

**The Silicon Valley Edge:  
A Habitat for Innovation and Entrepreneurship**

Edited by

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What is the secret of Silicon Valley? *The Silicon Valley Edge*, written by researchers and practitioners from the Valley, provides an answer. They argue that what distinguishes the Valley is not its scientific advances nor technological breakthroughs, but rather a special “habitat” or environment that is finely tuned to turn ideas into products and take them rapidly to market by creating new firms. This habitat includes supportive government regulations for new firm formation, leading research universities that interact with talent, an exceptionally talented and highly mobile workforce and experienced support services in such areas as finance, law, accounting, headhunting, and marketing—all specialized in helping new companies form and grow. The authors are leaders from each part of this habitat who reflect on what makes Silicon Valley tick.

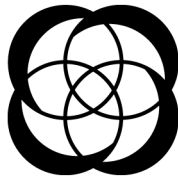
For the regional steward interested in learning more about the innovative economy, this book provides important information about what makes a region successful today. At the top of the list is the importance of both economic and social networks. The authors point out that in Silicon Valley, networks of specialists form communities of practice within which ideas develop and circulate and from which new products and new firms emerge. One of the key characteristics of these networks is that they usually cross organizational boundaries. We find that innovation is a social process where people and relationships matter most. This story is told again and again.

**The Importance of Regions in Innovation**

One of the most interesting chapters in this book is by John Seely Brown, former Director of Xerox PARC and Paul Duguid of Berkeley. Titled “Mysteries of the Region”, this chapter finds that “shared practice, face-to-face contacts, reciprocity and swift trust, all generated within a network of practice are critical to the region’s success. New communications technologies can certainly reinforce these, but it is doubtful that they can readily replace them”. In short, they make the case that regions matter in the new economy.

Brown and Duguid conclude as follows:

We have tried to show that localization meets the demands of knowledge. At least with the current communications technologies, regional clusters will continue to exist in exactly those industries where fast-breaking knowledge is at a premium. Those wanted to develop robust knowledge economy need to learn how to develop a robust knowledge ecology.



For those interested in more insights from John Seely Brown should read *The Social Life of Information* (Harvard Business School 2000)

### **Regional Habitats & Regional Stewards**

The editors of the book highlight ten features of regional habitats:

1. Favorable rules of the game
2. Knowledge intensity
3. High quality mobile work force
4. Result-oriented culture
5. A climate that rewards risk-taking and tolerates failure
6. Open business environment
7. Universities and research institutes that interact with industry
8. Collaboration among business, government and nonprofit organizations
9. High quality of life
10. A specialized business infrastructure

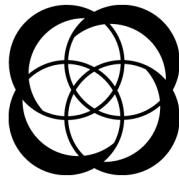
As important as these individual elements is the ability to connect these assets in a mutually reinforcing manner. As Paul Romer, the Stanford Economist and leader in new growth theory, says, “its not the ingredients, it’s the recipe”.

One of the most interesting aspects of this book is the role that regional leadership has played at every step of the evolution of the Silicon Valley habitat—from the early days of Stanford Dean Fred Terman and Hewlett Packard co-founder David Packard to the current efforts of business, education, government and community leaders to improve the quality of life of the region through efforts such as Silicon Valley 2010. Regional stewardship continues to play a key role in the life of the Valley.

### **What Next?**

It is fair to ask what impact the technology slowdown that began in 2000 will have on Silicon Valley. Clearly, job growth has slowed from its peaks of the mid 1990s; technology firms began announcing layoffs in early 2001. The gold rush era of venture-funded dot-coms is over. Will Silicon Valley survive an Internet recession?

Two factors are worth considering. A recent study by Brookings on technology industries found that Silicon Valley is the most diverse technology region in the country. It is not one technology sector but several. The Internet, software, computer and communications equipment and semiconductor sector are related, but their cycles don’t always move in the same direction at the same time. There is diversity within the habitat.



Second, history shows that the Valley has evolved through at least four major cycles over the last 40 years, each with an S curve quality. Initial defense spending drove the Valley but that slowed down in the early 1970s. The integrated circuit took off in the 1970s and drove the semiconductor industry boom that lasted into the mid 1985, when Intel laid off 10,000 due to foreign competition. Next, the personal computer revolution driven by Apple and others lasted from the mid 1977s to the late 1980s when personal computers became a commodity. Finally, the latest Internet wave began in the early 1990s and created a bubble that has not broken.

Here is the lesson for us all: Joseph Schumpeter, the economist best know for coining the phrase “creative destructive” described an uneven economic development process driven by new technologies that create opportunities for entrepreneurs. “Swarms of new firms” rush into the opportunity followed by an inevitable consolidation. These waves are the natural result of innovation and entrepreneurship. Viewed in this light, an innovative region must expect uneven growth. The real question is whether a regional habitat is resilient – can its networks of talent adjust and prepare for the next opportunity? My bet for the Silicon Valley habitat is that it will continue to lead on innovation and entrepreneurship. Read this book and you will see why.