Capabilities Analysis

What is it?

Capabilities analysis helps clarify the major sets of activities, skills, and resources that drive value to customers.

When do we use it?

Capabilities analysis can be useful at the time of strategy formulation—when firms are assessing which strategic options are currently feasible—and may be included in a broader process of determining strengths, weaknesses, opportunities, and threats (SWOT). In addition, capabilities assessment can be used as an initial step in strategy implementation. Assuming an appropriate time horizon, firms may use the analysis to ascertain which capabilities need to be enhanced or developed in order to execute a chosen strategy. As part of this, capabilities analysis can be used to determine which capabilities are perhaps non-core and therefore candidates for outsourcing or external partnering.

Why do we use it?

Truly understanding a firm's competitive strengths requires more than just an understanding of that organization's *tangible* assets. Indeed, the key building blocks of competitive advantage are often more likely to involve the firm's *intangible* assets. Such assets can be understood as the resources that organizations tap in order to create value, such as a tacit understanding of a complicated market segment, trusting relationships with key suppliers or customers, or an efficient set of back-end processes that produce faster or more responsive products.

Yet an intangible source of competitive success is not always by definition a capability. For instance, the "innovativeness" of a key product offering may indeed generate customer revenue and even capture sales that might have otherwise gone to a competitor. But what if that particular product was a fluke? Or what happens when that product no longer seems so innovative to customers? If a firm truly intends to compete on innovation, a more lasting source of competitive advantage may be the firm's *capability* around innovation, better understood as the intangible and tacit elements that enable the firm to innovate in the first place.

Successful companies are often those that develop strategies that align such capabilities with their plans for external positioning in the marketplace. Brilliantly formulated strategies mean little if the firm has not developed the capacity to execute against them. In this sense, capabilities place an upper limit on which strategies are viable.

Capabilities analysis is based on the resource-based view (RBV) of strategy that emphasizes the internal skills and resources of the firm. The RBV asserts that resources and capabilities can be a source of competitive advantage when they are (a) valuable, (b) rare, (c) inimitable, and (d) non-substitutable. Valuable capabilities must be rare, otherwise they would hardly be a source of differentiation. Valuable, rare capabilities must be difficult to imitate, otherwise any competitive advantage would be exceedingly fleeting. And the most enviable capabilities are ones for which there is no readily identifiable substitute. More generally, we can think of capabilities analysis as helping firms identify the specific ways in which they create value for their stakeholders and differentiate themselves from competitors.

How do we use it?

Step 1. Determine the value chain for your business.

First, draw the value network for the business being analyzed. This involves laying out the cluster of activities that creates value for a product or service, working backward from the end point of the value proposition delivered to customers. These clusters, taken together, form the basic architecture of the chain. It is important to note that a firm rarely participates in every cluster; it will outsource, relying on suppliers or distributors. A typical value chain might look like the following:

Note: this model is perhaps artificially linear; these activities do not always occur in a single stream, nor are they always done in the same order each time.

An important—and often tricky—task is defining what constitutes an element in the network. Remember that we are mapping strategic clusters of activities, not companies. For a first pass, it is always better to make a more detailed map. You can later collapse clusters of activities that do not need to be viewed separately. If you start out too broadly, you may miss important activities that are invisible at too aggregated a level but could be broken apart to create strategic advantage.

Next, analyze the competitive environment in each box, identifying the key players and their relative market shares. Identify the core strategic capabilities needed to produce value in each box. What does each contribute to overall value? Evaluate the bargaining power and influence of each player. Who drives performance? How easy would it be to find a substitute for each player's contribution? How much value does the end customer perceive as contributed by this player? Determine the possibilities for improving a firm's power and profitability in the network. What determines how

value is captured? Who has the power in the network? Why? Assess a firm's vulnerabilities. Where is a firm vulnerable to others who might change its footprint in ways that put it at a disadvantage? Identify themes related to bargaining power, capabilities, partners, and defensibility.

Step 2. Isolate the core set of capabilities.

Next, identify the clusters of activity where a focal firm has core capabilities that are central to its competitive success. In reality, not every activity in a value chain is likely to be a core capability. Most firms recognize that there is a small set of three to six capabilities that are most critical to customer value creation and that may differentiate them from competitors. Other activities may only be "table stakes" necessary to play, but insufficient to win competitively. The question is where is the organization world-class?

Capabilities are more than simply the activities described in the value chain. They are combinations of three key knowledge-based resources: (a) processes, (b) people, and (c) systems (technologies) that drive value. In this regard, capabilities represent the collective learning in organizations, and involve how the firm coordinates diverse skills and integrates multiple technologies.

Step 2a. Processes. Processes are an important foundation of core capabilities because they represent codified knowledge, "recipes," or standard routines for how work will be done and results will be accomplished. In this step, identify those processes that are most critical to the capability.

This will likely not include every process, but rather those few that are most pivotal. For example, when executives at Intermountain Healthcare (IHC) analyzed its capability in Clinical Care, it found that less than 10% of its processes accounted for over 90% of the cost, time, and quality of patient health. These were selected as the core processes upon which the organization would focus for capability enhancement. Similarly, during Lou Gerstner's early years at IBM, he focused on six core processes as the foundation for the company's strategic repositioning (hardware development, software development, supply chain, services, fulfillment, and customer relationship management). The company viewed these as most visible to customers, and therefore most critical to capability development.

Step 2b. People. Human capital is perhaps the most obvious source of knowledge-based advantage. In this step, it is important to identify the key skill areas that are most critical for executing and improving the processes above. Again, not everyone who touches a process is strategic. Critical talent might include process owners, and/or those that have the biggest impact on three process metrics: (a) cycle time, (b) quality or defects, and (c) cost.

Typically, we can identify critical skill areas as those that are (a) most central to value creation and (b) unique and difficult to replace. Importantly, skill level and pay are not always the best indicators of strategic talent in this context. Southwest's capability in ground operations depends less on the skill of its pilots (who are justifiability well paid), and more on the skill of its ramp agents and operations agents who turn the planes around and get them back in the air. Note this is also not a search for the best performers. "Racking and stacking" the best performers is an important but separate activity from identifying key

skill areas. In this step, the analysis is meant to identify the "A" positions rather than the "A" players.

Step 2c. Systems. In addition to core processes and talent, knowledge-based resources are also codified in supporting systems and technologies. This may include information systems, databases, proprietary technologies, and the like. These systems have three primary impacts: (a) operational, (b) relational, and (c) transformational. First, some systems have an operational impact in that they help to automate processes, improve efficiency, and reduce/eliminate human effort. Second, these systems have a relational impact, helping to connect people to one another or to important databases. Increasing these systems helps to "infomate" work by providing information that enables higher quality and more timely decision support. Finally, systems have a transformational impact in that they may actually change the sequence or pattern of work itself. In fact, there are times when the systems are virtually indistinguishable from the processes themselves.

Step 3. Determine degree of alignment.

The next step in the analysis is to determine if the people, processes, and systems are aligned with each other (i.e., internal alignment) and aligned with the customer value proposition (external alignment).

Step 3a. Internal alignment. Firms often note that they have made improvements in some elements of capability development, but have neglected others. For example, executives in a professional services firm recently lamented that although it has invested heavily in process improvement and skill development to enable knowledge sharing among its 20+ global offices; it had not made concomitant investments in information systems to enable knowledge transfer. Instead the systems were designed to ensure timely reporting to top management. As a consequence, despite good intentions and a culture of collaboration, the consultants could not leverage solutions to problems in one part of the world that had been developed in another. As a result of poor internal alignment, its capability in global knowledge management was far behind its goals.

Step 3b. External alignment. What is driving a customer's willingness to buy from your firm? What benefits do they derive relative to the costs that they incur (i.e., value = benefits/costs)? Generic value propositions may include some combination of product leadership (e.g., Apple, Lexus), operational excellence (e.g., FedEx, Southwest), and customer intimacy (e.g., Nordstrom, McKinsey). These value propositions provide focus for an organization's strategy and may be a source of differentiation. Are capabilities aligned with the customer value proposition? This seems like an obvious question, but when properly aligned, the impact of even simple and straightforward capabilities can be substantial. In contrast, misalignment can be devastating.

A very simple example can be seen in the story of Domino's Pizza. Most observers would agree that Tom Monahan, founder of Domino's, was able to change the pizza industry not because he created a better product, but because he was able offer a different value proposition—30 minutes

or it's free—and then created the capability to "deliver" against that promise. He aligned the key people, processes, and systems necessary to develop a capability in home-delivery pizza. Domino's used assembly line-based standardized processes to improve efficiency and reduce preparation time. It was the first to use conveyor-belt oven technology to ensure uniform temperature and reduce baking time, and it incentivized delivery personnel to get the pizza to homes in 30 minutes.

As important as what Dominos did is what it did *NOT* do. Strategy is about making choices. Domino's did not focus on great pizza—it focused on fast pizza. It did not customize ever order, but prepared them all in advance. It didn't hire premier pizza chefs who tossed pizza dough into the air to make lighter crusts. It didn't use wood-fired stoves to give the pizza an old-world taste. And it didn't offer in-store dining. These would add cost and time that the customer did not want. Each of the ingredients in Monahan's formula was aligned around its value proposition of fast delivery.

It might be interesting to note that, although other start-ups were able to copy Monahan's strategy, its major competitor—Pizza Hut—could not. Although Pizza Hut tried home-delivery pizza, its efforts failed miserably. Its capabilities were misaligned with that value proposition. Pizza Hut's capability, its "people, processes, and systems," were aligned around a different value proposition of in-store dining and quality pizza.

Step 4. Determine sustainability.

The final step of a capabilities analysis is to determine the sustainability of distinctive core capabilities. The competitive advantage that accrues to certain capabilities may be undermined by two general forces:

Step 4a. Imitation. Core capabilities provide a competitive advantage only to the extent that others cannot imitate them. A number of factors may limit the imitability of core capabilities. Scarcity is one. A dining experience augmented by a prime location (say on a dock by the sea) may be difficult for others to replicate due to limited real estate opportunities. Capabilities derived from socially complex, integrative sets of activities may be difficult to imitate: for example, the theme park experience at Disneyland. Ambiguity about the underlying process or source behind a capability may hinder imitation by others. The key question is can others imitate a given capability and how long will it take?

Step 4b. Durability. Even a difficult-to-imitate capability may fail to continue to provide value if the underlying basis for that capability degrades over time. An obvious example is intellectual property such as a patent that only provides legal protection for a fixed number of years (typically 17 years in the U.S.). Human capital, to the extent that it is embodied in an individual or individuals, will eventually degrade. Consider a championship-level sports team. As its star players age, performance will eventually decline. Most assets such as property and equipment degrade over time. The key question is how long can we maintain a given capability, imitation aside?

For each core capability identified, assess the degree to which it is difficult to imitate and how durable the capability is. This will help you plan for how long one might enjoy a competitive ad-

vantage, but also help highlight when investment might be needed to move onto other capabilities or to refresh existing capabilities.

Taken together, these steps in a capability analysis provide a concrete way to assess a very amorphous element of strategic analysis. Intangible assets, such as capabilities, can be powerful sources of advantage. Their amorphous nature makes them difficult to copy, but they can be nearly impossible to manage if firms do not have a method by which to make some elements tangible.

The table below provides a template for making the analysis more explicit.

CAPABILITY WORKSHEET

CAPABILITIES	1. _____	2. _____	3. _____	4. _____
Processes				
People (Skills)				
Systems/Tech				
Alignment & Sustainability				

FURTHER READING

Leinwand & Mainardi, "The Coherence Premium" *Harvard Business Review* (June 2010).

D. Collis, "Competing on Resources," *Harvard Business Review* 73, no. 4 (1995): 118–28.