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Playing the Differences: The AAA Triangle

Integrated Strategies for Global Value Creation

Excerpted from

Redefining Global Strategy:
Crossing Borders in a World Where Differences Still Matter

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Harvard Business School Press
Boston, Massachusetts

ISBN-13: 978-1-4221-2625-7
2625BC

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Playing the Differences

The AAA Triangle

The MNC [multinational corporation] of the late twentieth century had little in common with the international firms of a hundred years earlier, and those companies were very different from the great trading enterprises of the 1700s. The type of business organization that is now emerging—the globally integrated enterprise—marks just as big a leap.

—Sam Palmisano, Chairman and CEO, IBM,
"The Globally Integrated Enterprise" (2006)

COMPARE THE WORDS of Sam Palmisano with those of Ted Levitt at the beginning of chapter 1. Levitt was clearly excited about the globalization of markets. What Palmisano is excited about, in contrast—I've had a chance to check this with him—is the globalization of production and of services delivery. In the *Foreign Affairs* article from which the quote was excerpted, Palmisano notes that an estimated sixty thousand manufacturing plants were built by foreign firms in China alone between 2000 and 2003, and discusses how IBM has sought to capitalize on its expanded sense of the possibilities.

I think that Palmisano is onto something fundamental—something that extends beyond the justification of a particular corporation's strategy or

even a heightened appreciation of the possibilities afforded by arbitrage. Attention to the globalization of production as well as the globalization of markets heralds something new in global strategy—something that changes our understanding of the variety of global strategies as well as the challenge of selecting among them. This chapter begins by explaining why. It then discusses progressively more ambitious responses that are characterized in terms of the AAA strategies, i.e., in terms of strategies for playing the differences. The chapter concludes with some broader lessons for global strategy and organization.

The Need to Redefine Global Strategy

Figures 7-1a and 7-1b compare the strategic issues raised by the globalization of markets with those raised by also considering the globalization of production. Figure 7-1a focuses on the globalization of markets. With limited globalization of markets, adaptation is in order; with extensive globalization of this sort, aggregation merits more emphasis; and in between, the two have to be traded off against each other—*the* strategic choice on which the literature on global strategy has traditionally focused.[1]

FIGURE 7-1

The globalization of markets and production

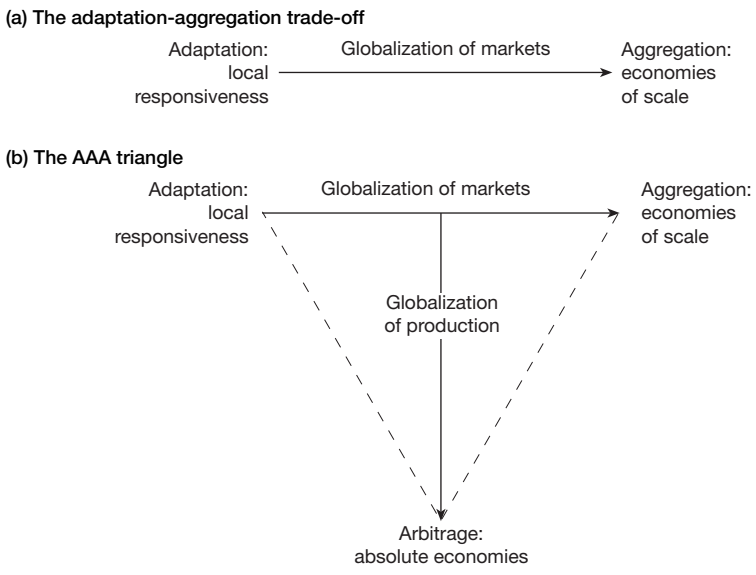


Figure 7-1b summarizes the implications of also accounting for the globalization of production. This obviously transforms the adaptation-aggregation trade-off into the adaptation-aggregation-arbitrage (AAA) triangle.[2] And just as obviously, it adds significantly to the range of ways in which companies can think of playing cross-border differences.

But attention to the globalization of production does more than simply expand the range of possible strategies: it also suggests a new, expanded set of trade-offs. As the literature in economics on multinational companies (MNCs) reminds us, vertical MNCs that exploit the differences across countries have very different operating and organizational characteristics from horizontal MNCs that perform many of the same activities in each major market (and that mush together the categories of adaptation and aggregation).[3] Table 7-1 highlights the strategic differences across the AAA strategies.

TABLE 7-1

Differences across the AAA strategies

Characteristics	Adaptation	Aggregation	Arbitrage
Competitive advantage: **why globalize at all?**	To achieve local relevance through national focus (while exploiting some scale)	To achieve scale and scope economies through international standardization	To achieve absolute economies through international specialization
Coordination: **how to organize across borders?**	By country; emphasis on adjustments to achieve a local face within borders	By business, region, or customer; emphasis on horizontal relationships for cross-border economies of scale	By function; emphasis on vertical relationships, including across organizational boundaries
Configuration: **where to locate overseas?**	To limit the effects of cultural, administrative, geographic, or economic distance by concentrating on foreign countries that are similar to the home base		To exploit some elements of distance by operating in a more diverse set of countries
Controls: **what to watch out for?**	Excessive variety or complexity	Excessive standardization or emphasis on scale	Narrowing spreads
Change blockers: **whom to watch out for internally?**	Entrenched country chiefs	All-powerful headquarters, business, regional, or account heads	Key functions or vertical interfaces
Corporate diplomacy: **which external issues might arise?**	Relatively discreet and robust, given emphasis on cultivation of a local face	Appearance of, and backlash against, homogenization or hegemony (especially for U.S. companies)	The exploitation or displacement of suppliers, channels, or intermediaries; potentially most prone to political disruption

Most fundamentally, the three As involve the pursuit of different sources of advantage from operating across borders and, relatedly, are associated with different organizational types. If a company is emphasizing adaptation, a country-centered organization is often indicated. If aggregation is the primary objective, cross-border groupings of various sorts—global business units or product divisions, regional structures, global accounts, and so on—make sense. And an emphasis on arbitrage is often best pursued by a vertical, or functional, organization that tracks the flow of products or work orders through the organization. Clearly, not all three modes of organizing can take precedence in one organization at the same time. And although some approaches to corporate organization (such as the matrix) can combine elements of more than one pure mode, they carry costs in terms of managerial complexity.

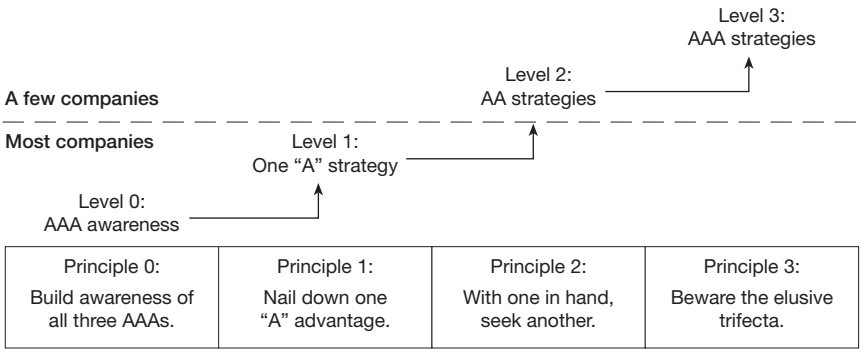
Given these—and other—differences across the three As, strategy often requires choices about which of the As to emphasize or, equivalently, about how to play the differences. Figure 7-2 summarizes the variety of global strategies implied by the AAA triangle, arrayed in four levels of increasing ambitiousness, that are meant to summarize the possibilities rather than to suggest a sequence through which all border-crossing companies must pass. The sections that follow discuss these four levels of global strategy one by one.

Level 0: AAA Awareness

For the three As to be minimally useful, a company must be aware of them. This might seem like a requirement too trivial to be worth stressing, but

FIGURE 7-2

Levels of global strategy



many companies, judging by the examples in this book, fail to meet it. The patterns of failure themselves seem quite diverse. Global neophytes often tend to implant themselves overseas in the same form as they did domestically, expecting instant aggregation, and often endure significant losses as they learn that some adaptation is typically needed as well. Unless they go global to exploit arbitrage opportunities, they are likely to be oblivious to these opportunities in the early stages as well. In experienced companies, history can also be a key conditioner: a company that has grown through acquisitions or has a long tradition of federalism is likely to fail to achieve the requisite focus on real aggregation. Country of origin matters as well. U.S. companies often pursue aggregation and arbitrage more aggressively than their European counterparts, but are often less attuned to adaptation. And the best Chinese and Indian companies tend to be better at arbitrage than they are adaptation and aggregation.

One way to counteract undue biases in this regard is to use the AAA triangle to build your company's awareness of the full range of strategic objectives that it might pursue, and different levers and sublevers for doing so. In this context, granularity and specificity are helpful. That is, it makes sense to stress the (often overlooked) levers discussed in chapters 4 through 6 (see table 7-2) and, even better, to take the discussion down to the level of individual sublevers, backed up by interesting examples.

A second approach to broadening awareness of the three As is to use the AAA triangle to develop a globalization scorecard. While there are both advantages and disadvantages to the use of scorecards, they offer room for significant improvement on the state of current practice: most companies seem to lack any systematic global performance measurement system beyond tracking the percentage of revenues derived from foreign operations and ensuring that the profitability of the foreign operations is acceptable, or at least not unsustainably bad.

TABLE 7-2

Global strategy levers

Adaptation: adjusting to differences	Aggregation: overcoming differences	Arbitrage: exploiting differences
• Variation	• Regions	• Cultural
• Focus	• Other country groupings	• Administrative
• Externalization	• Noncountry groupings	• Geographic
• Design	○ Business or product	• Economic
• Innovation	○ Global accounts	
	○ Client industries	
	○ Channels	

Figure 7-3 is a simplified example of a globalization scorecard. It was developed for a financial services company focused on the capital markets side of the business, rather than on retail financial services that had grown through acquisition. The quantitative targets attached to the scorecard elements in figure 7-3 were supplemented with qualitative ones, initiatives were defined to help achieve both types of objectives, and progress was tracked in terms of value creation (along the lines of the ADDING Value scorecard) as well as these operating measures.

Note that while the globalization scorecard in the figure covers all three As, the treatment is deliberately imbalanced. This reflected a clear sense that, given the company's industry, history of growth through acquisition, and strategy, additional aggregation was the highest strategic priority globally—and that there were trade-offs between pursuing that strategy and the others, particularly adaptation.

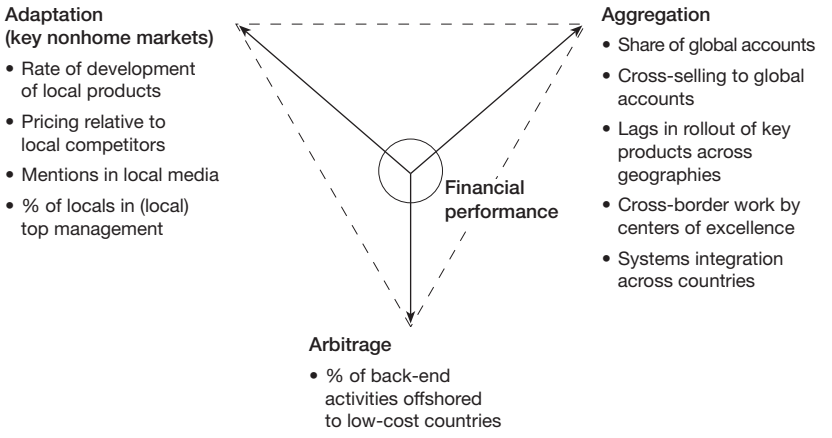
That last point can and should be generalized. Building awareness of all three As is essential, and many companies—particularly those that lag behind—have the headroom to improve along each of them. Nevertheless, most companies will need to prioritize across the AAA strategies, as discussed next.

Level 1: One "A" Strategy

The need for strategic prioritization—as opposed to simply pushing as hard as possible along all three As—stems from the differences across the

FIGURE 7-3

A sample globalization scorecard



AAA strategies that were laid out in table 7-1. The literature on competitive strategy has long emphasized that such heterogeneity usually forces companies to choose how they are going to beat their competitors, instead of simply planning to beat them on all dimensions—and that companies that fail to face up to this reality have to reckon with significant conflict and coordination costs.[4] As discussed in chapter 6, Acer exemplifies such conflict: its private-label business, built around arbitrage, lost customers when it also began to aggregate by building up its own brands. And the best way of making the point about coordination costs is to note that if everything is meant to be a priority, nothing, in effect, will be.[5]

The emphasis on clarity about which one of the three strategies will be the basis of cross-border advantage is *not* meant to imply obliviousness to the remaining strategies. As emphasized above, most border-crossing companies need to at least think through all three. But the point is that having done so, *every top manager of a company with aspirations to create value through border-crossing activities should be able to specify clearly, in his or her own head, which of the three As will be the basis for cross-border competitive advantage*.

Most companies that have built up profitable operations outside their home base have done so by stressing one of the three As. While such strategies are referred to here as "pure," that should not be equated with "simple." Wal-Mart's international stores have performed poorly—particularly in markets dissimilar to the United States—largely because of intrinsic as well as self-imposed difficulties in *adapting* a business model that worked well for Wal-Mart at home. Unilever has underperformed P&G in areas of overlap such as beauty care largely because Unilever still has trouble, for all its recent efforts, at *aggregating* to achieve cross-border economies of scale and scope. Or to consider a case of success rather than failure, Embraer's ability to outperform Bombardier in the regional jet business can be entirely imputed to labor *arbitrage*—but the easy arithmetic of cheap labor notwithstanding, it is far from simple to actually run a world-class aerospace operation out of Brazil.

While firms that have achieved global success are likely to have already developed resources and capabilities around a particular strategy, less experienced or less successful firms sometimes need to figure out which of the AAA strategies to target. Again, the AAA triangle can be helpful in this context. One approach is to calibrate how intensive an industry or a business is in various categories of expenditure that serve as rough proxies for the headroom afforded by the three As. The percentage of sales spent on advertising indicates how important adaptation is likely to be; the percentage spent on R&D is a proxy for the importance of aggregation; and the percentage spent on labor helps gauge the importance of (labor) arbitrage.[6]

More specifically, I recommend plotting industries or companies on a calibrated version of the AAA triangle, as in figure 7-4 (which is based on data for U.S. manufacturing industries). If an industry or a company scores above the median along a particular dimension of intensity—delineated by the solid line in the figure—the corresponding strategy merits some attention. If it scores close to or past the dashed line, which delineates the 90th percentile, the corresponding strategy may be perilous to ignore.

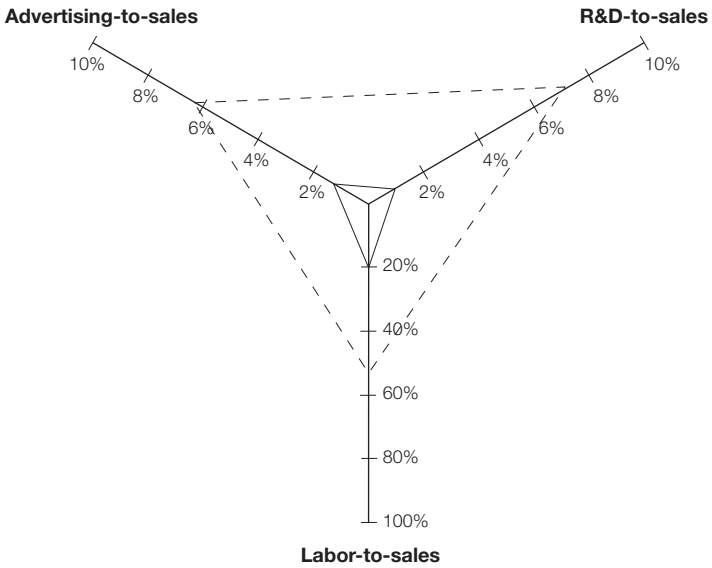
Another, related approach involves using the AAA triangle to map a company's position relative to its competitors—in terms of either the expenditure intensities just described or a broader set of considerations (see figure 7-7 below). This provides some additional insight into which strategy or strategies to stress—particularly important when a company is up against formidable competitors.

Level 2: Compound (AA) Strategies

Although pure A strategies are the most obvious types of global strategies, at least a number of leading-edge global companies I have had a chance to discuss the AAA triangle with seem to emphasize two As rather than just one. Such compound AA strategies might actually involve a company's

FIGURE 7-4

Industry expenditure intensities



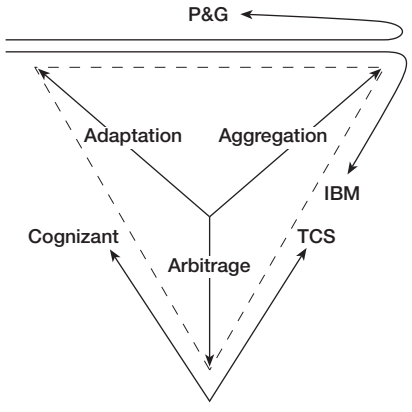
beating its competitors on two dimensions or, more probably, striking a better balance between two As than competitors are able to achieve. Under the latter interpretation, AA strategies can be thought of as generalizing the one key trade-off, between adaptation and aggregation, identified by the traditional focus on the globalization of markets to the three key trade-offs highlighted by the AAA triangle once account is also taken of the globalization of production (compare figures 7-1a and 7-1b). These AA strategies, corresponding to the sides of the AAA triangle, emphasize the common focus underlying each trade-off: similarities in the case of the adaptation-aggregation trade-off, differences or variation in the case of the adaptation-arbitrage trade-off, and cross-border integration in the case of the arbitrage-aggregation trade-off.

Also note that allowing for AA strategies further expands the variety of global strategies from three to six—or to nine if one allows AA strategies with primary and secondary emphases (Aa strategies, in effect). For lessons about how to achieve the ambitious objectives implicit in AA strategies, it is best to look at leading-edge companies. The rest of this section will focus on four such company examples that are informed by discussions with the respective CEOs and other executives (figure 7-5).

IBM. For most of its history, IBM pursued an adaptation strategy, serving overseas markets by setting up a mini-IBM in each target country. Every one of these companies performed a largely complete set of activities (apart from R&D and resource allocation) and adapted to local differences as necessary. In the 1980s and 1990s, dissatisfaction with the extent to which

FIGURE 7-5

Evolution of leading-edge companies



country-by-country adaptation curtailed international scale economies led to the overlay of a regional structure on the mini-IBMs. IBM aggregated the countries into regions in order to improve coordination and thus generate more scale economies at the regional and global levels.

More recently, however, IBM has also begun to exploit differences across countries. The most visible signs of this new emphasis on arbitrage (not a term the company's leadership uses) are IBM's efforts to exploit wage differentials by more than tripling its employees in emerging markets in three years—particularly in India, where head counts went from less than ten thousand to fifty thousand over that period—and by planning for additional, massive growth there. Most of the new employees are in IBM Global Services, the part of the company that is growing fastest but has the lowest margins—which they are supposed to help improve, presumably by reducing costs rather than raising prices. So IBM is pursuing an aggregation-arbitrage strategy. Adaptation remains important, particularly in market-facing activities, but is *not* being emphasized more than in the past.

One particularly interesting part of IBM's attempts to arbitrage by better matching the supply of talent globally to demand is a sophisticated matching algorithm that dynamically optimizes people's assignments across all of IBM's locations. Krishan Nathan, the director of IBM's Zurich Research Lab, describes some of the reasons that such a people-delivery model involves much more rocket science than, for example, a parts-delivery model. First, people's services usually can't be stored. Second, people's functionality can't be summarized in the same, standardized way—by serial number and associated description of technical characteristics—that parts are summarized. Third, in allocating people to teams, a company must pay attention to issues of chemistry that might, as a worst-case scenario, make the team less than the sum of its (human) parts. Fourth, for this reason and others (e.g., employee development), assignment durations and sequencing must satisfy some auxiliary criteria. Nathan also describes the resultant assignment patterns as "75 percent global and 25 percent local." While this may be more aspirational than actual, it is clear that, to the extent that better matching is being used to arbitrage more effectively, it embodies a massive power shift, the effective orchestration of which is a much broader organizational challenge.

Procter & Gamble. Like IBM, Procter & Gamble started out with mini-P&Gs that tried to fit into local markets, but it has evolved differently. Its halting attempts at aggregation across Europe, in particular, led to a drawn-out, function-by-function installation of a matrix structure through the course of the 1980s. But the business-geography matrix proved unwieldy,

and in 1999, new CEO Durk Jager announced a major reorganization around global business units (GBUs) with ultimate profit responsibility, complemented by geographic market development organizations (MDOs) that would actually run the salesforce (shared across GBUs) and go to market.

The result of this ambitious attempt to achieve more aggregation was that all hell broke loose along multiple dimensions, including at the key GBU-MDO interface. Jager departed after only seventeen months. P&G has experienced more success under his successor, A. G. Lafley, who says that he retained the house that Jager built, but added wiring to the structure. Thus, decision tables, devised after months of negotiation, lay out protocols for how the different decisions are to be made, and by whom—the GBUs versus the MDOs—while generally reserving responsibility for profits (and the right to make decisions not covered by the tables) for the GBUs. But there is some flexibility within the system: the pharmaceuticals business, with distinct distribution channels, has been left out of the MDO structure, and in emerging markets, where market development challenges loom large, profit responsibility continues to be vested with country managers. Common IT systems and career paths that cross over between the GBUs and MDOs help tie those subunits together. The capstone is provided by an elaborately layered system of reviews that starts with growth objectives, then cascades down through strategies, innovations, and brands before being translated into operating plans and budgets with rolling two-year horizons.

Lafley also explains that while P&G remains willing to adapt as necessary to important markets, it ultimately aims to beat competitors—country-centered multinationals as well as local companies—through aggregation at the GBU level. He also explains that arbitrage is important to P&G (mostly through outsourcing), but that it takes a backseat to both adaptation and aggregation: "If it touches the customer, we don't outsource it." As a result, arbitrage—through multiyear outsourcing, via the Global Business Shared Services unit, of IT services to HP, employee services to IBM, and facilities management to Jones Lang LaSalle—has affected about 2.5 percent of P&G's employee base, versus closer to 25 percent at IBM. One obvious reason is that the scope for labor arbitrage in the fast-moving consumer goods industry may be increasing but is still much less substantial overall than in, say, IBM Global Services.

TCS and Cognizant. TCS's attempts to aggregate and its core strategy of arbitrage have already been discussed. As CEO S. Ramadorai puts it, both are integral to its future. But while ostensibly pursuing the same AA strategy as IBM, TCS places comparatively more emphasis on arbitrage, in line with its initial strategy. The contrast helps makes the point that there is

room for variation in the definition and implementation of what might seem to be the same AA strategy and suggests, as does the example of P&G (which was majoring in aggregation and minoring in adaptation), that distinguishing between the primary and secondary emphases of AA strategies can indeed be helpful.

But even without drawing such distinctions there may be more than one route to success in a particular industry. This point will be illustrated with another example from Indian IT services, Cognizant, which has grown rapidly to become the fourth-largest competitor with delivery basically out of India. Cognizant has emphasized arbitrage and adaptation, rather than arbitrage and aggregation, by investing heavily in a local presence and "face" in its key market, the United States, to the point where the firm can pass itself off as Indian or U.S.-based, depending on the occasion.

Cognizant began life in 1993 as a captive of Dun & Bradstreet, with a more even distribution of power than in purely Indian firms: founder Kumar Mahadeva dealt with customers in the United States, while Lakshmi Narayanan (then chief operating officer, now chairman) oversaw delivery out of India. The company soon moved to deepen such pairings by setting up a "two-in-a-box" structure in which there were always two global leads for each project—one in India, and one in the United States. The leads had joint accountability and were compensated on the same outcomes in the same way. Francisco D'Souza, Cognizant's new CEO, recalls that it took two years to implement this structure and even longer for it to change mind-sets—at a time when there were only six hundred employees (compared with twenty-five thousand now). And two-in-a-box is just one element, albeit an important one, of a much broader effort to rethink the trade-offs between arbitrage and adaptation and get past what Cognizant's management describes as the key integration challenge in global offshoring: poor coordination between delivery and marketing that leads to "tossing stuff over the wall" (figure 7-6).

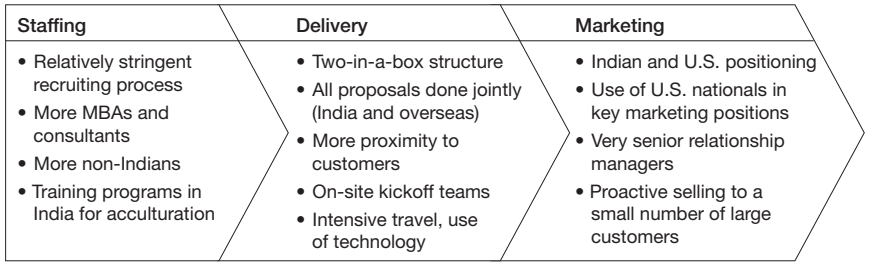
Taken together, all these examples illustrate that the pursuit of compound strategies rather than one is still challenging. The organizational elements of this challenge will be discussed further in the last section of this chapter.

Level 3: Trifecta (AAA) Strategies

Finally, consider a company trying to beat its competitors on all three strategies: adaptation, aggregation, and arbitrage. Success in this regard, while not impossible, is very rare. It is more likely—or less unlikely—in

FIGURE 7-6

Cognizant's arbitrage-adaptation strategy



environments where the tensions outlined in table 7-1 are weak or can be overridden by large-scale economies or structural advantages, or where competitors are constrained.

For an example that illustrates these points as well as the pursuit of an AAA strategy, or close to it, consider the case of GE Healthcare, or GEH, in medical diagnostic imaging. This industry has been growing rapidly and has concentrated globally in the hands of a big three: GEH, Siemens Medical Solutions (SMS), and Philips Medical Systems (PMS), with estimated revenue shares of the worldwide "big box" business of, roughly, 30 percent, 25 percent, and 20 percent, respectively.[7] The high global concentration seems to be related to what is most striking about the industry in terms of the strategies depicted in figure 7-4: medical diagnostic imaging ranks well within the top decile of manufacturing in terms of R&D intensity. Specifically, R&D-to-sales ratios have risen to more than 10 percent for the big three competitors and range even higher for smaller rivals, many of which face profit squeezes. These figures suggest that the aggregation-related challenge of building global scale has proven particularly important in this industry in recent years.

GEH, the largest of the big three, has also consistently been the most profitable. This reflects, first of all, success at aggregation, as indicated by the following:

- *Economies of scale:* GEH has higher total R&D spending than SMS or PMS, greater total sales, and a larger service force (constituting half of GEH's total employee head count)—but its R&D-to-sales ratio is lower, its other expense ratios are comparable, and it has fewer major production sites.

- *Acquisition capabilities:* Through experience, GEH has become more efficient at acquiring. It made nearly one hundred acquisitions under Jeffrey Immelt (before he became GE's CEO); since then, it has continued to make a lot of acquisitions, including the $9.5 billion Amersham deal in 2004, which moved the company beyond metal boxes and into medicine, and its purchase of two of Abbott Laboratories' diagnostics businesses in early 2007 for $8.1 billion, further extending its medical capabilities.
- *Economies of scope:* The Amersham and Abbott acquisitions reflect a drive to meld GE's traditional base of physics and engineering skills with skills at biochemistry; in addition, GEH finances equipment purchases through GE Capital.

In addition to its success at aggregation, GEH has even more clearly outpaced its competitors in terms of arbitrage. Under Immelt, but especially more recently, it has moved to become a "Global Product Company" by migrating production rapidly to low-cost production bases. Moves have been facilitated by a "pitcher-catcher" concept originally developed elsewhere in GE, with a "pitching team" at the existing site working closely with a "catching team" at the new site until the latter's performance meets or exceeds the former's. By 2005, GEH was reportedly more than halfway to its targets of obtaining 50 percent of its direct material purchases from—and locating 60 percent of its own manufacturing in—low-cost countries.

Finally, in terms of adaptation, GEH has invested heavily in country-focused marketing organizations, relatively loosely coupled to the integrated development-and-manufacturing back end, with objectives that one executive characterized as being "more German than the Germans." It also boosts customer appeal with its emphasis on providing services as well as equipment; for example, training radiologists and consulting about postimage processing, although such customer intimacy obviously has to be tailored by country.

Having outlined GEH's well-thought-out global strategy, I must add that even it is subject to some internal tensions, particularly in terms of adapting to the exceptional requirements of potentially large but low-income markets such as China and India versus integrating globally. As Jeff Immelt recently described it,

> At a meeting last year, reviewing the value products for health care with Joe Hogan, who runs the business, we added $20 million in funding and took the responsibility for the value products away from the product lines and put it in China. That was how we removed an internal barrier:

> the mother business was squeezing it. In the year since, sales have grown from $60 million to $260 million. At a recent update for those same products, we talked about an external barrier: how we might design knockdown kits so that we could design the thing and make a kit in India but have it assembled in China and avoid the tariffs and duties.[8]

It is also worth adding that GEH *isn't* clearly ahead on all dimensions: SMS has focused more on core imaging and is regarded as having achieved technological leadership in more imaging modalities. That is, SMS has aggregated more effectively from at least one perspective. This example reminds us that even when more than one competitor pursues a particular strategy, they may succeed by taking very different approaches.

What's more, GEH has managed to pursue the three As to this extent partly by separating out the pursuit of one of them, adaptation. This is one example of a range of mechanisms for economizing on managerial bandwidth. Such mechanisms are particularly in demand when a company is emphasizing the pursuit of two or, especially, three As: separation may be a better overall approach than forcing very diverse activities together in, say, the bear hug of a matrix structure. As A. G. Lafley explained to me, the reason P&G is able to pursue arbitrage up to a point as well as adaptation and aggregation is that the company has deliberately separated these functions into three subunits (global business units; market development organizations; and global business shared services, or GBSS) and has imposed a structure that minimizes points of contact and, thereby, friction.

P&G's emphasis on outsourcing through GBSS effectively externalizes arbitrage, calling to mind yet another sublever discussed in the context of adaptation in chapter 4. Some of the other sublevers discussed in chapter 4 also apply to this problem of optimizing the allocation of limited managerial bandwidth. Making different parts of the organization perform different functions is, after all, a matter of increasing internal variation efficiently, despite trade-offs and various indivisibilities that favor doing particular things one way throughout the organization.

Finally, GEH's performance has also depended, to some extent, on constrained competitors. In addition to facing a variety of size-related and other structural disadvantages relative to GEH, SMS and particularly PMS have simply been slow in some respects, such as in shifting production to lower-cost countries. For all these reasons, the temptation to treat the GEH example as an open invitation to pursue a trifecta of adaptation, aggregation, and arbitrage should stubbornly be resisted. If you still find yourself tempted, please read the box "The AAA Trifecta: Better Odds at the Racetrack?" with particular care.

The AAA Trifecta: Better Odds at the Racetrack?

Despite my advice against trying to beat capable competitors along all three AAA dimensions, experience shows that energetic managers will consider that objective and even pursue it far more frequently than in the few cases in which it actually seems attainable. Instead of betting your company's resources on an AAA strategy, it might be safer to take them to the racetrack and wager them on a *trifecta*.

A trifecta, as aficionados of racing will know, involves picking horses to finish first, second, and third in a race. The successful selection of all three is unlikely enough that winning money through a trifecta is viewed in some racing circles as indicative of inside information.

Pick threes, in which you pick the winners in three separate horse races, are even riskier than trifectas (other things being equal, particularly the distribution of equine talent). In a trifecta, if a horse places first, it can't also place second, and so on.

The challenge of pulling off an AAA strategy in business seems substantially harder than successfully picking the winners in three separate horse races, because of the conflicts or trade-offs across the three As that were highlighted in table 7-2. Or to use a different mammalian metaphor suggested by chapter 6, attempts to create jacks-of-all-trades are likely to result, instead, in jackalopes.

The AAA Triangle and Strategy Development: A Competitive Mapping Example

The previous section used the AAA triangle to illustrate the variety of global strategies. The triangle can also be helpful in deciding which strategy to pursue in the first place, a point already registered in regard to A strategies during the discussion of industry expenditure intensities (figure 7-4), but worth making in a extended way, over an extended strategy space.

The example concerns PMS, the smallest of the big three in diagnostic imaging. As described in chapter 4, Philips long followed a strategy that concentrated significant power in the hands of country managers and emphasized adaptation—until 1996, when a new CEO abolished the geo-

graphic leg of the geography-product matrix to aggregate more effectively around global product divisions. At the business level, in regard to PMS, it is sometimes suggested that Philips's traditional focus on adaptation has persisted and remains a source of competitive advantage over GEH or SMS. But any adaptation advantage for PMS is limited by SMS's edge at technology and GEH's edge at service quality. While these can be seen as global attributes of those two competitors' offerings, they *do* create customer lock-in at the local level.

Any residual adaptation advantage for PMS seems to be more than offset by disadvantages at aggregation, at which it trails GEH and SMS even though the supremacy Philips assigned to global product divisions in the second half of the 1990s was meant to move it in this direction. PMS's absolute R&D expenditures are one-third less than those of GEH and one-quarter less than those of SMS, and it is a much larger part of a much smaller corporation—with, apparently, a smaller acquisition war chest. In addition, PMS was stitched together out of six separate companies in an acquisition spree between 1998 and 2001 to complement its original, aging X-ray imaging business. It is somewhat surprising that this attempt has worked as well as it has—in a corporation without much acquisition experience to fall back on—but there are clearly still aftereffects. Most dramatically, PMS wrote down or paid more than €700 million related to past acquisition attempts—one consummated, another considered—in 2004, nearly wiping out its reported earnings for that year.

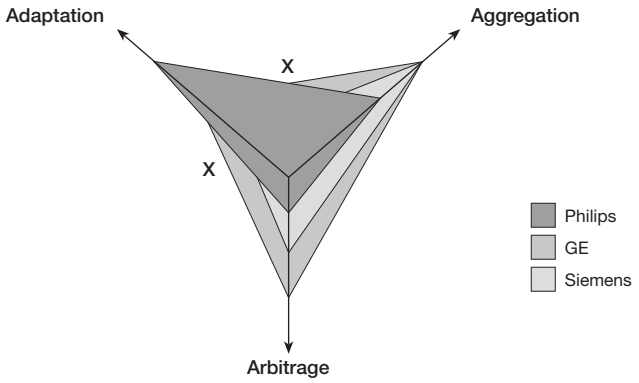
PMS's preoccupation until recently with getting its disparate parts stitched together is also partly to blame for its trailing at arbitrage. It did not start a manufacturing (joint) venture in China until September 2004, with the first output for the Chinese market becoming available in 2005, and the first supplies for export in 2006—even though Philips, the parent, is one of the largest multinationals in China. Overall, PMS's sourcing levels from low-cost countries in 2005 were comparable to levels achieved by GEH in 2001 and lagged SMS's as well.

These insights on positioning relative to the three As can usefully be pulled together into a single competitive map (figure 7-7). Mapping along these lines, while always approximate, calls attention to how competitors are actually located in strategy space as well as improving visualization of the trade-offs across different strategies—both important to thinking through where and where not to focus your efforts.

How might PMS use this competitive map—and, more broadly, the AAA triangle, for strategy development? In view of where PMS lags, there are probably certain operational givens about trying to narrow those gaps: continuing to try to improve how the different parts of PMS work

FIGURE 7-7

AAA competitive map of diagnostic imaging



together (aggregation) and accelerating the shift of manufacturing to low-cost countries (arbitrage). But it seems unlikely that PMS can decisively beat its larger rivals at either strategy (unless it somehow successfully introduces a disruptive technology, but that is easier said than done). It also seems, however, that the increased emphasis industrywide on aggregation and arbitrage *has* undercut the viability of a strategy based just on adaptation.

The two most obvious strategy alternatives for PMS are the two AA strategies marked by Xs in figure 7-7: adaptation-aggregation or adaptation-arbitrage. Adaptation-aggregation comes closest to the strategy currently in place. Note, however, that it is unlikely to solve the aggregation-related challenges facing PMS as number three, so it had truly better offer some meaningful extras in terms of local responsiveness. Alternatively, PMS could give up on the idea of creating a competitive advantage and simply tap into average industry profitability, which is high: the big three are described as "gentlemanly" in setting prices. Either way, though, imitation of the larger rivals' large-scale moves into entirely new areas seems likely to *widen,* rather than narrow, this source of disadvantage.

The second of the AA alternatives for PMS, adaptation-arbitrage, would aim not just to produce in low-cost locations, but to radically reengineer and simplify the product so as to take large amounts of cost out for large emerging markets such as in China and India. However, this option does

not fit with Philips's heritage, which is *not* one of competing through low costs. And GEH has clearly reduced the room for PMS to follow a strategy of this sort by an "in China for China" product that is supposed to have reduced costs by 50 percent. PMS, in contrast, talked of cost reductions of 20 percent with its first line of Chinese offerings.

Finally, if neither of these compound alternatives appeals—and frankly, neither seems likely to lead to a competitive advantage for PMS—the company *could* try to change the game that is playing. While PMS seems stuck with structural disadvantages in core diagnostic imaging relative to GEH and SMS, it could look for related fields in which it might have more advantages and fewer disadvantages. (In relation to the AAA triangle, this would best be thought of as a lateral shift, to a new area of business.) And in fact, PMS seems to be attempting something along these lines—albeit slowly—with its recent emphasis on medical devices for people to use at home, such as home defibrillators to treat sudden cardiac arrest. As former CFO Jan Hommen put it, PMS has an advantage here over both SMS and GE: "With our consumer electronics and domestic appliances businesses, we have gained a lot of experience and knowledge in how to facilitate consumers."[9] Since the resources emphasized in this go-to-home strategy—brand and distribution—operate at the local or national level, the new strategy can be seen as emphasizing adaptation (and some degree of aggregation) in a new market.

Three Organizational Principles

The preceding sections have highlighted the variety of global strategies and offered tools and several specific principles for choosing among them. It is useful to add three principles for organizing to achieve the selected strategic objectives.

Expanded coordination

While multinational companies have existed for several centuries, at least, they have greatly increased the amount of coordination that they attempt. Early multinationals such as the great trading companies operated in environments where information flows were slow and sparse, and the companies had correspondingly small headquarters: the Hudson's Bay Company, for instance, employed only twenty salaried managers centrally at the beginning of the eighteenth century.[10] By the late nineteenth century, some multinationals had worked out the functional and multidivisional forms of organization as responses to the challenges of coordination and

control over long distances, but head offices continued to be small by today's standards: thus, the highly integrated oil behemoth, John D. Rockefeller's Standard Oil, had only a thousand people in general administration on the eve of its dissolution in 1911. Since then, leading-edge multinationals have looked beyond a single strategy (originally arbitrage) and have benefited—especially recently—from dramatic improvements in information technology. As a result, cross-border coordination in such companies extends well beyond the traditional emphasis on resource allocation across and monitoring of national operations by headquarters—and involves significant coordination across organizational boundaries. Yet many companies, not to mention the literature, still cling to minimalist conceptions of coordination.

New coordination mechanisms

Efficient expansion of the amount of coordination attempted has been greatly aided by the development of new coordination mechanisms. Consider examples from leading-edge companies discussed earlier in this chapter. In addition to IBM's human supply chain, the company has demonstrated creativity in devising "deal hubs" to aggregate across its diverse businesses and in reconsidering assumptions such as the collocation of global functional headquarters: it recently relocated its chief procurement officer from Somers, New York, to Shenzhen, China. Other examples already mentioned include P&G's cascading structure of reviews, TCS's global-regional-local delivery network, Cognizant's two-in-a-box structure, and GE's "pitcher-catcher" concept. Numerous others can be culled from current headlines. Thus, Cisco recently announced the appointment of a chief globalization officer, to be based in Bangalore, which has been designated Cisco Globalization Center East, as part of an initiative to set up a global, developing-technology hub in the Indian subcontinent to compete more effectively with the likes of Huawei of China.[11] (Actually, all of Cisco's primary business functions are supposed to be represented in India, and the company's target is to have 20 percent of senior managers working out of Bangalore by 2010.) The point of all these examples is that with new challenges, new responses are mandated, and leading-edge companies are good places to look for them.

The Evolving Agenda

Let's return to the example with which this chapter began, IBM. While IBM has gone a considerable distance in recent years in integrating arbi-

trage into how it runs its businesses, particularly IBM Global Services, it seems unlikely that the company will be able to beat Indian competitors at software services at their own low(er)-cost game, given employment costs that seem to be 50 to 75 percent higher than for local firms. Rather, what is distinctive about IBM is that despite recent divestitures, it still has the broadest product line in the industry, with hardware, software, and IT services. By analogy with PMS's seeking out unoccupied space—but arguably from a position of greater strength—one option for IBM is to realize the vision of "One IBM" by offering solutions that span all three sectors. The latest reports out of IBM headquarters indicate that an aggregation effort along exactly these lines seems to have been initiated as the company gets up to speed (or close to it) in terms of arbitrage. Sam Palmisano has formed integration and value teams out of the top several hundred managers at the company as a (relatively) bottoms-up way of trying to transform the organization more fundamentally than top-down dictates to the sector heads might achieve. Also note that such changes in relative emphasis are particularly likely, over the short-run, if compound strategies are being pursued.

The last principle and, in fact, all three organizational principles discussed in this section are meant to make a broader point. Nobody has yet figured out the optimal way to organize a complex global company, even conditional on the strategic target or targets that it is pursuing. But much can be learned from what leading-edge companies are trying to do, how they have chosen to pursue their agenda, and the challenges with which they continue to wrestle.

Conclusions

The box "Global Generalizations" summarizes the specific conclusions from this chapter. If the last few, in particular, seem open-ended, that is by design. This book was meant to broaden thinking about global strategy. This chapter has done its part by stressing the variety of global strategies: there are three pure strategies corresponding to the three As—with numerous variants on each—and at least as many compound (AA or AAA) strategies. In addition, one can imagine a number of organizational interpretations and implementations of the choice of a particular A or AA (or, sometimes, AAA) strategy. That is why, despite my insistence on choosing among the three As, taking semiglobalization seriously in setting strategy can be very liberating. There are many ways to play the differences.

Global Generalizations

1. The excitement around globalization has shifted since the 1980s from the globalization of markets to the globalization of production.
2. While the current enthusiasm for the globalization of production—or, more broadly, arbitrage—may pass, there is for the first time recognition of the full scope of the global strategy agenda.
3. This agenda can be summarized in terms of the AAA triangle, which, in addition to helping highlight the variety of global strategies, can be used to develop a globalization scorecard and force strategic prioritization.
4. Every top manager of a company with aspirations to create value by crossing borders should be able to specify in his or her own head which of the three As will be the basis for the company's cross-border competitive advantage.
5. My broad recommendations in this regard to the AAA strategies are these: nail down at least one of the As and, with one in hand, possibly seek another, but be careful about pursuing the elusive trifecta.
6. Applications or extensions of the AAA triangle that aid choices across the three As include careful consideration of the trade-offs across them and the mapping of expenditure intensities and competitive positions.
7. The effective pursuit of adaptation, aggregation, or arbitrage, or, especially, some combination of them typically requires expanded conceptions of coordination and arrays of coordination mechanisms.
8. Nobody has yet figured out *the* optimal way to organize a complex global company, but much can be learned from looking at leading-edge companies.

Notes

Chapter 7: Managing Global Differences: The AAA Triangle

1. This literature essentially started with a discussion, nearly forty years ago, of the tension between pressures for unification within companies and for fragmentation that different national environments can create: see John Fayerweather, *International Business Management: A Conceptual Framework* (New York: McGraw-Hill, 1969). C. K. Prahalad and Yves L. Doz, in *The Multinational Mission: Balancing Local Demands and Global Vision* (New York: Free Press, 1987), elaborated on this tension as the widely cited trade-off between global integration and national responsiveness.

2. Until recently, the only aspect of arbitrage that had attracted much attention was the exploitation of international differences in knowledge. Compare Christopher A. Bartlett and Sumantra Ghoshal, *Managing Across Borders: The Transnational Solution* (Boston: Harvard Business School Press, 1989; 2nd ed. 1998). While such knowledge arbitrage is interesting, there is, as we have seen, *much* more to arbitrage in general.

3. For an excellent overview of this literature, see Richard E. Caves, *Multinational Enterprise and Economic Analysis,* 3rd ed. (Cambridge: Cambridge University Press, 2007).

4. See, for instance, Michael E. Porter, *Competitive Strategy* (New York: Free Press, 1980), ch. 2; and Michael E. Porter, *Competitive Advantage* (New York: Free Press, 1985), ch. 1.

5. For further discussion of the costs of conflict, compromise, and coordination—in a multibusiness context rather than a multigeographic one—see Pankaj Ghemawat and Jan W. Rivkin, "Choosing Corporate Scope," in *Strategy and the Business Landscape,* 2nd ed., by Pankaj Ghemawat (Englewood Cliffs, NJ: Prentice Hall, 2001).

6. Note that advertising-to-sales and R&D-to-sales ratios are the two most robust markers of the incidence of multinational companies, but that advertising economies

of scale still operate primarily at the local or regional level, whereas R&D is more likely to be characterized by global economies of scale or scope. Advertising-to-sales ratios, therefore, have affinities with adaptation, which is focused on local responsiveness, and R&D-to-sales ratios relate to aggregation, which is focused on international economies of scale or scope. And labor expenses-to-sales ratios are an obvious proxy for the prospects of labor arbitrage—although we should keep reminding ourselves that arbitrage encompasses a much wider array of international differences than simply labor costs. Thus, the oil companies, the largest global companies by many measures, built their worldwide operations around differences in the prices of raw materials.

7. All figures are for 2005, unless otherwise noted. The account is largely based on Pankaj Ghemawat, "Philips Medical Systems in 2005," Case 706-488 (Boston: Harvard Business School, 2006); D. Quinn Mills and Julian Kurz, "Siemens Medical Solutions: Strategic Turnaround," Case 703-494 (Boston: Harvard Business School, 2003); and Tarun Khanna and Elizabeth A. Raabe, "General Electric Healthcare, 2006," Case 706-478 (Boston: Harvard Business School, 2006).

8. Jeffrey R. Immelt, quoted in Thomas A. Stewart, "Growth As Process," *Harvard Business Review*, June 2006, 60–71.

9. Joon Knapen, "Philips Stakes Its Health on Medical Devices," *Dow Jones Newswires,* 9 June 2004.

10. This example and the discussion of Standard Oil are based on Mira Wilkins, ed., *The Growth of Multinationals* (Aldershot, England: Edward Elgar Publishing, 1991), 455.

11. This description is based on press releases from and articles about Cisco. See, in particular, "Cisco Chooses India As Site of Its Globalization Center and Names Wim Elfrink Chief Globalization Officer," 6 December 2006, http://newsroom.cisco.com/dlls/2006/ts_120606.html; and Rachel Konrad, "At Globalization Vanguard, Cisco Shifts Senior Executives to India's Tech Hub," Associated Press, 5 January 2007.