"A terrific book" —Tom Peters

Co-opetition

1. A revolutionary mindset that combines competition and cooperation.

2. The Game Theory Strategy that's changing the game of business.

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2. Co-opetition

If business is a game, who are the players and what are their roles? There are customers and suppliers, of course; you wouldn't be in business without them. And, naturally, there are competitors. Is that it? No, not quite. There's one more, often overlooked but equally important group of players—those who provide complementary rather than competing products and services. That's where we'll begin this chapter. We'll see how complements can make all the difference between business success and failure.

1. Thinking Complements

The classic example of complements is computer hardware and software. Faster hardware prompts people to upgrade to more powerful software, and more powerful software motivates people to buy faster hardware. For example, Windows 95 is far more valuable on a Pentium-powered machine than on a 486 machine. Likewise, a Pentium chip is far more valuable to someone who has Windows 95 than to someone who doesn't.

Though the idea of complements may be most apparent in the context of hardware and software, the principle is universal. A complement to one product or service is any other product or service that makes the first one more attractive. Hot dogs and mustard, cars and auto loans, televisions and videocassette recorders, television shows and *TV Guide,* fax machines and phone lines, phone lines and wide area networking software, catalogs and overnight delivery services, red wine and dry cleaners, Siskel and Ebert. These are just some of the many, many examples of complementary products and services.

Let's take a closer look at the complements to cars. An obvious one is paved roads. Having built a better mousetrap, the fledgling auto industry didn't leave it to others to make a beaten path to its door. While it couldn't pave all the roads itself, it got many started. In 1913 General Motors, Hudson, Packard, and Willys-Overland, together with Goodyear tires and Prest-O-Lite headlights, set up the Lincoln Highway Association to catalyze development of America's first coast-to-coast highway.[1] The association built "seedling miles" along the proposed transcontinental route. People saw the feasibility and value of paved roads and lobbied the government to fill in the gaps. In 1916 the federal government committed its first dollars to building roads; by 1922 the first five transcontinental highways, including the Lincoln, had been completed.

Today there are plenty of roads, but money can still be scarce. Cars, especially new ones, are expensive, so if customers find it hard to borrow, they may find it hard to buy a new car. Thus, banks and credit unions complement Ford and General Motors. But auto financing has not *always* been accessible. That's why General Motors created General Motors Acceptance Corporation back in 1919 and Ford Motors formed Ford Motor Credit in 1959. It doesn't really matter who provides the financing—banks, credit unions, or the automobile credit companies themselves. More money in this market leads to lower interest rates. Better and cheaper access to credit enables people to buy more cars—and that helps Ford and GM. The flip side is also true: selling cars helps Ford and GM sell loans. Over the last decade, Ford has actually earned more money making loans than making cars.

Auto insurance is a complement to cars because, without insurance, people might not be willing to risk investing $20,000 or more in a new car. Just as carmakers have made auto loans more affordable, perhaps they could help make auto insurance more affordable. This would be particularly valuable to first-time buyers, who often face prohibitively high insurance rates.

Complements are always reciprocal. Just as auto insurance complements new cars, new cars complement auto insurance. The more new cars people buy, the more insurance they buy, especially collision and theft insurance. Thus, auto insurance companies might want to use their expertise and clout to help their customers get a better price on new cars. We'll come back to the subject of cars and auto insurance later in the book.

Suppliers to the car industry haven't forgotten complements, either. Until tire manufacturers figure out a way to add a fifth wheel to a car, there's really only one way for them to boost sales, and that's to whet people's appetite to drive. That's why the French tire maker Michelin sells the Michelin guidebooks. These guidebooks don't give just the shortest route, they make sure to point out the longer scenic routes as well. The Michelin guide makes getting there at least half the fun. It encourages travelers to keep moving, to keep wearing down those tires. There's always another town to see, another interesting detour to make. The Michelin guide not only helps sell more tires, it's also a profitable business in its own right. It dominates the guidebook market in France and is making inroads in the rest of Europe.

The used-car market also benefits when people pay attention to complements. For proof, look to John and Louise MacBain, publishers of *La Centrale des Particuliers*, a Paris weekly specializing in advertisements for used cars. They have found people who will provide the complementary services their readers want—auto insurance, financing, and mechanical warranties. And the MacBains have prenegotiated very favorable rates for their readers by giving the providers a prominent listing in the magazine and use of the *La Centrale* brand name. The MacBains go even further, selling some complements themselves. Both readers and advertisers want to know average transaction prices and the average time on the market for each make, model, and year. Through France's Minitel online service, the MacBains make this information available for a fee.[2] By paying attention to complements, the MacBains have ensured that there is no competition for *La Centrale*. They've taken their idea on the road, changing the way used cars are sold in Canada, Hungary, Poland, Sweden, Thailand, the United States, and other countries.

The complements mindset also helps explain why some businesses fail. Alfa Romeo and Fiat had trouble selling their cars in the United States, because people knew they'd have trouble finding spare parts and qualified mechanics. Both have exited the U.S. market. The Sony Betamax videocassette recorder, though technically superior to the VHS in some respects, was ultimately undone by the lack of rental movies in the Betamax format. In many cities, downtown shopping has lost out to suburban malls because of a lack of convenient parking. If these enterprises had provided the necessary complements, they might have fared much better.

The problem of missing complements is multiplied a thousand times over in the case of a new economy. This is the situation in much of the third world and in many of the former communist countries. There the fate of everything—not just the company or industry but often the whole country—depends on complements. One industry will need complementary industries so it can get going, but those complementary industries will need the first industry so *they* can get going. It's a chicken-and-egg situation everywhere you look. Everything has to happen all together, or nothing might happen at all. That's why some developing economies take off while others stall.

Thinking complements is a different way of thinking about business. It's about finding ways to make the pie bigger rather than fighting with competitors over a fixed pie. To benefit from this insight, think about how to expand the pie by developing new complements or making existing complements more affordable.

Intel is the ultimate competitor. Andy Grove, the CEO, is known for saying: "Only the paranoid survive."[3] But competitors aren't the only thing on Grove's mind; Intel is also on the lookout for complements.

Inside Intel We started this chapter by explaining how Microsoft benefits when Intel develops a faster chip and how Intel benefits when Microsoft pushes forward in software development. But from Intel's perspective, Microsoft doesn't push hard enough. According to Andy Grove: "Microsoft doesn't share the same sense of urgency [to come up with an improved PC]. The typical PC doesn't push the limits of our microprocessors. . . . It's simply not as good as it should be, and that's not good for our customers."[4]

If software applications don't push the limits of existing microprocessor chips, then Grove has to find something else that will. Otherwise, his customers won't feel the continued need to upgrade. If they don't keep upgrading, not only will the market become saturated but the other chip manufacturers—AMD, Cyrix, and NexGen—will be able to catch up.

This is not a new problem for Intel; processing capabilities have always led the software applications. For example, although 32-bit processing has been a technological reality since 1985, Microsoft's first 32-bit processing system—Windows NT—didn't appear until 1993.[5] Intel has always been on the lookout for applications requiring massive processing capabilities.

One of the most CPU-intensive applications is video. Even the Pentium chip will not handle full-screen, 24-frames-per-second output. But the next-generation chip, the Pentium Pro, will. What Intel wants, therefore, is a cheap and widely used video application. To that end, it has invested over $100 million in ProShare, a videoconferencing system that sits atop a desktop computer.[6] ProShare is an ideal complement to Intel's chips.

But Intel faced the same problem that makers of fax machines faced a decade earlier: what's the point of having a desktop videoconference system if there's no one to call? Fax machines only took off in 1986, when their price came down to under $500. How could Intel establish a market presence for ProShare and get the price down without shelling out another $100 million? Intel's strategy was to look for other companies interested in helping out.

The phone companies proved to be one natural ally. ProShare complements their business because it receives and transmits more data than ordinary phone lines can handle. To work effectively, ProShare requires an Integrated Services Digital Network line, or ISDN line, for short.[7] These lines have three channels for transmission—two for data and one for voice—each with nearly five times the capability of ordinary twisted copper. The phone companies have the capability of supplying ISDN lines, but there's been little demand so far. If people buy ProShare, they'll buy ISDN lines, too.

So Intel doesn't have to pay for ProShare all by itself. Just as phone companies heavily subsidize the purchase of a new cellular phone in order to attract new cellular subscribers, some are subsidizing ProShare to encourage people to buy ISDN lines. They are offering ProShare to their customers for $999, less than half its list price of $1,999.[8]

In another move to create momentum for ProShare, Intel reached an agreement with Compaq, the leading PC maker, under which Compaq will include ProShare in all of its business PCs. This integration brings down the cost of ProShare for Compaq buyers to between $700 and $800 and gives ProShare's market presence a further boost.

All the players—Intel, phone companies, and Compaq—recognize their complementary relationship. Intel wants to increase the demand for processing capability; phone companies want to increase the demand for large amounts of data transmission; Compaq wants its business PCs to stand out from the competition. These objectives come together perfectly with personal videoconferencing.

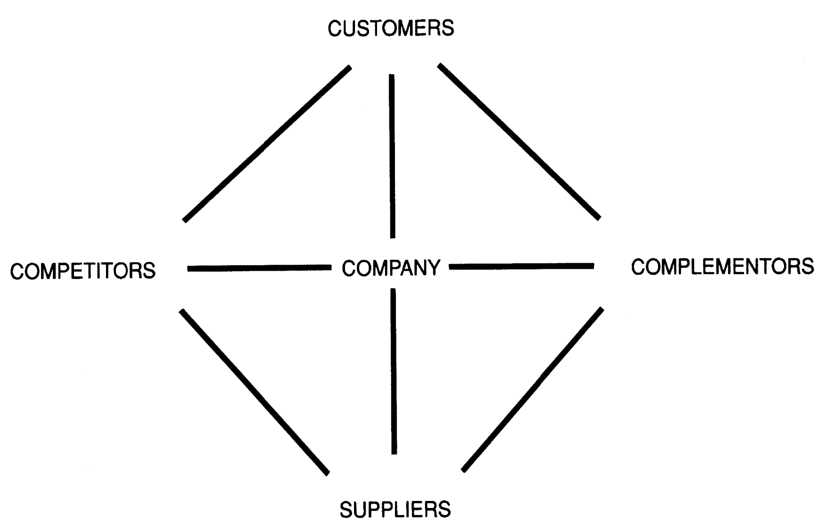
2. The Value Net

We're now in a position to better answer our first question: if business is a game, who are the players and what are their roles? Customers, suppliers, and competitors. And one more category: people who provide complements. There's no word for people who provide complements, so we're going to propose one: *complementor*. This is the natural counterpart to the term "competitor." The fact that we had to coin a new word is proof that the vital role of complements has been largely overlooked in business strategy.

We're going to present a complete picture of the game of business. In the rest of this chapter, we'll explore the roles of all four types of players—customers, suppliers, competitors, and complementors—and the interdependencies among them. We'll see how the same player can have multiple roles. We'll reexamine conventional wisdom on who are your friends and who are your enemies. We'll define exactly what we mean by our new term "complementor"; it will even prove useful to give a definition of the familiar term "competitor."

It's a back-to-basics exercise, and it's quite an eye-opener. Focusing on one type of player or one type of relationship tends to produce blind spots. Taking in the wider picture reveals many new strategic opportunities.

To get things started, we introduce a schematic map to help you visualize the whole game. This map, the Value Net, represents all the players and the interdependencies among them. As we proceed, you might start thinking about how you'd draw a Value Net for your business. You'll see the Value Net we drew for our own business later on in this chapter.



THE VALUE NET

Along the vertical dimension of the Value Net are the company's *customers* and *suppliers*. Resources such as raw materials and labor flow from the suppliers to the company, and products and services flow from the company to its customers.[9] Money flows in the reverse direction, from customers to the company and from the company to suppliers.

Along the horizontal dimension are the company's *competitors* and *complementors*. We've already seen many examples of complementors. Here's a definition of the term:

A player is your complementor if customers value your product *more* when they have the other player's product than when they have your product alone.

Thus, Oscar Mayer and Coleman's are complementors. People value hot dogs more when they have mustard than when they don't. And vice versa. The way to identify complementors is to put yourself in your customers' shoes and ask yourself: what else might my customers buy that would make my product more valuable to them?

Competitors are the reverse case:

A player is your competitor if customers value your product *less* when they have the other player's product than when they have your product alone.

Coca-Cola and Pepsi-Cola are a classic example of competitors. So are American Airlines and Delta Air Lines. If you've just had a Coke, you value a Pepsi a lot less than if you've yet to quench your thirst; Coke doesn't add life to Pepsi. Likewise, if you have a ticket on Delta, American is something a little less special in the air.

The traditional approach defined competitors as the other companies in your industry—those companies that make products similar to yours in a manufacturing or engineering sense. As people think more in terms of solving their customers' problems, the industry perspective is becoming increasingly irrelevant. Customers care about the end result, not about whether the company that gives them what they want happens to belong to one industry or another.

The right way to identify your competitors is, again, to put yourself in the customers' shoes. Our definition leads you to ask: What else might my customers buy that would make my product less valuable to them? How else might customers get their needs satisfied? These questions will lead to a much longer, and more insightful, list of competitors. Thus Intel and American may end up as competitors as videoconferencing takes off and becomes a substitute for business trips.

As Microsoft and Citibank each work to solve the problem of how people will transact in the future—whether it be E-money, smart cards, on-line transfers, or something else—they might end up being competitors. This is despite the fact that they come from different "industries" as traditionally defined—software and banking.

Phone companies and cable television companies are both working to solve the problem of how people will communicate with each other and access information in the future. Again, different industries—telecommunications and cable television—but increasingly one market. Today European banks are selling insurance, and European insurance companies are selling tax-advantaged savings vehicles. It's no longer the banking industry or the insurance industry—it's one marketplace for financial services.

So far we've been stepping into customers' shoes to identify who complements you and who competes with you in attracting customers' dollars. But that's only half the game.

The Supplier Side

The top half of the Value Net deals with customers, the bottom half deals with suppliers. And, just as with customers, there are two sides to the game with suppliers. Other players can complement you or compete with you in attracting suppliers' resources. Here are the definitions:

> **A player is your complementor if it's *more* attractive for a supplier to provide resources to you when it's also supplying the other player than when it's supplying you alone.**

A player is your competitor if it's *less* attractive for a supplier to provide resources to you when it's also supplying the other player than when it's supplying you alone.

Competition for suppliers often crosses industry boundaries. Capital providers are suppliers, and the competition to attract their funds takes place in a global market. Employees, too, are suppliers. People don't usually look at it that way, but follow the dollar: the company pays employees to provide a valuable resource—namely, their expertise, labor, and time. Competition for employees crosses industry boundaries. For example, companies from very different industries compete for the supply of newly minted M.B.A.'s.

Many companies are both competitors and complementors with respect to their suppliers. Compaq and Dell, for example, compete for the limited supply of Intel's latest chip. But the two companies are complementors as well as competitors with respect to Intel. Between development costs and building a new fabrication plant, Intel will spend well over a billion dollars to develop the next-generation chip. Intel will be able to spread that cost among Compaq, Dell, and all the other hardware makers, which means that each one of them will pay less to have Intel inside.

American and Delta compete for landing slots and gates. But although they are competitors for airport facilities, they are complementors with respect to Boeing, a key supplier. When American and Delta decide to commission the next-generation airplane, it's much cheaper for Boeing to design a new plane for both airlines together than to design a new plane for each of them separately. Most of the development costs can be shared, and the greater demand helps Boeing move down the learning curve faster, too.

The same principle applies to fighter planes, although the U.S. Congress may have discovered this a bit too late. The F-22 fighter jet complements and is complemented by other defense programs that share common development activity, such as avionics and navigation. Kill one of these supply-side complementors and you may shoot down the F-22 without meaning to. William Anders, former chairman and CEO of General Dynamics Corporation, explains the problem:

The F-22 is being recognized as one of the most successful, best managed next-generation weapons system development programs cur-

> **rently under way. However, as demand continues to fall in other defense programs served by the F-22 team, a portion of the fixed and overhead costs formerly supported by those programs automatically shifts over to the F-22. The danger is that this model program could ultimately become unaffordable because of the growing overhead and fixed cost burdens.[10]**

In cutting back defense programs that it decides it can do without, Congress inadvertently endangers programs that it wants to keep. With complements, it's sometimes all or nothing. There may be no halfway.

As we continue moving into the knowledge-based economy, supply-side complementarities will become increasingly the norm. There's a big up-front investment in learning to make something—whether computer chips or airplanes—and then variable costs are relatively modest. There's huge leverage. The more people that want a knowledge-based product, the easier it is to provide.

In the case of computer software or drugs, essentially *all* the costs are up-front; then it's gravy. For Microsoft, all the real cost comes in the intellectual step of writing the computer code for a new program. Copying the disks costs only pennies. So the bigger the market, the more the development costs can be spread out. The mass-market program is better and cheaper than what any one person could commission on his own. That's the nature of markets for knowledge-based products.

Recognizing Symmetries

The Value Net reveals two fundamental symmetries in the game of business. On the vertical dimension, customers and suppliers play symmetric roles. They are equal partners in creating value. But people don't always recognize this symmetry. While the concept of listening to the customer has become a commonplace, the same isn't true when it comes to suppliers. We've all heard people tell their suppliers: "You've got the specs. You don't need to know what the product's for. Just get it to me on time at the lowest price." Imagine talking to customers that way! Only recently have people begun to recognize that working with suppliers is just as valuable as listening to the customer.

Supplier relations are just as important as customer relations. In one labor negotiation, we heard the head of human resources exclaim: "I have to get my employees to understand that the customer comes first." Seeing the Value Net helped change his mind and made for much more productive discussions. In the end, everyone recognized a common goal—to create the biggest pie. To do that, you can't put anyone first. If a customer wants something special, such as rush delivery, but isn't willing to pay enough to compensate workers for a lost weekend with their families, then satisfying this order would not create value—in fact, it would destroy value. The customer isn't always right. Employees have rights, too.

On the horizontal dimension, there's another symmetry. Go back to the definitions of complementor and competitor. You'll see that the only difference between them is that where it says "more" in the definition of complementor, it says "less" in the definition of competitor. At the conceptual level, complementors are just the mirror image of competitors. That's not to say that people are equally good at seeing the mirror image. Just as people have been playing catch-up when it comes to thinking about suppliers, there's a lot more work to be done in recognizing and benefiting from complementor relationships.

Symmetries of the Value Net

Customers and suppliers play symmetric roles.

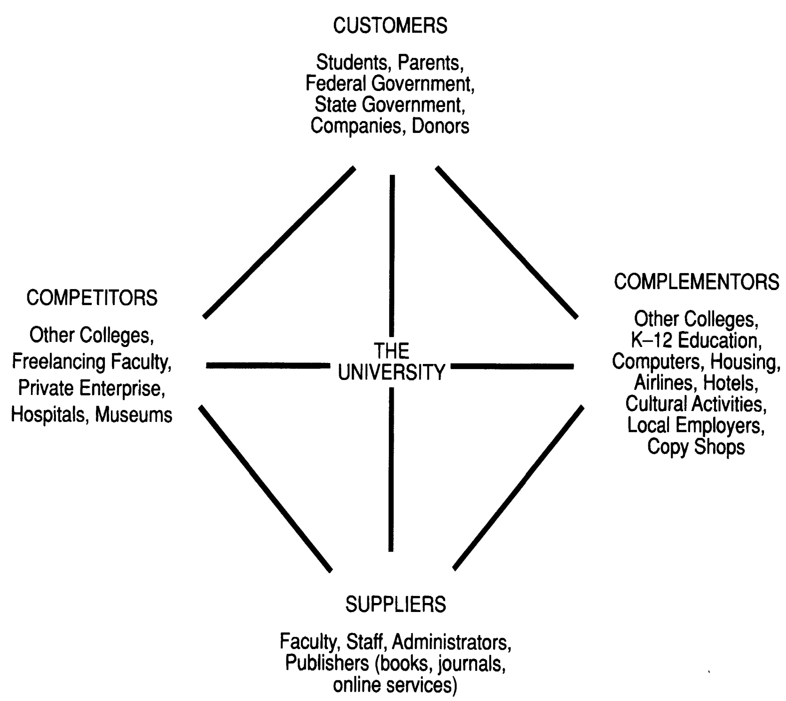
Competitors and complementors play mirror-image roles.

It's easy to focus on only one part of your business, and miss others. The Value Net is designed to counter this bias. It depicts all four types of players you interact with, and it emphasizes the symmetries between them—the symmetries between customers and suppliers, and between competitors and complementors.

3. Surfing the Net

To understand the game you're in, start by going around your Value Net. This approach applies to any organization—private, public, or nonprofit. As an example, we'll take you on a tour of the Value Net we know best—namely, our own.

Drawing a Value Net for a university gave us a better understanding of some of the issues facing our home institutions.[11] And, in our consulting work, we've found that the best way to begin assignments is by helping clients draw their own Value Nets. This exercise is an essential input into the process of generating new strategies, as we'll see later in the book when we lay out our PARTS model.



The University's Customers

Who are the customers of a university? Students, primarily. Strangely, universities don't always treat their students as if they are the customers. Some people say that's the way it should be; after all, the faculty has know-how that students don't yet have. To the extent that's true, we say that makes students "clients." They're employing a professional service—like a doctor or lawyer—and should follow the guidance of the faculty. And, in return, the faculty should listen carefully when students express satisfaction or dissatisfaction with the service they get.

Universities have other customers. Parents are customers when they pay for their children's education. Companies are customers of business schools when they pay to send employees there, or when they pay schools to put on special programs for them. And the government is a customer when it pays for tuition scholarships. The government is a customer of a different sort when it commissions research from universities.

Another very important customer group is donors. Donors as customers? Yes. They seek fulfillment, prestige, or the opportunity to shape future generations in return for their contributions. Viewing donors as customers might give some universities pause for thought. Too often, a university fund-raising campaign starts with a list of priorities—a "mission"—and tries to persuade donors to fund them. This is hardly listening to the customer. Like all customers, donors are free to take their "business" elsewhere. Perhaps universities should pay more attention to what donors want. Asking donors what they would like to fund would build better relationships and likely raise more money, both now and in the future.

Of course, these different customer groups sometimes have competing views as to what type of education a university should provide. A university may not be able to listen to all of its customers at the same time.

The University's Suppliers

A university's suppliers are primarily its employees: faculty, staff, and administrators. Since universities are in the business of disseminating information, they are also in the market for ideas. Thus, publishers of academic books and journals and providers of electronic information services (such as Lexis/Nexis and WestLaw) are suppliers to universities, too.

The University's Competitors

Universities have no shortage of competitors: admissions offices compete with one another for students; faculty across schools compete for government and foundation grant money. Universities even face competition from their own faculty. For example, business school professors often give their own executive-education programs to companies on a freelance basis. That makes them competitors to business schools in the executive-education market.[12] Meanwhile, college presidents, along with their development officers, compete for the checkbooks of potential donors. They compete not only with other universities but also with hospitals, museums, and other nonprofits.

On the supply side, universities compete with one another for employees—faculty and administrators, in particular. Sometimes they also have to compete with private enterprise for talent. For example, finance professors Fischer Black from MIT and Myron Scholes from Stanford, inventors of the option pricing model that bears their names, left academia for Wall Street.

Technology is likely to increase the competition among schools. As videoconferencing becomes better and cheaper, remote classes will grow in importance. The university with the best undergraduate biology course, say, will be able to offer that course to students everywhere. This, in turn, will make universities less reliant on any but the very best faculty.[13]

The University's Complementors

Universities, though they compete with one another for students and faculty, are complementors in creating the market for higher education in the first place. High school students are more willing to invest in preparing for college, knowing that there are many schools to choose from. More college students pursue Ph.D.'s, knowing that there are a number of schools that might hire them.

The list of complementors to a university is huge. Kindergarten, elementary, junior high, and high schools complement universities. The better a student's earlier education, the more he or she will benefit from a college education. By the same token, undergraduate schools in one university and graduate schools in another university complement one another. The better a student's undergraduate program, the more he or she will gain from a graduate program.

Other complements to a college education are computers and housing. That's why most universities help their students buy computers and locate off-campus housing. Since schools attract students from all over, perhaps they should also help their students buy air travel—another complement. Working as consultants to Sallie Mae, the largest student loan provider, we've been able to put this perspective into practice. Sallie Mae is now helping its students buy complements for less. It has negotiated special student discounts on Northwest flights, MCI phone calls, and some publishers' textbooks.

Local hotel accommodation is an important complement to business schools offering executive-education programs. Accommodations were a problem for Northwestern's Kellogg School of Management, since there were few high-quality hotel rooms in Evanston, Illinois. So Kellogg built its own executive-education quarters.

Cultural activities and restaurants make a university more attractive to students. In this respect, schools in New York and Boston, for example, have an edge over those in Palo Alto and Princeton. There are many, many other complementors to universities—24-hour copy shops, coffee shops, pizza and ice cream parlors, and more. These businesses all make a point of locating close to university campuses.

Local employers complement universities. Thus, as dual-career couples become increasingly common, Harvard has an advantage over Yale because of all the other Boston-area businesses that offer employment opportunities as compared with the depressed New Haven economy. To overcome this disadvantage, Yale is going to have to work harder at helping spouses with job placement, or be more willing to hire spouses at the university.

No doubt there's more to say about the Value Net for a university. The larger point is that drawing the Value Net for your business is a valuable exercise. You may already know the business inside out. Drawing your Value Net requires you to understand your customers' and suppliers' perspectives: you'll be forced to know the business "outside in," too.

Multiple Perspectives

So far we've been surfing the Value Net from only one vantage point. You put yourself in the middle and then look around to your customers, suppliers, competitors, and complementors. Of course, that's not the whole game. There are also your customers' customers, your suppliers' suppliers, your competitors' competitors, your complementors' complementors, and the list goes on. For example, recruiters who come to hire graduating students are a university's customers' customers.

You could try to draw an extended Value Net to represent these extended relationships, but it would quickly become a mess. The better way is to draw multiple nets. Draw a separate Value Net from each perspective: your customers', your suppliers', your competitors', and your complementors', and, perhaps, from perspectives even further removed. For example, drawing your customers' Value Net might help you find a way to increase the demand for whatever your customer sells. Helping your customer this way helps you, too.

4. Playing Multiple Roles

All the world's a stage,
And all the men and women merely players:
They have their exits and their entrances;
And one man in his time plays many parts . . .
—Shakespeare, *As You Like It*

People play many parts in the game of business. That makes the game a lot more complicated. Sometimes you see someone occupying one role and forget to ask what other roles that person plays. Other times you can't seem to fit someone into any particular role at all and then discover that's because that person is playing two or more roles simultaneously. The Value Net enables you to sort through all this tangle.

We've already seen some examples of how players can occupy more than one role in the Value Net. From the perspective of American Airlines, Delta is both a competitor and a complementor. American and Delta compete for passengers, landing slots, and gates, but complement each other when commissioning Boeing to build a new plane.[14] For American, it would be a mistake to view Delta solely as a competitor or solely as a complementor—Delta plays *both* roles.

It's the norm for the same player to occupy multiple roles in the Value Net. Strategy experts Gary Hamel and C. K. Prahalad give an example in *Competing for the Future:* "On any given day AT&T might find Motorola to be a supplier, buyer, competitor, or partner."[15] It won't be too long before electric utilities use their lines to transmit voice and data along with electricity. At that point, they will become competitors to the phone companies. But that hasn't stopped Southern New England Telephone and Northeast Utilities from becoming complementors today: the two companies run phone and electric wires over a common set of poles, enabling both to save money.

In the nonprofit sector, the Museum of Modern Art (MOMA) and the Guggenheim Museum in New York compete for visitors, members, and curators as well as for paintings and funding. Still, it's not all competition. The option to visit several museums in a weekend helps bring people into New York. Thus, the Guggenheim is a complementor as well as a competitor to MOMA. Perhaps the museums should create a joint weekend pass, a common practice in many European cities.

There's more. The Guggenheim might borrow a painting from MOMA or lend MOMA a painting to create a special show. Then the Guggenheim becomes a customer and supplier as well as a competitor and complementor to MOMA.

The position in the Value Net merely represents a role someone plays, and the same player can have multiple roles. It's counterproductive to typecast someone as just a customer or just a supplier or just a competitor or just a complementor.

Jekyll and Hyde

People are so accustomed to viewing the business world in warlike terms that even when other players are both competitors and complementors, they tend to see them as only competitors and fight against them. They focus on the evil Mr. Hyde and overlook the good Dr. Jekyll.

In the early 1980s, when sales of videocassette recorders took off, the movie studios were convinced that people might not see a film at the movie theater if they knew they could rent or buy it in the future. Although the studios would make money from video rentals and sales, this business would so significantly eat into their big-screen profits that they would end up worse off than before. So studios priced their movies sufficiently high that rental stores could only afford to buy a few copies each. Almost no movies were sold directly to consumers.

The studios' concern over cannibalization had merit. Some people did indeed skip going to the movies and were content to wait for the video release. But there was a much more important complementarity effect. Movies that did well in the theaters whetted people's appetite to rent or buy the movie. Those who enjoyed the movie might themselves rent or buy it to see it again, or tell others who missed it on the big screen to be sure to see the video.

Now that the studios have caught on, they have begun offering videos for sale at prices below $20 rather than selling only to video rental stores for $69.95. As a result, the combined market for movie theaters, video rentals, and video sales is far greater than in the days before video. In 1980 the industry revenue from theatrical releases totaled $2.1 billion while home video brought in an additional $280 million. By 1995, theatrical releases were bringing in $4.9 billion; even better, home video rentals and sales totaled $7.3 billion.[16]

Just as the movie studios feared the home video market, traditional bookstores see electronic publishing and the Internet solely as competitors. Once again, they see only half the picture. What bookstores fail to recognize is that sales in one domain may stimulate demand in the other. According to McGraw-Hill CEO Joseph L. Dionne, "In ten instances when we created an electronic version of the print edition . . . [demand for] the print version grew, too."[17]

By helping the entire market grow, booksellers on the Internet, such as BookZone, stimulate traditional book sales. Although sometimes people buy books from BookZone instead of a traditional bookstore, BookZone provides a place to buy books on the spur of the moment—at 2:00 A.M., for example. This extra sale helps enlarge the pie, but that's not all it does. Books are sold by word of mouth; one sale can create a chain reaction. If the BookZone customer likes the book and tells friends about it, they might then buy it at a traditional store. Or people may buy a book in the bookstore because their interest was piqued by an electronic book review on the Internet. And, ultimately, if the Internet helps sell more books, authors and publishers will produce more books, which is good not only for booksellers but also for customers.

In an article in *Publishers Weekly,* BookZone president Mary Westheimer responded to the cool reaction she received at the 1995 American Booksellers Association convention:

> **If, instead of fighting futilely, these threatened booksellers looked through the other end of the telescope, they might see that what they perceive as competition is actually a complement. . . . Together, we can create an appetite that feeds our industry.[18] . . . If all of us—booksellers, publishers, distributors, authors—do a good job of selling, more people will buy more books. And if we all work together toward the goal, we and our customers, the readers, will be that much happier.[19]**

While the traditional booksellers see only competition, Westheimer recognizes the elements of complementarity in the book business.

A dramatic example of mistaking Jekyll for Hyde is to be found in every office. When computers were first introduced, almost everyone thought they would eliminate "paperwork." Words and data stored as minute magnetic impulses seemed like the greatest competitor paper had ever faced. There was talk everywhere of "paperless offices." People even began to wax nostalgic about old-fashioned printed and written material. But the reality was very different. According to the *Wall Street Journal*, "Despite rising cost of paper and increased use of computers, offices are projected to use 4.3 million tons of paper this year [1995], up from 2.9 million tons in 1989. Offices will consume 5.9 million tons by the year 2000."[20] What computers really did was make paperwork easier to generate. To date, computers have complemented far more than they have competed with paper.

Even when they recognize a complement, some people turn it down. Citibank was the first bank to introduce the ATM, back in 1977. When other banks came along with their own ATMs, they wanted Citibank to join their networks. That would have made everyone's ATM cards more valuable. When banks are on a common network, each machine complements all the others. But Citibank refused to join. It didn't want to do anything that might help its competitors. It didn't want to help Dr. Jekyll if that also meant helping Mr. Hyde. That decision came at the expense of Citibank's own customers. Over time, the other bank networks became the national and international leaders, and Citibank customers were left out. The limited ATM access cost Citibank market share. Citibank eventually woke up. In 1991 it reversed course and joined the other networks.

Of course, a player can start out as Dr. Jekyll and turn into Mr. Hyde. Cable television originally complemented network television stations by extending their reach into towns with poor reception. However, over time, the cable companies started to broadcast more and more alternatives to the networks' programs: HBO, CNN, MTV, Nickelodeon, Nashville, Home Shopping Network, and many more. Even people with good reception started signing up for cable. As viewers turned to cable programming rather than network shows, cable turned into more competitor than complementor to the networks.

Why is it that people tend to see Mr. Hyde and miss Dr. Jekyll? It's the business-as-war mindset. Everything is competition, not complementarity. This perspective leads you to suppose that when customers buy someone else's product, they're less likely to buy yours. Or that when suppliers provide resources to someone else, they're less able to supply you. It's all competition.

Perhaps this mindset stems from the view that life is all about making trade-offs. No one can have it all. With only so much money, so much time, so many resources, people have to make choices. Customers and suppliers have to choose between you and the competition. It's "either-or," not both.

But that's not always true. The trade-off mindset fails to take account of complements. When a customer buys a complementary product, that makes him more likely to buy yours. It's both, not one or the other. Or when a supplier provides resources to a complementor, that makes it easier for him to supply you as well. Again, it's both, not one or the other.

To help recognize Dr. Jekyll as well as Mr. Hyde, remember to think complementors as well as competitors.

Jekyll and Hyde

There's a bias toward seeing every new player as a competitive threat.

But many players complement you as well as compete with you.

Look for complementary opportunities as well as competitive threats.

Making Markets

The fact that players can be both competitor and complementor explains what otherwise appears to be strange behavior. At first blush, it seems quite peculiar that competing businesses often locate literally right next to one another: New York diamond merchants along 47th Street; art galleries in SoHo; antiquarian bookstores in London; movie cinemas in Westwood, Los Angeles; and car dealers located along a strip. In Brussels, antique stores are lined up all around the Place du Grand Sablon.

Shouldn't the antique stores spread out over Brussels so that each store could have its local market? There would then be less direct price competition, since customers would find it less convenient to compare prices. After all, Wal-Mart doesn't line up next to Kmart, and Pearle Vision doesn't shadow LensCrafters. Nor do coffee shops or dry cleaners generally congregate.

But that way of thinking sees the Brussels antique stores only as competitors. By locating near to one another, the antique stores become complementors, too. Instead of having to choose only one store to go to—possibly the wrong one—shoppers can go to the Place du Grand Sablon, browse, and make a more informed choice. And because it's a lot more convenient, people are more willing to set out to buy antiques in the first place. They can also be more confident that the merchandise will be high-quality, because a store with inferior products or inflated prices will have a much harder time staying in business if the superior competition is located right next door. Also, people are more willing to buy one store's table if they find the perfect chairs for it, and there's a good chance of finding those chairs in another store nearby. Making it easier to find chairs helps sell tables, and vice versa. By locating close together, antique stores, though competitors in dividing up the market, become complementors in creating the market in the first place.

In some cases, the bunching effect helps creates a bigger market for suppliers as well as for customers. That's the case for the performing arts on and off Broadway, New York. On the customer side, all the different shows help bring people into the city, even though the shows compete for the same audiences on any given night. On the supply side, the bunching of performing arts creates a critical mass that makes it easier for all to attract suppliers. Chamber music can share the same stage as symphonies. Theater can share the stage with dance. Musicians who play symphonies can perform in operas and musicals. Costume designers for theater can work for opera and dance. Lighting designers can work across theater, music, opera, and dance. Directors have their choice of actors and actresses working off Broadway—or even in restaurants.[21]

Whether it be diamond merchants, art galleries, antiquarian bookstores, movie cinemas, car dealers, antique stores, or performing arts, bunching together creates complementarities that develop the market, even if there's sometimes more competition in dividing it up.

Toys "R" Us seems to follow the opposite strategy, relying instead on destination shopping. Its stores typically are located in low-rent areas off highways, not next to other retailers. People go to Toys "R" Us because it's specifically where they want to shop. Is Toys "R" Us doing the right thing? We don't suggest that Toys "R" Us locate next to another toy store, but perhaps having a McDonald's restaurant or a Discovery Zone (a supervised indoor kid's playground) inside the store would make going to Toys "R" Us more appealing. After all, people on their way to the Discovery Zone for a birthday party would now pass through the toy store. How convenient. And why not have a Big Mac while you're there?

So far, it's all complements. But the problem for Toys "R" Us is that parents who drop their kids off at the McDonald's or Discovery Zone while they're shopping will be less influenced by their children to buy toys on impulse. Thus, McDonald's and the Discovery Zone are complementors when it comes to getting people into the store, but perhaps competitors when it comes to what they buy. We don't know which effect dominates, but, with well over five hundred stores, Toys "R" Us might benefit from running some experiments. In fact, Toys "R" Us might be able to learn from its own operations abroad. In Japan, for example, Toys "R" Us has joined forces with McDonald's and Blockbuster Video to create family malls.

Peace and War

Companies are

- **complementors in making markets**
- **competitors in dividing up markets**

A Player You Can't Avoid

The ultimate example of a player occupying more than one position in the Value Net is government, both federal and state. Depending on the aspect of government you're looking at, it can appear in the role of customer, supplier, competitor, or complementor. It also has an important behind-the-scenes role.

When the government buys goods and services, it's being a customer like any other—only bigger. In its role as customer, the government commissions new roads, bridges, buildings, and prisons; buys medical care and education; procures vast amounts of military equipment. The government is also a supplier. Among other things, it sells oil and mineral rights, logging rights, and the rights to use radio spectrum.

When people pay taxes, they have less money to spend on other goods and services. In this way, the government "competes" with private business for people's dollars. Admittedly, the "competition" is rather one-sided, since paying taxes is obligatory. Likewise, when the government borrows money, it competes with companies looking to raise capital. State colleges compete with private colleges. The U.S. Postal Service competes with Federal Express. As the country's biggest employer, the government also competes with any business looking to hire people.

Meanwhile, the government serves as a complementor to every business activity by providing basic infrastructure and civil order. Virtually every business depends on government for things like protection of life and property, a transportation network, civil courts, a stable currency, and so on. Without these things, people couldn't do business.

Along with its transactional roles as customer, supplier, competitor, and complementor, the government has the power to make laws and regulations that govern transactions among other players. We'll talk more about this behind-the-scenes role of the government as a rule maker in the Rules chapter.

5. Friend or Foe?

Michael Corleone: Keep your friends close,
but your enemies closer.
—The Godfather, Part II

In the game of business, who are your friends and who are your foes? Sounds like an easy question. You have three groups of friends and one group of foes, right? Customers, suppliers, and complementors are all on your side, while competitors clearly are not.

In fact, we know that can't be quite right. People understand, intuitively, that along the vertical dimension of the Value Net there is a mixture of cooperation and competition. It's cooperation when suppliers, companies, and customers come together to create value in the first place. But when the pie has to be divided up, customers press for lower prices, and suppliers want their slice, too. So it's competition when it comes time to dividing the pie. In the case studies throughout this book, you'll see the simultaneous elements of competition and cooperation at work. It's co-opetition that best describes your relationships with customers and suppliers.

What about the horizontal dimension? Who are your friends and foes here? You're pleased when a complementor enters the game, and, most of the time, you're happier if competitors stay out. So complementors are friends and competitors are foes? Yes. But, again, that's not the whole picture.

When a complementor enters the game, the pie grows. That's win-win. But then there's a tug-of-war with your complementor over who's going to be the main beneficiary. If your complementor gets less of the pie, that leaves more for you, and vice versa.

This tug-of-war between complementors is evident in the computer business. Since hardware makers complement Microsoft, Compaq's and Dell's entry into the IBM-compatible personal computer market benefited Microsoft. But Microsoft gains even more every time Compaq or Dell starts a price war. When the price of hardware falls, more people buy computers, which leads to more software sales. Microsoft wins. Even people who would have bought computers at the old, higher prices now have more money left over to buy software. Microsoft wins again. Complementors may be your friends, but you don't mind if they suffer a little. Their pain is your gain.

In fact, if your complementors are too comfortable, that may leave you little, if any, pie. For on-line services, a critical complement is local phone service. If phone calls are expensive, on-line services have to compensate with low prices, perhaps so low that they can't make money. That's a major reason why on-line services haven't taken off in Japan, where NTT dominates the telephone market and charges handsomely for local calls. By contrast, in most places in the U.S., local calls are unmetered, and this has helped fuel the explosive growth of America Online, CompuServe, and the multitude of Internet-access providers. Cheap complements are your friend.

What about competitors? Surely here, at least, the relationship is clear. It's survival of the fittest. It's war. Sometimes it *is* war. Later in the book, we'll see how Nintendo conquered all opposition to became a giant of the videogame business. We'll also see how NutraSweet fought a price war in Europe to establish a valuable precedent. But the idea that it's *always* war with competitors is overly simplistic. More often than not, the win-lose approach leads to a Pyrrhic victory. Win-lose becomes lose-lose. The classic example is cutting price in an attempt to steal market share. Competitors match your lower price, and the result is lower profits all around.

Another problem with waging war on competitors is that it's very hard to kill them off. More often, you succeed only in wounding them, and the most dangerous animal is a wounded one. Now that you've lowered their profits, your competitors have less to lose and every reason to become more aggressive.

The better way is to find win-win opportunities with competitors.

Win-win opportunities with competitors, really? People talk about cooperation inside the company, working in teams and sharing information. But stepping outside, it seems naive to think of letting competitors "win." But it isn't. What matters is not whether others win—it's a fact of life that they sometimes will—but whether *you* win.

Although it's hard to get used to the idea, sometimes the best way to succeed is to let others do well, including your competitors. We've seen examples where companies regarded primarily as competitors are also complementors. Insofar as these companies succeed *as complementors,* they are clearly benefiting each other.

But there are also many times when the best strategy is to let competitors succeed *as competitors.* In the remainder of this book, we'll see many cases where a company's move to undercut competitors could easily undercut the company itself. We'll show how to achieve win-win outcomes by avoiding mutually destructive competition. We'll explore how giving away a bid often comes back to hurt you, and suggest a better way to compete. We'll see how loyalty programs help everyone avoid falling into the price-war trap. We'll examine how rules such as meet-the-competition clauses change the nature of competition. We'll look at how to influence perceptions in order to shape competitive responses for everyone's benefit. We'll even discover situations where it's worthwhile to let a competitor prosper, even though that means accepting lower profits yourself. One case of this kind is where a new entrant in a market leaves the incumbent a big enough piece of the pie so that the incumbent finds it in its interest to live and let live rather than fight. A prosperous competitor is often less dangerous than a desperate one.

Julius Caesar: Let me have men about me that are fat.
—Shakespeare, *Julius Caesar*

Fine, but it's still a bad idea to turn your back. We are fully aware that your competitors may be all too happy to eat your lunch if you let them. Our recipe for strategy isn't about giving your competitors a free lunch—your lunch. We don't propose that you simply act nice, hoping that others will reciprocate. All too often that's a lose-win recipe.[22] We have something else in mind: a smarter way to compete that doesn't rely on the goodwill of others.

Your relationship with competitors is prima facie competitive, or win-lose. You lose when they enter the game. But you don't have to lose as much if you recognize that, once competitors enter the game, you can have win-win interactions with them. It's not all war with competitors. It's war and peace.

The same is true in all four directions. Whether it be customer, supplier, complementor, or competitor, no one can be cast purely as friend or foe. There is a duality in every relationship—the simultaneous elements of cooperation and competition. War and peace. Co-opetition.

Friend *and* Foe

There are both win-win and win-lose elements in relationships with
- **customers**
- **suppliers**
- **complementors**
- **competitors**

THINK CO-OPETITION

At this point, we have a map (the Value Net) and a mindset (co-opetition) for thinking about the game of business. We've seen some examples of how companies have changed the game, such as Ford and Ford Motor Credit, and Intel and ProShare, and hinted at many more examples to come. But we don't yet have a systematic method for how to change the game. To develop a method, we turn to game theory. That's the subject of the next chapter.