



## The Xilinx Business “Ecosystem”



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In today's fast paced high technology business climate, the keys to success are complex and they change constantly. It's difficult for any one company to master all of the necessary functions of business management, product design, manufacturing, marketing, sales, and customer support. And, as the breadth of required knowledge and expertise expands, people are becoming much

more specialized in their jobs, taking a more narrow focus, because there is so much to master. That's why it has become imperative that high technology companies, such as Xilinx, focus on the key aspects of their business, to become excellent at their core technology and business processes, while partnering with other companies that are also the best in what they do.

Well managed companies must also learn to partner with their customers to develop the insight and the processes that ensure the success of each new generation of technology. And, if the company is successful,

its shareholders will profit and will continue to support the company through stock purchases—a key factor in the economic health of the company.

This partnership between companies, specialized partners, customers, and shareholders is like an ecosystem where each part depends on the others, and the boundaries between each are blurred as they work closely together. For each part of this ecosystem to survive and to thrive, all parts must work well together, in balance, and this must become the primary objective of the company management—if any part of the ecosystem fails, all will suffer.

## The Five Habitats

The Xilinx business “ecosystem,” as I see it, is composed of five main “habitats,” or overlapping systems:

- The Company - People who focus on the primary business goals; the direct employees and managers of the company.
- Customers - People who not only buy products and services but also influence the design of new products.
- Partners - People who support the ecosystem through supplying needed services to the company (such as manufacturing and sales, intellectual property and design support).
- Investors - People who own the company and support it through their continued investment.
- Government - People who have an impact on the overall business environment by making laws and regulations that can affect the company.

Each of these habitats must be healthy and prosperous for the overall ecosystem to be healthy and prosperous.

### The Company Habitat

For a company to prosper and grow, it must create and maintain a balanced ecosystem. Therefore the company must:

- Determine the core competencies required for long term success and become excellent in those key areas.
- Determine which functions can best be handled by other companies (partners), and manage those relationships well.
- Work closely with customers to develop the right products and to provide specialized services.
- Become a learning organization, adapting to the dynamics of the marketplace.
- Be dynamic, adaptive, and free to innovate, with room to make mistakes.
- Take good care of its employees by providing a rewarding, satisfying, and friendly work environment.

- Have a Chief Executive Officer who is a coach, not the “quarterback.” Because the business “game” is dynamic, the coach must have competent managers and trust them to fulfill their specific responsibilities.



### The Customer Habitat

For customers to prosper and grow, they need:

- A continuous flow of innovation from the company to help them create leading edge products and remain competitive in their markets.
- Easy access to all of the company’s intellectual property.
- Open channels of communication with the company to:
  - help it create the right products and services, and become a better company
  - receive the latest technical and marketing information

### The Partner Habitat

For partners to prosper and grow, they need:

- Advanced information about new products and new technologies coming from the company so they can be prepared.
- Cooperation from the company for product development and marketing.
  - Constant communication with the company to share information about trends, and to maintain overall balance.
  - A working relationship that helps them manage their business more effectively and be more successful.
  - Training.

When partners are prosperous and growing, customers receive better service and a broader range of support products and services.

### The Investor Habitat

For investors to prosper and grow they need:

- The company to be well managed and provide good return on investment.
- To have a good understanding of the company’s strategy and business practices.
- To have timely and unbiased information about the company’s results.

In many cases, employees, customers, and partners are also company stockholders, and therefore they are doubly motivated to maintain a healthy environment that supports the long term growth of the company. This is important because the company’s ability to borrow money and therefore its flexibility and adaptability are directly affected by the company’s worth on the stock market.

### The Government Habitat

To ensure that government supports the company and to ensure that the company is a good corporate citizen, the company must:

- Educate the government about the company and its products.
- Give feedback on proposed laws and



policies that can have an impact on the company and its industry.

- Build a partnership with local government to improve the local community and to reach common goals.

## How the Xilinx Ecosystem Works

Our primary responsibility must be to develop, manage, and balance our business ecosystem if we are to remain the leader in our industry. So, our first task was to decide what key competencies we needed within Xilinx and which we could entrust to outside partners.

We have defined four core competencies that we must keep within Xilinx:

- Product design and technology development.
- Marketing.
- Customer support.
- Partner relationship management.

By focusing on these core functions, we can put our resources to best use.

## Product Design

Product design is our primary focus because innovation is the lifeblood of any high technology company; we spend more money on research and development than any of our competitors. We continuously strive to create leading edge devices and support tools that meet the specific needs of our customers.

## Marketing

It's not enough to create "dream" products with more and more features. Excellent products must consistently meet the needs of our customers and our customers must be fully aware of what we offer. It is the function of marketing to make sure that we are in full communication with our marketplace, in both directions.

## Customer Support

To create superior technology, and make the world aware of it, goes a long way toward the success of any company. However, without effective and consistent customer support, it's not enough. Our technology is complex, and to use it effectively requires an in-depth and constantly evolving expertise. That's why we created our in-house staff of highly-trained support engineers and design services professionals who can quickly help you meet any challenge.

Sometimes the difference between our products and our services blur. For example, our in-house development tools and



intellectual property are products, but their sole purpose is to assist you in creating the best possible designs with the least time and effort. So, though most of our revenue comes from the sale of FPGAs and CPLDs, we must also make sure the best tools and services are available too.

We also work with many third-party consultants to provide training, design services, IP development, tool development, and so on.

## Partner Relationship Management

Two of the most important competencies that we decided to entrust to outside part-

ners are manufacturing and sales. So, Xilinx has no fabrication facilities or direct sales force. These are two of the most expensive functions in any company, and the costs are not fixed. In a cyclic industry, such as our own, we gain a significant cost advantage by outsourcing these functions to partners who have made it their business to be the best; plus we gain added flexibility that helps us weather the inevitable down turns without having to lay off employees or suffer heavy losses. Therefore, within Xilinx, we have dedicated people to manage these relationships with our 3rd party manufacturing and sales partners. In addition, we also have dedicated marketing people who manage our relationships with our development tool partners, helping them define and market their products to our customers.

For manufacturing, we have partnered with UMC in Taiwan and Seiko-Epson in Japan. UMC has created one of the world's leading IC fabrication facilities, with the very latest equipment and process technologies. And,

because it is their business to manufacture semiconductors, they are always on the cutting edge of process technology.

We work very closely with UMC to develop new manufacturing technologies and to ensure that our designs can make best use of the highest performance, and least expensive, process technologies. Through this partnership, we have moved from 0.5 $\mu$  technology to 0.15 $\mu$  in less than five years; and 0.13 $\mu$  technology is soon to be in use. This fast-paced process migration has helped us to quickly reduce costs and significantly increase density, which means you get faster, less expensive devices, sooner. We could not have progressed this

quickly with an in house fabrication facility—the costs would have been far too high. This partnership has benefited both companies, as well as our customers.

For sales, we use our distributors and independent sales representatives. Sales is obviously a critical function in any company, and is very expensive. We chose to partner with our distributors because Xilinx products are a key source of revenue for them, often providing more revenue than any other product line. Therefore our distributors have a lot of incentive to focus on our products and to use their extensive sales force to focus on Xilinx. This is another win-win partnership that helps both companies adapt to the inevitable ups and downs of the business cycles. Our customers also benefit from the broad range of services provided by our distributors.

At Xilinx, average revenue per employee is \$600K; many companies with in-house sales teams are fortunate to have \$200,000/year/employee. By keeping our sales costs low, we can put more resources into research and development which keeps us on the leading edge of technology, and makes our customers and our investors very happy.

For software support, we partner with the industry's leading software and development tool suppliers to make sure that you have access to the broadest range of tools and support. We work very closely with the leading software suppliers to make sure that our tools work well together. Though we have a massive in-house effort for software development we also know how important it is to provide you with the new tools and processes that are constantly being created in the marketplace.

For research, we partner with universities and research centers around the world to access the latest developments. Plus, the Xilinx University Program is helping train engineering students in the use of programmable logic devices by providing donations, discounted products, and services. Today there are over 1200 universities using Xilinx in class labs; about 15% of all of the engineering universities worldwide.

### The Xilinx Value System

Values are what holds any organization together and define the boundaries within which its employees can efficiently function. Too often a company's values are undefined however and this leads to erratic results and confusion.

To help us manage and balance the Xilinx business ecosystem, we developed a clear and consistent set of values that we live by. In part, these values are the boundaries that allow our managers the room to innovate and to take ownership of their functions. Our values also help to make Xilinx a great place to work which inevitably leads to better products, happier customers, and increased profits.

Our values are contained within the acronym "CREATIVE" which stands for:

- C** **Customer Focused.** We exist only because our customers are satisfied and want to do business with us... and we never forget it!
- R** **Respect.** We value all people, treating them with dignity at all times.
- E** **Excellence.** We strive for "Best in Class" in everything we do.
- A** **Accountability.** We do what we say we will do and expect the same from others.
- T** **Teamwork.** We believe that cooperative action produces superior results.
- I** **Integrity.** We are honest with ourselves, each other, our customers, our partners, and our shareholders.
- V** **"Very" Open Communication.** We share information, ask for feedback, acknowledge good work, and encourage diverse ideas.
- E** **Enjoying Our Work.** We work hard, are rewarded for it; and we maintain a good sense of perspective, humor, and enthusiasm.

### Conclusion

Many companies—even successful ones—view themselves as adversaries with their customers and with their marketplace, often using military tactics and focusing on winning at all cost. We think there is a better way.

To become successful, and remain competitive, high technology companies must view themselves as part of a synergistic whole that includes customers, strategic partners, employees, investors, and government. At Xilinx, our role is to maintain the dynamic balance of this system, and to keep it growing and expanding in a way that makes everyone more whole and prosperous.

When you work with Xilinx, you'll see what a positive difference our "ecosystem" attitude can bring to your long term success.

