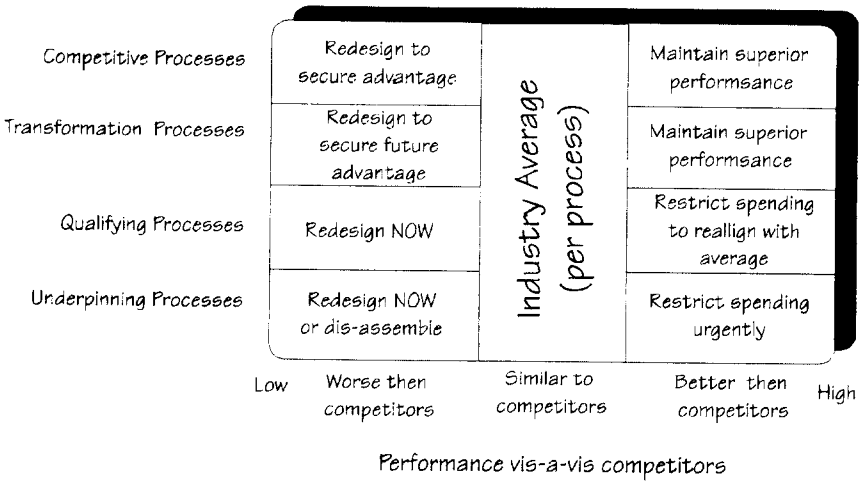

Figure 5 The process-performance matrix.

Applying The Process Triangle: The case of NatWest Group

During 1994 the IT Operations unit of NatWest Group, one of Europe's largest financial institutions, began a programme to evaluate and understand its operations with a view towards possible re-engineering. This was against a background of having undergone much re-organisation and restructuring in the *way* it achieved its mission over the previous years. What was different about this initiative was that it sought for the first time to look towards 'process' as a means of understanding itself particularly in the face of mounting customer dissatisfaction and the continued threat of outsourcing. The motivations of individual IT Operations's board members were varied, which is understandable, but it was generally agreed that a single high-level process model of how the business operated was highly desirable and that if they were to continue to exist they would need to work together towards that end.

IT Operation was responsible for the operational element of the banks computers and communication systems. It is large by virtually any standards, employing at the time 1,300 staff and having an annual run rate budget of £240 million. Through the years a very complex technical infrastructure had grown consisting of equipment from virtually every major vendor. A sister unit of the one in question was responsible for applications development and was structured according to the business it served. For example, it had analysts and development staff dedicated to the mortgage business and others focusing upon the retail banking business. The relationship with this sister unit was complex as all contact with the business was supposed to be through this sister unit but of course the business customers soon recognised that some of their requests were performed quicker by going directly to the operations group.

IT Operations, the subject of the case, operated like any other business unit having its own controlling board, a vision statement, a strategy and customers. The vision of the operations unit was 'to provide *quality services* at *competitive* prices adding value in *first choice* partnerships, based on trust and openness through *first class* people *passionately* committed to the *success of clients'* [the italics are theirs]. It competed to a limited extent for part of its business in that some of its customers had sufficient autonomy to use any supplier they wished, however this was a very limited group of customers, most were tied to using the operations service. In reality the unit had a significant competitor in the outsourcing companies who were constantly attempting to secure a large contract by targeting individual parts of the business and demonstrating their competence. Given the world-wide trend in outsourcing, the business was concerned that they might be considered as a potential candidate, whether for full or partial outsourcing. This IT Operations unit was a distinct business unit within the group and the business transformation initiative focuses exclusively on this unit.

Deciding an approach to the problem

An overview workshop was conducted by one of the authors, which introduced to the Board the subject matter of this article. It was also explained to them the principles to be employed, the benefits that could be expected and in particular the commitment that would be required if they decided to proceed. With customer dissatisfaction high and the threat of outsourcing looming on the horizon, the Board took these principles and devised a nine stage approach to operationalise them. This approach was:

- Identify stakeholders
- Identify and verify stakeholders expectations
- Form the processes to meet the expectations
- Allocate Board members to be process owners
- Categorise processes using the triangle
- For each process identify highest level activities and allocate owners
- Determine the degree of effort required to create or improve each activity
- Determine the improvement programmes that are to be pursued
- Allocate improvement programmes to particular Board members

Identifying the stakeholders and their expectations

The Board identified the stakeholders to be as follows:

- Clients
  - The sister development unit
  - The clients with purchasing autonomy
  - The executives of the various front line business units
  - The front line consumers/users of the service
- Operations staff
  - Staff
  - Line Management
  - The Operations Board
- Suppliers
- The Group Main Board

For each stakeholder the IT Operations board developed a series of expectations and delights. In order to undertake this task, board members were allocated a stakeholder group and each undertook to visit a number of representatives from their allocated group and verify the expectations/delights and to allocate a ranking of importance of the expectations to the stakeholder. The ranking was a crude assessment of high importance, medium importance and low importance but critically it reflected the views of the stakeholders. It is important to note that the 'low' categorisation was in the context of the other expectations and the fact that it received a mention was indicative of its importance. This relatively simple task in itself proved to hold benefits in that it provided a platform to discuss stakeholder expectations without the recriminations of day to day problems.

Some sixty-eight expectations were identified and table 1 presents an example of three of these. For each of these expectations a paragraph or so was developed to reflect the sentiment of the stated expectation and measures of success were discussed as a means of further refining the expectation. These sixty-eight expectations were subsequently classified as per table 2.

Expectation	**Descriptions**	**Priority (High, Medium or Low)**
High availability, reliability, and integrity of operational service	Delivery in a consistent way, i.e., the specification of services over time, and client confidence that this will be sustained.	**(H)**
Effective problem management	Fast, sensitive and accurate resolution of client problems ensuring root causes are resolved.	**(H)**
Effective delivery of technology, new or rationalised.	Delivery, installation and effective functioning of, and ongoing support accountability for, new technology	**(H)**

Table 1 Example of the Bank's Front Line Consumer expectations

Stakeholder group	High	Medium	Low
The sister development unit and clients with purchasing autonomy (combined as very similar)	7	9	3
Managers of the front line business units	8*	1	0
Consumers/users of the IT service in the front line business units	3	0	0
Operations staff	6	2	0
Operations line management	6	3	0
Operations Board	5	3	1
Suppliers	1	2	1
Group Main Board	5	2	0

* Two of these expectation were categorised as of super high importance.

Table 2 Classification of stakeholder expectations.

Forming the processes

The sixty-eight expectations were examined individually and an initial analysis revealed a number of repeated expectations albeit using slightly different words. For example, the desire to contain or reduce costs was a common theme. These common items were consolidated. Every expectation on the resulting list was then examined and the question was asked *have we yet developed a process to deliver this expectation?*: if 'yes' the expectation was consolidated into that process and a measure(s) was added to the existing process success measures: if 'no' a new process was originated and a measure(s) devised. This brief description does not reflect in any way the amount of effort and debate that was provoked by this task. Even after a list was produced later stages provoked a fine tuning of this list of processes. The resultant list comprised twelve processes (see table 3).

Process	Competitive	Transformation	Qualifying	Underpinning
Manage Finances			*	
Manage Service Delivery	*			
Manage Relationships	*			
Manage Programmes and Projects	*			
Develop Organisation		*		
Manage Communications			*	
Develop Services		*		
Manage Workflow				*
Manage Suppliers			*	
Manage Professional Business			*	
Manage Risk and Reputation			*	
Provision Supply			*	

Table 3 Processes mapped against the process classification scheme.

A cross referencing scheme was developed to ensure that these processes would in fact address stakeholders expectations. Each process was defined and had an agreed owner. Box 2 outlines a brief description of these processes.

Manage Finances
Manage all IT operations finances professionally to the required standard of the Group. Provide the required level of financial information to support market comparisons, negotiations with Group Board, supplier negotiations and to satisfy clients as to IT operations competence.

Manage Service

The delivery and management of IT operations services to the agreed level of performance and quality as detailed in the service level agreements negotiated with the client. The also include fault resolution and change management.

Manage Relationships
Develop and maintain mutually beneficial relationship with the sister systems development unit, FM clients and the main board at all levels, based on trust and understanding of their requirements and impeccable delivery of their needs.

Manage Programmes and Projects
To deliver projects to a best of breed standard of excellence that results in IT Operations being recognised as having a market leading distinctive capability in programme and project management.

Develop Organisation
The definition and implementation of the shape and content (in terms of skills, competencies, roles and headcount, culture, structure) the organisation needs to meet its objectives. It also inputs to and influences key factors such as pay and reward which are not within the IT Operations mandate.

Manage Communications
To improve the understanding and awareness of the IT Operations vision, business strategy, and performance among stakeholders through a structured communication process tailored to stakeholder needs.

Develop Services
To create and maintain the service development plan which encompasses the portfolio of services that IT operations does, and will, offer in meeting clients needs, also defining the means of delivery.

Manage Workflow
Manage and monitor the state of all items of work being performed in support of IT Operation's clients, including the bid process, in order to ensure clear client interfaces exist, progress is tracked and escalation takes place when exceptions occur.

Manage Suppliers
Manage the performance of IT Operations suppliers to ensure that clients, and taking a wider view of the Group, enjoy maximum benefits from the relationship. Communicate IT Operation's broader objectives to suppliers to encourage them to add value and in particular solicit suggestions for continual service improvements.

Manage Professional Business
Whereby IT Operations defines its strategy and objectives, defines and implements a business plan, captures and uses management information to measure progress against objectives and takes corrective action when required. Through this process the IT Operations board will be able to measure business progress against the balanced business scorecard and any other measures in place.

Manage Risks and Reputation
Managing effectively, to Group Risk and Policy standards, the environment in which client business applications operate, in a manner which ensures integrity and protects the reputation of the Group whilst still allowing business flexibility.

Provision Supply
To analyse the supply side of products and services that underpin IT Operations, by: assessing market position, current industry trends, determining acquisition and disposal strategies.

Box 2 Description of consolidated processes.

A crucial concern at this stage relates to *process validation*. How could management be sure that these were the 'correct' processes? By examining strategy, identifying stakeholders, defining expectations and communally identifying processes, it can be sure it has identified a set of processes that for now all of the board members will work towards operationalising. Correctness is in the eyes of those that are tasked to manage the unit!

Classifying the processes

A half day meeting was devoted to classifying the processes. The resultant output is depicted in table 3. As before, this classification represents the Board's agreed view of processes: for the same unit in another bank or even for this unit at a different time in its evolutionary cycle this classification may well be different. A quote from the company report adds insight, '[t]his initial analysis has led to the conclusion that many of the identified processes have no formal recognition or framework to operate within.......'. In short, the processes necessary to deliver customer satisfaction were not recognised and therefore not owned and the resultant activities were not co-ordinated to ensure delivery to expectations.

The Board identified three process which were crucial to the success of the business: *the management and delivery of IT services*, *project and programme management*, and *managing the relationship with customers* (see Table 3). They recognised that they needed to improve performance in these processes in order to counteract competitive threats. The transformational processes of *organisation and service development* would create the basis of future competitiveness, creating new competencies.

Focusing the initiative

Having identified and classified its processes the Board had to decide where to begin. The competitive processes were obvious choices, but for further analysis, the 12 processes were mapped onto the process-performance matrix. While this would give further clarity to the initiative, it would also require that some benchmarking be undertaken. Slowly one began to see a consensus emerging amongst the Board as to what processes to focus upon in the near and medium term future and who was to be responsible for action. Relationships between the various departments within the business unit became clearer and clarity between organisational boundaries was highlighted. As a result of this exercise, two processes were selected as candidates for redesign, and consultants were hired in order to help in the redesign of these particular processes.

Benefits of the initiative

The general benefits of applying the Process Triangle have been discussed earlier and so this particular section restricts itself to the particular benefits to this organisation. It is always difficult to measure the benefits of a single project such as this, as many other initiatives are ongoing in the organisation as a whole which could impact this project. However as a short term measure the Board believed that the analysis had revealed a new perspective which would aid them in focusing many ongoing initiatives; it would delay some initiatives to devote extra resources on others. The project certainly provided a framework in which to constrain the consultants hired to redesign particular the two particular processes. As ever the discussions which were necessary to use the classification tool were acknowledged to be insightful. One major side benefit was that it helped to bind together what was a fairly new (to each other) top team.

The redesign and implementation of these new process blueprints is not the subject of this article, but the bank clearly recognised the importance of managing the migration from the old process design to the new. During 1995, the IT Operations unit took in excess of their target of £40m out of the annual run budget and have the same target for 1996 which, although it looks stretching, is seen as being achievable. There was a similar story with service quality which also improved strongly and similar targets are being set for 1996.

Closing remarks

An organisation should understand its processes, their classification and clearly develop and agree guidelines for the management of each process. The Process Triangle is a means to classify the processes of an organisation to provide sufficient understanding to select particular processes for detailed redesign and additionally it can provide guidelines for the ongoing management of processes. It builds upon the experiences of others and has been deployed in a variety of organisational forms. Interestingly it has been employed with a variety of IT units requiring to undergo transformation and the processes developed have been essentially similar, however the classification of these processes has varied considerably. Benchmarking, usually a difficult task to apply in functionally based organisations, is much easier to apply when processes are well understood. The Triangle becomes invaluable in process based benchmarking as it begins to explain why a particular organisation is striving to be superior or content to be average in relation to a particular process.

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