

the phrase being “... *the knowledge set that distinguishes and provides a competitive advantage. ... Its content is embodied in [1] employee knowledge and skills and embedded in [2] technical systems. The processes of knowledge creation and control are guided by [3] managerial systems. The fourth dimension is [4] the values and norms associated with the various types of embodied and embedded knowledge and with the processes of knowledge creation and control.*<sup>10</sup>

Much discussion of capabilities seems to discount the possibility that anything easily specified could feasibly contribute to competitive advantage, by the logic that if it *could* be so specified then others would copy it and the advantage would disappear. This has led to a rich variety of phrases for the more special capabilities thought to explain competitive advantage—in addition to core capabilities, the literature mentions distinctive capabilities, strategic capabilities, firm-specific competence, organizational competence and many other adjective–noun combinations.

As argued previously when defining resources, it is not safe to dismiss mundane capabilities as being irrelevant to competitive advantage. Even if everyone knows what a specific, simple capability *is*, there can be significant differences in the level of that capability between competitors. Firms vary widely in the effort and investment they devote to building a particular capability, and in their success at doing so. There can also be considerable costs and lead-times in building capabilities, just as there are for many resources, both tangible and intangible. Furthermore, as explained previously, it is the *system* that generates performance, not a simple sum of separate elements.

### Ockham’s Razor

Ockham’s razor is a principle attributed to the 14th-century friar William of Ockham. In essence it states that the simplest explanation for any phenomenon is likely to be the best. This implies that, in the search for scientific theories, it is advisable to seek explanations that are economical or “parsimonious” (requiring the minimum number of factors), and involve the smallest number of hypothetical or abstract factors and mechanisms. This principle is worth bearing in mind when considering the likely usefulness and reliability of strategy theories and frameworks.

We will therefore drop all qualifiers, such as “core,” “distinctive,” “strategic” and “organizational” and use the single term “capabilities.” Most of these are not at all distinctive from those possessed by competitors, though they may well differ

in scale. Borders and Barnes & Noble, for example, are both highly capable at negotiating good terms with book suppliers, designing and opening appealing stores, merchandizing their ranges of books, and so on. As will be shown, which competitor performs better depends on their *relative* capability on each of these and other issues, the *relative* scale and quality of their tangible and intangible resources, and how effectively the whole system of each firm functions.

The explanation of intangible resources in Chapter 9 admitted a limit to just how far it is possible to go for a rigorous definition and measurement of those factors. The same will apply here. There are undoubtedly complex, subtle and sophisticated capabilities that play an important role in helping firms perform. However, their incremental contribution should not distract from efforts to understand and assess the very substantial impact that can arise from identifying, developing and using much simpler capabilities.

## EXAMPLE OF CAPABILITY EFFECTS

To illustrate how capabilities affect the performance of a firm's strategic architecture Figure 10.1 reconsiders the retailer from Chapter 5 (Figure 5.14), though now with a more detailed timescale covering its first 20 quarters of operation.

The firm tries to open stores quickly in order to capture the new customers available around each location. The fastest it could possibly open any particular new store, having made the decision to start-up in a locality, is three quarters (dashed lines and light text). However, being a new company, with little experience of finding, acquiring and developing stores, the best it can do is open each store after a process taking six quarters. This puts back substantially its capture of customers (solid lines and bold text), noting as in Chapter 5 that not all potential customers are captured immediately.

This first model already demonstrates a principle that will recur as the role of capabilities is explored further:

**Most capabilities are concerned with building and retaining resources.**

There are exceptions, which will be examined later, but very many of the most important capabilities are clearly located at the flow rates in the strategic architecture. Since it has been shown throughout earlier chapters that flow rates determine the growth of resources, and are where management act to drive performance, it is only to be expected that this is where capabilities will be found.

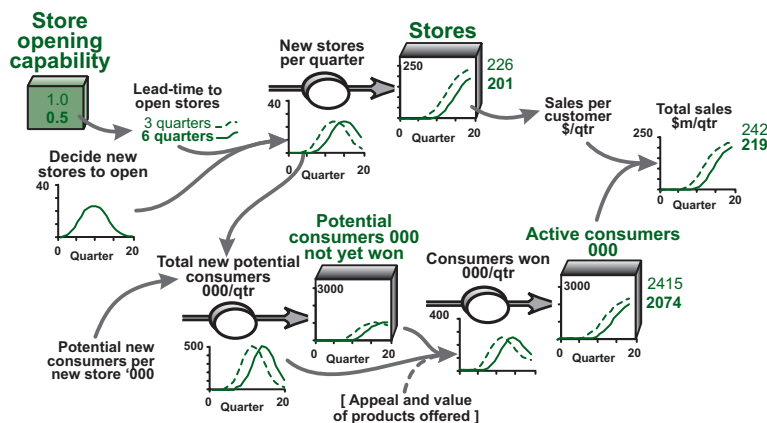
## MULTIPLE CAPABILITY IMPACTS

There is more to getting stores open than simply doing so quickly. Further concerns include:

- finding good quality locations that can attract as many potential customers, as possible in each area
- acquiring and developing stores for a low cost

In Figure 10.1, the capability's value is an easy metric to arrive at. The lead-time is actually six quarters, but should be three, so it can be assigned a capability level of  $3/6$ , or  $0.5$ . It might be possible to continue with this value, and look up what it implies for the quality and cost of new stores locations. However, it makes more sense to apply appropriate metrics directly to each of these items. Furthermore, these capabilities are genuinely distinct. The organization may be good at negotiating a good price and at finding the best location to reach all potential customers, but poor at managing the process quickly.

The capability to acquire and develop stores at a good price can be defined as the ratio between the best possible cost and the cost actually incurred. The capability to find good quality store locations can be given by the fraction of potential customers in an area that each store actually captures. (This will turn out to interact with another capability in the marketing of each store, which also aims to capture potential customers.)



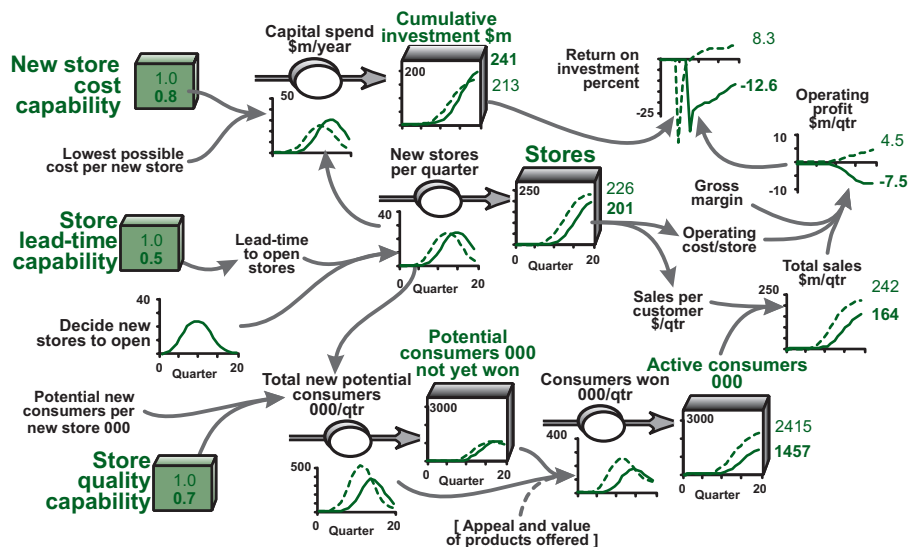
**Figure 10.1:** Low capability delays the store opening rate for a retailer.

**TABLE 10.1: CAPABILITY METRICS FOR STORE OPENING**

Detailed capability	Success factor	Capability indicator	Low value
Opening stores quickly	Lead-time: quarters	Actual lead-time vs. shortest	0.5
Finding good locations	Fraction of potential customers reached	Actual customers reached vs. total potential	0.7
Minimizing cost of new stores	Total cost of opening each store \$millions	Actual cost vs. lowest possible cost	0.8

Adopting this style of measurement for capabilities will often result in capabilities that are near to 1.0, rather than varying widely across a zero-to-one range. For example, a less capable retailer may open stores that are easily reached by only 90% of the potential customers in an area, but is unlikely to be so incompetent as to choose locations that no one can find at all. Similarly, they may well spend 20% more than the best purchaser could achieve, but will not likely spend two or three times that amount.

Table 10.1 summarizes the metrics for each capability, and Figure 10.2 shows the performance consequences that arise from the low capability levels shown in the table. The original low capability for lead-time (middle left) delays both the



**Figure 10.2:** Impact of low capabilities for store opening speed, quality and cost.

store openings and the spending of capital investment, but the poor capability for opening at low cost means that cumulative investment overtakes the high-capability case. The slow capture of customers is worsened by the poor quality of store locations opened, cutting still further the sales revenue the stores achieve. Since stores still incur full operating costs, the chain cannot become profitable and losses increase, leading to a negative return on investment.\* The business is clearly not doing well, relying as it does on these poor store-opening capabilities.

(Online learning materials are available to support this example, see p.xxi.)

It was argued earlier that the search for special or distinctive capabilities had distracted researchers from trying to understand the influence of capabilities that are entirely transparent. Figure 10.2 illustrates the point. It requires only a partial increase in each capability to allow sales to grow and the operating losses to be entirely eliminated.

And this is only *one* domain in which capabilities will arise. Others, concerning management of product range, logistics, staff hiring and training, marketing and pricing will all have significant impacts on their own part of the strategic architecture and on the performance of the business as a whole. Any significant company operating in the sector will be fully aware of the nature and importance of each capability, and will strive to improve it. It is not necessary to invoke complex, abstract, cross-organizational capabilities to explain extreme performance differences between competitors. The real puzzle is not so much why firms in the same sector differ in performance, as why they do not differ considerably more than they often do.

## CAPABILITIES AND BUSINESS PROCESSES

The mapping and deliberate design of effective business processes has become almost ubiquitous amongst larger organizations since business process reengineering (BPR) first came to prominence in the 1990s. The key observation at the time was that many businesses were using information technology to automate activities that were pointless, rather than redesigning processes to incur the minimum amount of essential activity.<sup>11</sup> One bank, for example, automated a process that had involved one employee checking the work of another as a protection against fraud, with the result that it developed two computer systems, each of which checked that the other was not attempting to defraud the company. This insight regarding widespread automation of wasteful activity then quickly developed into an approach that management

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\* This is a much simplified indicator of return on investment, with no recognition of depreciation, working capital, tax and other issues.

could adopt, or employ consultants to apply for them, to fundamentally redesign or “re-engineer” processes throughout their business. The result would often be a considerable improvement in speed, reliability and cost efficiency.<sup>12</sup>

In summary, the core of BPR is, first, to identify the activities involved in current processes and the problems to which these give rise. From this understanding of how things currently operate, a revised (and usually reduced) set of activities is developed, together with new HR and IT systems as appropriate. Finally, the revised process is introduced, its effectiveness monitored, and any necessary adjustments made. Around these central elements, extensive attention should be given to management and leadership issues, such as obtaining backing and investment from senior executives, engaging with the teams concerned, canvassing opinion and feedback, and so on.<sup>13</sup> Redesign of processes continues to be an important element when organizations out-source their information systems support to third-party suppliers, who of course have a powerful incentive to make the processes they look after for clients as efficient as possible. Arguably, the most egregious examples of bad business processes to be found in the early 1990s have by now been redesigned, or else the firms that held on to them declined or died, so attention currently focuses on designing business processes correctly in the first place.

It is not the purpose here to discuss the details of process mapping or redesign. However, some examples of business processes clearly show an important connection to the frameworks developed in earlier chapters, and hence to capabilities. In Table 10.2, for example, the first column clearly lists activities that have been identified before as *resource flows*. In the strategy dynamics language, hiring is a flow of people into the staff resource, but it is also a process that some part of the organization must undertake. That process consists of several activities, such as specifying the job, placing advertizements, screening applicants, interviewing, selection and making offers. The second column, whilst not concerning factors we have specified as resources, nevertheless concern operational asset-stocks of various kinds, that is items that display bathtub behavior. For example, distribution moves finished goods to customer premises, production moves raw materials into

**TABLE 10.2: EXAMPLES OF BUSINESS PROCESSES**

Marketing	Distribution	Credit control
Product development	Production	Payroll
Hiring	Order processing	Budgeting
Information-systems development	Purchasing	

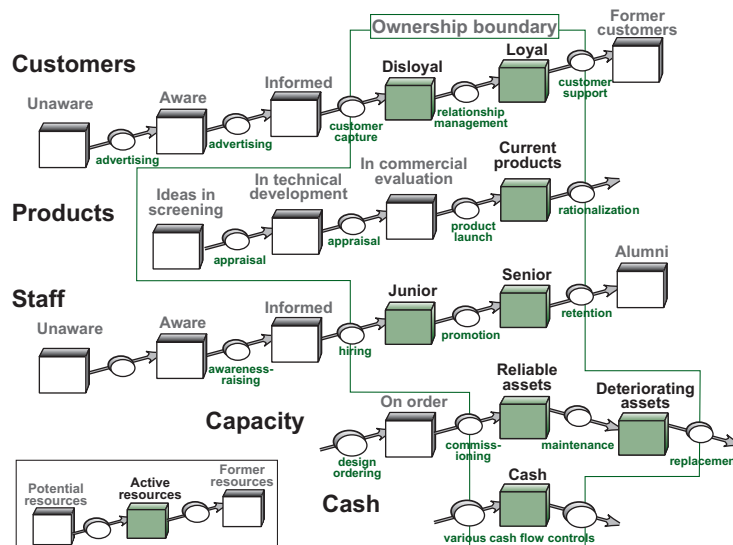
work-in-progress, and so on. Note that some of these processes concern movement of information, such as orders, rather than physical materials. The third column concerns details of processes by which cash is moved and its flows controlled.

It soon becomes clear that every resource flow in an organization's strategic architecture is a *process*, whether consisting of just a few steps or several. In order to be effective, the organization (or its outsource providers) must have a strong enough *capability* to enable it to acquire, develop and retain each resource. Furthermore, each capability often needs to be adequate on at least three dimensions:

- sufficient *speed*: customer win rate, product-development rate, hiring rate
- good *quality*: valuable customers, appealing products, skilled people
- adequate *efficiency*, whether in terms of financial cost or effort, marketing spend per acquired customer, product development effort, cost per new hire

The resource development perspective in Chapter 6 breaks down large-scale and multi-stage resource-building domains into distinct, subordinate, but nevertheless substantial resource flows, each of which is again a process performed with some capability. Examples include growing the number of aware customers, promotion of staff, product testing, and refurbishment of equipment.

Figure 10.3 shows (green text) some of the principal locations where strong capability may be needed, and where key processes therefore take place. Whilst most of these capabilities concern enabling desirable resource development, some focus on slowing undesirable flows, such as customer losses or equipment deterioration.



**Figure 10.3:** The location of capabilities and processes at major resource flow rates.