

CHAPTER 1

PROCESS IMPROVEMENT



DEVELOPMENTS IN PROCESS MANAGEMENT

Businesses, whether commercial or not-for-profit organizations, inevitably have a wish to remain in operation; to have sustainable and repeatable business; and to satisfy stakeholders, customers and employees. For many, this brings a need to examine their operations in order to improve and advance such objectives. While organization change is covered in detail in Chapter 2 and the people aspects of performance management and organizational

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development in Chapter 3, a deliberate starting point for such change may be the examination of current practices and processes. Against this backdrop, process improvement can be regarded as being a systematic effort to provide an understanding of every aspect of a company's processes in order to reduce rework, variation and needless complexity in order to contribute to its performance through effectiveness and efficiency. It should be noted that process identification and redesign only provides a benefit when it is actually implemented and hence this also suggests a natural link to a change management programme.

Completion of a process improvement examination exercise is often seen to be a traditional springboard for much larger business improvements, which may in turn incrementally develop into a large-scale change management programme and planned organizational development. Indeed, what may begin as a simple local business improvement may grow into other initiatives aimed at delivering more substantial change and hence increased business-wide implications. The evolution through a range of such business programmes is shown in Figure 1.1.

With every organizational change there comes a risk which usually manifests itself through deterioration in business performance; however, a performance management system with associated key performance indicators can be used to help management teams predict and mitigate such an impact. This suggests that process improvement may be made in conjunction with the introduction of a change management programme which may be instigated

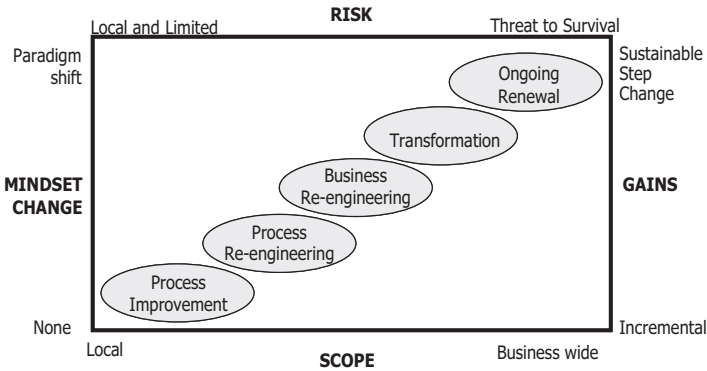


Figure 1.1 The re-engineering spectrum.

(From *Business Process Re-engineering: Myth and Reality*. Professor Colin Coulson-Thomas, 1996, reproduced with permission of Kogan Page.)

to realign the culture and business targets. Nevertheless, it should be stressed that the ubiquity of change management initiatives within both public and private sector organizations can quite often leave stakeholders at all levels with “change fatigue”, particularly where the vision, mission and principal objectives become diluted and performance reporting data confused. This said, for any performance-based management system to really add value to the organization it will need to encourage a no-blame culture where it will be safe for individuals to highlight sources of poor performance variance and actually regard these as proactive opportunities for improvement through a step change in their process redesign activities prior to implementation. Common across the re-engineering spectrum of Figure 1.1 is the requirement to understand

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Revolution	Evolution
BPR – Business Process Re-engineering	Continuous improvement
Start from scratch	Kaizen
Very rapid	Build on what has gone before
Innovative	Slowly and steady
	Maintenance and improvement

Figure 1.2 Two extremes of undertaking process improvement. (From *The Essential Management Toolbox: Tools, Models and Notes for Managers and Consultants*. S.A. Burtonshaw-Gunn, 2008, reproduced with permission.)

fully the current processes together with a desire to improve them.

Consequently, it is essential that organizations establish a level of openness and engagement throughout the process improvement and change management lifecycle, which transcends policies, procedures and statutory obligations, and carefully consider how critical the involvement of all employees will be in helping deliver process change. While there are a number of approaches to change, there are two extremes of major step change – one being revolution and the other a more gentle, incremental change of evolution with the features of both shown in Figure 1.2. However, this is not to suggest that one of these types is good and the other poor as this choice depends on a range of circumstances and the host organization's drivers for change. It should also be noted that a combination of these approaches is also possible although the majority of process improvements are aimed at achieving significant operational and financial improve-

ment; as such, the revolution elements of a business process re-engineering approach such as process mapping are commonly adopted.

In considering the other extreme category of process improvement, the term evolution is aptly used as this supports a continual activity. Without such commitment, it is likely that the company's performance will fail to keep pace with its competitors and larger change will more likely then be required. This failure is commonly referred to as "strategic drift" and is also shown in the model of Figure 2.2 in Chapter 2.

INVESTIGATING BUSINESS PROCESSES

While the obvious starting point is to gain an understanding and evaluation of an organization's current processes in order to identify where waste and/or rework occurs, it is also possible to take a more "visionary" approach and look to producing new processes without the constraints or inhibitions imposed by an organization's current operations and capability. This Envision stage exists in the standard business process re-engineering (BPR) methodology and requires an identification of any gaps to be undertaken and quantified in order to identify the level of transition to made to the "to-be" processes of the organization compared with those of the organization's current "as-is" position. A widely employed approach to BPR is shown in Figure 1.3. As mentioned above, the

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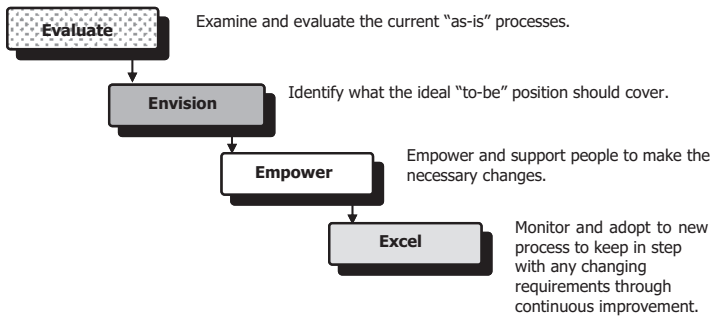


Figure 1.3 Business improvement process.

(From *The Essential Management Toolbox: Tools, Models and Notes for Managers and Consultants*. S.A. Burtonshaw-Gunn, 2008, reproduced with permission.)

starting point on the model may be either at the Evaluate or Envision stage, although both stages will need to be ultimately addressed.

One of the well-known and commonly used models in Europe is the EFQM Business Excellence model (covered as Figure 3.2 in Chapter 3), which itself has similarities to the American “Malcolm Baldrige National Quality Award”, both of which prompt organizations to look at their processes and in particular question how they are developed, used, reviewed and updated. At a higher level the Business Excellence model also promotes the use of “best practice” benchmarking with other companies and places great emphasis on performance measurement over time allowing trend analysis to be undertaken. This performance measurement can be from

qualitative data from customer or employee feedback, or from quantitative data such as financial reports, defect rates, etc. and used to examine the alignment relationship of the company processes to its business and customer requirements.

Since the mid 1950s, process examination has been part of the topic of “work study”, itself a forerunner to industrial engineering and more latterly management systems. As part of the earlier industrial tools, work study was a systematic approach of a staged methodology to select, record, examine, develop, install and maintain processes with the objective of reducing waste and hence increasing industrial output and performance.

One of the models that can be used to compare and contrast similar processes in an organization, especially if these are undertaken at different locations, is the POLDAT approach first used by the American Computer Services Corporation, and shown as Figure 1.4. This is used to record:

- the processes undertaken;
- the organizational setting;
- the location of where the processes are undertaken;
- the data that are managed;
- the application of the data; and finally
- the technology used in undertaking the task.

In addition to this internal comparison is the growing use of “benchmarking” where comparison is made with similar industries and companies to mutually seek

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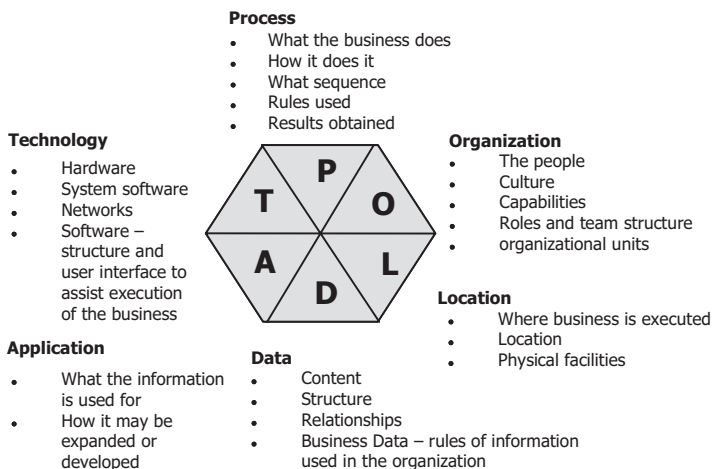


Figure 1.4 POLDAT methodology.

(From *The Essential Management Toolbox: Tools, Models and Notes for Managers and Consultants*. S.A. Burtonshaw-Gunn, 2008, reproduced with permission.)

improvement in process operations and share examples of considered good practice.

The use of the POLDAT model provides a systematic approach to selecting and recording performance whether at the company, department or activity level and lends itself to being a basis of comparison with the same activities undertaken in different locations. Such a comparison prompts questions around the model components such as details of the process; the organization's resources in terms of roles, responsibilities and numbers; and the use, level and extent of technology involved in undertaking each

activity, etc. in order to perform the same work output. Where process improvement is sought across a wide geographical area, companies can often address process improvement through the establishment of virtual teams and external consultant input, or at the other extreme have their own full-time staff charged with undertaking process improvement activity across an organization. The latter is more commonly used in the larger international organizations where the internal cost of establishing and operating such a team is more easily absorbed by the business. For some companies process improvement may also arise from other business activities such as problem solving.

One of the most used tools in this area is process mapping which encourages detailed investigation and analysis of how the company discharges its work. Process maps are usually presented in the form of a flow diagram and often have their own drawing convention. While flow charts may be drawn in a common IT program such as Microsoft Powerpoint or Excel, there are a number of process-mapping software programs such as Visio, FlowCharter Plus and Process Expert Professional, the latter being favoured by some UK police forces, for example. When considering the process language there are a number of mapping conventions such as British Standards, ASME Standard for Process Charts, etc. In widespread use is the internationally recognized Unified Modelling Language. However, the choice of these is of little consequence as it is the *task of process mapping* itself

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that provides an understanding of the current processes that can later be developed into new processes aimed at providing real performance benefits. If the process cannot be drawn using these mapping symbols then it is suggested that the process itself is not sufficiently understood. In view of the timing – or, perhaps more accurately, the order – of such an investigation the starting points of Evaluate or Envision shown in the business improvement process in Figure 1.3 again suggest either of these two stages provides an appropriate starting point providing that this is supported by the organization and those requesting an analysis of the organization's processes and performance.

Process improvement can also draw heavily on benchmarking an organization's processes with those of other businesses, although in practice finding “best practice” examples is not always easy, and often some examples are difficult to transfer between companies due to cultural or other operational differences. This is not to suggest that benchmarking is of no value, but that the elements of best practice championed by one organization may not always be applicable to others. It should also be noted that closer collaborative working (see Chapter 5) can also provide useful insights into process performance improvements where instead of whole process transfers, smaller “nuggets” of best practice may be identified which can be incorporated into providing increased organizational performance. The following six-step approach to benchmarking is proposed:

1. Define which process or practice is to be benchmarked and what you currently do.
2. Identify any best practice award winners in the area you wish to benchmark and list contact persons who could be potential partners.
3. Select and approach benchmark partners and explain the potential benefits to both sides.
4. Conduct one or more benchmark visits, identify learning points and provide feedback to the benchmark partner.
5. Use the learning points to create a benchmark report and options.
6. Agree the next steps and trial implementation improvements.

RECORDING THE PROCESSES

In almost all cases, irrespective of the starting position, a typical process improvement investigation will follow the process mapping to show the sequence of activities, flow of information, decision points and the range of possible process outcomes.

While simple process mapping provides a logical sequential account of the activities under investigation, this may be further refined by mapping the activities to align with individual roles or groups of staff and thus provide an organizational linkage between the process activities and the HR structure. The most common

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method of this linkage is by producing process maps arranged in “swim-lanes” headed by the appropriate resource grouping or individual post-holders. This method also allows the identification of those who should be involved in the current (as-is) process mapping together with identifying organizational changes on development of the “to-be” process maps. Again, the swim-lane approach provides a relatively easy method to understand the contribution made by groups (or individuals), which can then be cross-referenced with the existing or new role/job descriptions. The lanes can be punctuated with stage markers similar to those used in a swimming pool, providing an easy indication for the process user of which part of the process they are involved in and the following major stages to be undertaken. In addition, it is suggested that it is also beneficial to note the objectives of the process at the start of the map as this sets the scene for the user and provides some confidence that it is being undertaken for a specific and identified business purpose. Performance improvements can be made by building on the process mapping work – not just in modifying existing processes or introducing new ones, but by removing duplicated work or introducing changes to provide a closer synergy between related process maps. Looking at the roles and responsibilities of the staff undertaking the processes provides opportunities to improve further performance requirements including resource management and succession planning necessary to maintain operational performance or indeed required regulatory compliance in

some industries. From an HRM or staff training perspective, process mapping also supports a clear understanding of the business processes for employees new to an organization or department. Bearing this in mind from a more strategic viewpoint, process mapping, its development and adherence should be linked to wider quality assurance company requirements where applicable.

The final two models of this first chapter (Figures 1.5 and 1.6) each present an opportunity to examine the resulting processes maps and identify further improvements. First, Figure 1.5 provides not only a step-by-step list for process mapping but offers much more than simply stating what is done by, more importantly, prompting the complier to examine the tasks further by the addition of some guidance questions which can be asked at each of the seven steps. This was first published by Christopher Ahoy of Iowa State University and is reproduced below with his permission.

The table of Figure 1.6 provides some further practical prompts to those tasked with seeking process improvements and is a useful tool to use following on from Chris Ahoy's model. The questions of Figure 1.6 can be used both by an individual process mapper and by a group in a workshop environment to facilitate further process improvement following an examination of the "as-is" process maps and the development of the new "to-be" process improvements. The primary questions are initially designed to check that all of the required information has been obtained; after which the next stage is to enquire

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Step 1: Determine the boundaries	• Where does a process begin? • Where does a process end?
Step 2: List the steps	• Use a verb to start the task description. • The flowchart can either show the sufficient information to understand the general process flow or detail every finite action and decision point.
Step 3: Sequence the steps	• Use post-it notes so you can move tasks. • Do not draw arrows until later.
Step 4: Draw appropriate symbols	Start with the basic symbols: • Ovals show input to start the process or output at the end of the process. • Boxes or rectangles show task or activity performed in the process. • Arrows show process direction flow. • Diamonds show points in the process where yes/no questions are asked or a decision is required. • Usually there is only one arrow out of an activity box. If there is more than one arrow, you may need a decision diamond. If there are feedback arrows, make sure feedback loop is closed, i.e. it should take you back to the input box.
Step 5: System model	• Draw charts using system model approach. • Input – use information based upon people, machines, material, method and environment. • Process – use subsets of processes in series or parallel. • Output – use outcomes or desired results. • Control – use best in class business rules. • Feedback – use information from surveys or feedback.
Step 6: Check for completeness	• Include pertinent chart information, using title and date for easy reference.
Step 7: Finalize the flowchart	• Ask if this process is being run the way it should be. • Are people following the process as charted? • Is there a consensus? • What is redundant; add what is missing.

Figure 1.5 Process mapping.

(From *Process Mapping, Facilities Planning and Management*. C. Ahoy, 1999, reproduced with permission of Iowa State University.)

why the identified process steps are undertaken, their sequence and the organizational benefits from undertaking them. However, greater value may be obtained as a result of addressing the secondary questions as it is these

PRIMARY QUESTIONS	WHY?	SECONDARY QUESTIONS	SELECTION
PURPOSE – What is achieved?	WHY?	What else could be achieved?	WHAT SHOULD be achieved?
MEANS – How is it achieved?	WHY THAT WAY?	How else could it be achieved?	HOW SHOULD it be achieved?
SEQUENCE – When is it achieved?	WHY THEN?	When could it be achieved?	WHEN SHOULD it be achieved?
PLACE – Where is it achieved?	WHY THERE?	Where else could it be achieved?	WHERE SHOULD it be achieved?
PERSON – Who achieves it?	WHY THAT PERSON?	Who else could achieve it?	WHO SHOULD achieve it?

Figure 1.6 Process map development.

that initiate deeper investigation of the proposed “to-be” process and ultimately contribute to achieving improved performance.

Such questioning should also suggest that the process developer considers the implications of *not* doing parts of the process and the external impact on the organization’s current or potential customers or stakeholders. The items that need to change can be captured and used as part of the change management process. Options on this topic are provided in the next chapter.

