The Creative Community

Leveraging Creativity and Cultural Participation for Silicon Valley's Economic and Civic Future

The Creative Community

Working Paper

February , 2001

Prepared for:

cultural initiatives silicon valley

Prepared by:
Collaborative Economics

About This Paper

"A creative economy is the fuel of magnificence."

— Ralph Waldo Emerson

Cultural Initiatives Silicon Valley champions the implementation of a regional strategy to develop the cultural and creative aspects of Silicon Valley life. The group, led by a board of private, public, and civic leaders, has launched a new project to develop a Culture and Creativity Index.

The Index will track progress toward creating a more vital, connected cultural and creative environment in Silicon Valley. As a communication and engagement tool, the Culture and Creativity Index can spark a regionwide discussion about how essential cultural and creative capacities are to the long-term vitality of Silicon Valley.

This Working Paper serves as an input to the Advisory Group that will oversee creation of the inaugural Culture and Creativity Index. The purpose of the paper is to:

- **Articulate why becoming a Creative Community is important to Silicon Valley's future.**

- **Create a framework that identifies the core elements of a Creative Community and the relationships among them.**

The framework created with the Advisory Group will be used to structure the identification and development of quantitative measures of progress.

Kim Walesh and Doug Henton of Collaborative Economics prepared the Working Paper. The authors welcome comments (walesh@coecon.com).

TABLE OF CONTENTS

About This Paper

Opportunity: A Regional Renaissance for Silicon Valley 1

Creative Communities in History 1

What Do We Know about Creativity? 4
Creativity Is Fundamental
Creativity Is Both Individual and Collaborative
Creativity Is Influenced by Place

What Do We Know about Cultural Participation? 7
Cultural Participation Builds Social Capital
Cultural Participation Connects People to Place
Cultural Participation Develops Creative Capacities

Silicon Valley Needs to Leverage Creativity and Cultural Participation for Its Economic and Civic Future 9

New Economics Values Creativity. Creativity is essential for the new economics of Silicon Valley as the region moves from a material to a weightless economy. Cultural participation develops the very skills that will be required by the Silicon Valley workforce as a whole. 9

Creative Sector Is a Key Part of Innovation "Habitat."
The creative and cultural sector–including commercial businesses, nonprofit institutions, and independent artists–is becoming a more important part of Silicon Valley's innovation "habitat." 10

Culture Connects People and Place. Talented people–the Valley's most important input and import–are increasingly sophisticated consumers of place. Cultural participation can help bind Silicon Valley people to each other and to the place. 12

Civic and Social Creativity Is Vital. Creativity is urgently needed to address civic and social concerns in Silicon Valley. Cultural participation opens the door to civic and social creativity. 12

Fostering a Creative Community: Measuring Progress 14

References 16

Opportunity: A Regional Renaissance for Silicon Valley

Clearly, Silicon Valley's reputation for excellence lies in its technological and economic achievement. Building on this base and the incredible milieu for business innovation, Silicon Valley can pioneer the next-generation metropolitan community.

We have the opportunity: to spark a "Regional Renaissance" in Silicon Valley that evolves Silicon Valley into the world's first true Creative City-Region, where creativity leads not only to continued technological excellence, but to artistic, cultural, and civic innovation. The region can be the first in history to consciously develop and connect creative capacity across business and cultural realms.

This paper argues that moving in this direction is essential not just for achieving a higher-quality community in the near future, but for securing the Valley's long-term economic and civic achievement.

"Silicon Valley has been the creative hotbed of the new economy. It is time to channel that creativity to make the Valley a better place to live."

Alberto Torres, McKinsey & Company

Creative Communities in History

Lessons from the creative experience of great cities in history shape Silicon Valley's opportunity today.

Throughout human history, certain cities and regions have emerged as pinnacles of human creativity. Peter Hall, in his landmark book, *Cities in Civilization*, examines the combination of forces that fostered particular cities as centers of cultural, technological, or civic excellence. Hall finds that, historically, cities have tended to excel in a single realm. He holds open the possibility that a truly creative city of the twenty-first century will excel in multiple realms, building on the creative fusion of art and technology that began to emerge in twentieth-century America.

Hall's research aimed to answer the question "What makes for a creative city?" (To date, creativity research has tended to focus on exceptionally creative individuals or on creative processes in the arts and business. Few people besides Hall have written explicitly on the factors underlying creative places.)

Hall first studied the experiences of five cities that reached cultural zeniths—their "Belle Epoques"—in their respective eras: Ancient Athens; Renaissance Florence; London, Vienna, and Paris in the nineteenth century; Berlin in the twentieth. Hall finds a number of common factors that worked together to foster a particularly creative cultural environment in each city:

- *Rapid accumulation of new wealth* in new hands during a time of rapid economic transition. All these cities experienced a highly skewed income distribution during this period of economic transition.

- *Attraction of talented and ambitious* people, bringing new ideas, worldviews, and an understanding of the significance of the period and passion to influence its unfolding.

- *Crossroads of culture* where information from different traditions was exchanged and synthesized through "interculturalism" and trade.

- *Social and values tension* including a clashing of new values with traditional values that leads to new lifestyles, roles, relationships, and bases for class distinction.

- *Reconfiguration of social networks* as individuals from different occupations and positions in society—such as intellectuals, wealth makers, artists, and aristocrats commingled—in new relationships, leading to cross-fertilization of ideas and perspectives.

- *High civic aspirations and collective action* as individuals and associations (e.g., professional, business, and civic associations) expected and demanded that the public aspects of their city be great.

- *Physical places that fostered interaction* and mixing of people with diverse talents and views, such as plazas, salons, meeting houses, and cafes.

Similarly, Hall studied places that spawned economic and technological innovation, such as Manchester during the Industrial Revolution, Berlin as the high-tech industrial center of the nineteenth century, Henry Ford's Detroit, and Silicon Valley. Here, too, some commonalties emerge:

- *Heroic tradition* of individuals inventing, innovating, and building new industries.

- *Edge cities in transition*, as the commercial innovation emerged not in leading cities, but in developing areas.

- *"Outsider" inventors and entrepreneurs*—people from middle-class backgrounds, often self-taught.

- *Egalitarian culture, relatively* free of tradition, hierarchy, and social distinction, with commerce defining new relationships.

- *Local networks of talent and services* that fostered learning through competing and cooperating both informally and through associations, guilds, and trade unions.

- *"Creative destruction"* as new inventions and business practices displaced older ways.

Hall points to Hollywood (film industry, 1920–45) and Memphis (recording industry, 1948–56) as places that started to marry cultural and technological creativity. He believes that the innovative cities of the coming golden age will develop a creative union of technology, arts/culture, and civics:

> These new technologies arise from the same creative spark: the same rules apply to art and culture as to that more mundane but equally momentous kind of creativity which results in major technological advance and thus in new objects, new industries, new modes of production.… And, during the twentieth century, first and most obviously in America, artistic and technological innovation have increasingly and creatively fused: in movies, in television, in recorded music, finally and perhaps most excitingly in multimedia. Essentially these two great modes of innovation, long since seen as separate and contraposed, have become one; and the implications are still exploding around us. (Peter Hall, 1998.)

The joint evolution of technological and cultural creativity may prove not just interesting but essential. As British author Charles Leadbeater points out in *Living on Thin Air: The New Economy*, "culture—not science, technology or even economics—will determine how deeply embedded the new economy becomes in our daily lives…. Economic and scientific modernization succeeds when it is accompanied by cultural creativity that revolutionizes the way we see the world."

"The innovative cities of the coming age will develop a creative union of technology, arts, and civics."

Sir Peter Hall,
Cities in Civilization

Common Factors of Creative Cities

Culturally Creative Cities	Technologically Innovative Cities
High civic pride, aspirations	Heroic tradition
New wealth in new hands	Nonhierarchical societies
Economic transformation	Edge cities in transition
Connected social networks	Local networks of specialized talent and services
Influx of talented, ambitious outsiders	Outsider inventors and entrepreneurs, often self-taught
Social tension, clashing values	Creative destruction because of new inventions

Athens	**500–400 BC**	**Manchester**	**1760-–1830**
Florence	**1400–1500**	**Glasgow**	**1770– 1890**
London	**1570–1620**	**Berlin**	**1840– 1930**
Vienna	**1780–1910**	**Detroit**	**1890– 1915**
Paris	**1870–1910**	**Silicon Valley**	**1950– 1990**
Berlin	**1918–1933**	**Tokyo**	**1890– 1990**

Creativity Across Cultures
Hall's research examined "western cities"—those belonging to the cultural stream that was born in Athens and reborn in Florence. But no doubt, stories of creative cities could also be told from other culture streams: the Muslim world from the seventh century to the fifteenth, of the Indian subcontinent of the post-Gupta period, and of the five thousand years of Chinese cultural history.

What Do We Know about Creativity?

"Artists and entrepreneurs are similar in wanting to create something new—the next big thing."

Todd Flynn, SmartCalendar, Inc.

Merriam-Webster's Collegiate Dictionary defines creativity as "the ability to bring something new or original into being." But beyond this simple definition, *what has anyone learned about creativity that is important for thinking about Silicon Valley's future?*

Creativity Is Fundamental

We traditionally think of creativity as an attribute of an artist or the arts. Yet creativity is a broad, fundamental notion. Historically, the application of creativity has proved critical across the breadth of human enterprise: commerce, philosophy, science, the law, aesthetics, the trades, even athletics. For understanding the importance of creativity in Silicon Valley today, three areas are of particular interest.

- *Technological and Business Innovation*—Creativity in the economy is about devising new products, services, technologies, industries, and ways of doing business. Creativity has produced breakthrough technologies and business models: the merchant bank, the printing press, the entrepreneur, the modern corporation, the semiconductor, the venture capitalist, the World Wide Web. Silicon Valley pioneered a new kind of economy that competes on innovation—the generation and application of new ideas. Innovation results from creative people and the creative process.

- *Artistic and Cultural Innovation*—Creativity is also about advancing the fine and the performing arts, literature, commercial arts, popular culture, and avocational or amateur arts. Creativity has produced entirely new forms of literature, painting, dance, music, architecture, and other aesthetic expressions that have radically altered our relationship to each other and to the world. Silicon Valley is at the edge of the development of new media and new mediums for exploring artistic expression. And the implications of how the new economy of Silicon Valley is reshaping our lives are wide open for artistic exploration and examination.

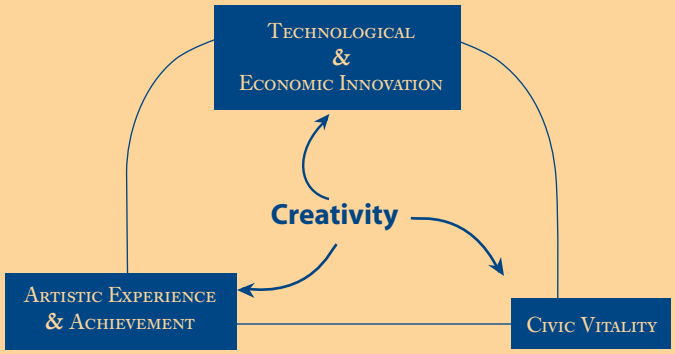
- *Civic Innovation*—Creativity in civic life has produced a range of public innovations in the built environment and in social institutions: the apartment block, the aqueduct, the subway, the skyscraper, public education, social security, and democratic institutions. In Silicon Valley today, creativity is also key to improving how we live together as a community and how we solve the civic challenges associated with growth and technological advances, including social cohesion, urban form, educational opportunity, and environmental stewardship.

Thinking broadly about the application of creativity in Silicon Valley leads to a working definition:

Creativity is the process by which ideas are generated, connected, and transformed into things that are valued.

This broad notion of creativity encompasses innovation, entrepreneurship, and expression. It connotes both the art of giving birth to new ideas and the discipline of developing, sharing, and applying those ideas to the stage of realized value. (See John Kao, *Jamming*.)

Silicon Valley as a Creative Community



"It is a dangerous myth to view innovation as dependent on a handful of exceptionally creative individuals."

Dorothy Leonard, Harvard Business School

Creativity Is Both Individual and Collaborative

We often think of creativity as the province of the exceptional individual—the creative genius. The lone inventor tinkering in the garage and the solitary artist consumed with a new work are part of our popular mythology. Clearly, we all know of individuals with special creative powers, who seem to "hear into life" differently than the rest of us and have exceptional abilities to transform and share their vision.

Yet research and experience also show that everyone has the ability to create and that creativity is also a collaborative process.

In business, innovation results from a creative process that typically occurs in groups. In her book *When Sparks Fly*, Professor Dorothy Leonard of the Harvard Business School finds that "creativity in business is a group exercise." She points out that it is a dangerous myth to view innovation as dependent on a handful of especially creative individuals. Every person has the promise of being creative, and that creativity can be unleashed as groups of people interact through a creative process. Carly Fiorina, CEO of Hewlett-Packard, recognizes that "innovation comes from working together." And the more diverse and unbounded the people, views and ideas, the more creative sparks fly.

Workers in Silicon Valley recognize this social side of innovation implicitly when they talk about the value of being part of a "hot team" or a "technology community." As workers move from team to team or company to company, they gain and share personal experience and know-how, or "tacit" knowledge. Face-to-face interaction and information exchange leads to rapid advances in an iterative, trial-and-error learning process.

In the arts, also, creativity is often a collaborative process. Creating and sharing art—whether as a spectator, participant, performer, or producer—is an inherently public and social experience. Artistic exchange is a form of communication that makes common an idea or emotion. Like creativity in the economic realm, creativity in the artistic realm is about exchanging ideas and perspectives and welcoming and building upon difference.

Creativity Is Influenced by Place

If creativity is among other things a social process, then the qualities of a particular environment or place matter. Surroundings—both the immediate environment and the macroenvironment—can affect the creative capacity of individuals and the likelihood of realizing that potential.

Even research on exceptionally creative individuals shows that personal factors as well as environmental factors affect the person's creative development and contributions. Clearly, certain people are born with special talents and passions. However, factors such as parental encouragement and early educational experiences make a difference in nurturing the creative potential of all individuals, whether exceptionally gifted or not.

Although creativity is not determined completely by outside factors, the nature of creative surroundings does matter. The right environment can foster the unfolding of creativity. University of Chicago creativity expert Mihaly Csikszentmihalyi describes how creativity happens as a person interacts with a larger system, including place or environment. The place where a person lives affects the degree to which the person will accept novel ideas and resources will be available to support creative pursuits. It affects the person's access to particular kinds of information, learning opportunities, or problems that need solution. Csikszentmihalyi writes that "certain environments have greater density of interaction and provide more excitement and an effervescence or ideas" that prompt a person to break away from conventions to experiment with novelty.

In science and business, as in art and culture, information grows much faster in "hot spots" where concentrations of people—including perceived "outsiders"—interact in close physical proximity. John Seely Brown writes in *The Social Life of Information* that these "clusters of dense cross-hatched relationships of practices and processes act as ecologies of knowledge." The information and ideas born of this ecology realize value in the context of these social networks.

A creative place, or creative community, is a geographic area with a concentration of creative people, businesses, and organizations. Sometimes this area appears also as a "creative milieu." This creative milieu fosters constant cross-fertilization of ideas across disciplines, ethnicities, and professions.

"At Xerox PARC the artists revitalize the atmosphere by bringing in new ideas, new ways of thinking, new modes of seeing, and new contexts for doing. All of these innovations mulch the soil and plant new unexpected seeds."

John Seely Brown, Xerox PARC

What Do We Know about Cultural Participation?

"Cultural participation" includes experiencing the visual and performing arts, as well as the range of activities that bring people together to interact, experience, share, and enjoy human expression. It includes amateur arts, community celebrations, festivals, vibrant public spaces where people gather, recreational tournaments, and neighborhood barbecues.

What have we learned about cultural participation that is important for thinking about Silicon Valley's future?

Cultural Participation Builds Social Capital

Cultural participation helps build a more cohesive, connected community. Evidence is growing that the long-term health of communities and economies is tied to a healthy stock of social capital—bonds of trusting, knowing, reciprocal relationships.

As a form of civic engagement, cultural participation is an important way of strengthening social capital. Professor Robert Putnam of Harvard University explains that some civic engagement—voter education, neighborhood watch, attending community meetings—can be like "civic broccoli": important and purposive, but not necessarily fun or inspiring. In contrast, people often participate in the arts and culture for sheer enjoyment.

Arts and cultural activities can play a critical role in connecting people across differences, helping them to express commonalties and value differences. As people participate in enjoying an activity together—whether it be singing in a choral society or attending an ethnic street festival—they connect with one another and form personal bonds. Because cultural participation often provides a neutral meeting ground, it is particularly conducive to bridging differences, be they socioeconomic, ethnic, educational, or generational. The stronger our capacity to identify with people different from ourselves, to see and appreciate their perspective, the stronger the social fabric of a community will be. The ability to see a problem or experience a phenomenon from a variety of perspectives is also important for teamwork and innovation in business. Cultural participation can function on a very human, personal, and emotional level, yielding friendships and trust of special intensity.

"Through participation in cultural activities, people get to know one another and become aware and proud of the resources of a common community."

Harry Saal,
Civic Entrepreneur

Opportunities to create social capital through cultural participation are highest when people are involved as active participants or presenters of an activity; opportunities are lowest when the people are primarily spectators (e.g., looking at a painting, listening to a concert). Putnam writes:

> To build bridging social capital requires that we transcend our social and political and professional identities to connect with people unlike ourselves. This is why team sports provide good venues for social-capital creation. Equally important and less exploited in this connection are the arts and cultural activities. Singing together (like bowling together) does not require shared ideology or shared social or ethnic provenance. For this reason, among others, I challenge America's artists, the leaders and funders of our cultural institutions, as well as ordinary Americans: Let us find ways to ensure that by 2010 significantly more Americans will participate in (not merely consume or "appreciate") cultural activities from group dance to songfests to community theater to rap festivals. Let us discover new ways to use the arts as a vehicle for convening diverse groups of fellow citizens.
> Art manifestly matters for its own sake, far beyond the favorable effects it can have on rebuilding American communities. Aesthetic objectives, not merely social ones, are obviously important. That said, art is especially useful in transcending conventional social barriers. Moreover, social capital is often a valuable by-product of cultural activities whose main purpose is purely artistic. (Putnam, 2000.)

Participation in arts and culture is a step toward engaging people more broadly in other elements of civic life—life beyond their family and work.

Cultural Participation Connects People to Place

By creating a sense of connectedness and belonging, cultural engagement builds connection to place. As people develop connections to others and feel valued for their contributions, they become more tied to place. This issue is increasingly important as people become increasingly mobile and sophisticated consumers of place.

Some cultural activities themselves have a particular emphasis on introducing people to the unique history or character of their place or celebrating what is special. Historical celebrations, community rituals, and ethnic festivals are all ways of developing a sense of place. One of the best examples is the Palio of Siena, Italy. The Palio is a twice-yearly one-minute horse race that expresses the heart and soul of the Sienese and their community. Feasts, processions, festivities surround the Palio, fortifying both strong neighborhood identities and the shared community, religious, and artistic traditions of Siena.

Participating in cultural traditions and social interactions in neighborhood settings is a particularly powerful way of creating shared ownership of the community. In New Orleans, for example, historical traditions promote strong identification with neighborhood through "krewes"—the long-standing masking and parading clubs associated with Mardi Gras. Through these associations, children receive early exposure to the rituals and art forms that help define their community. They grow up feeling connected to other children and adults in their neighborhood. Adults share daily life as well as major life-cycle events in a smaller community, even as they work and move through the broader region.

Developing connection to place is increasingly important in our highly mobile society and can help overcome the sense of isolation and rootlessness that people feel living far from extended family and their community of origin.

"Our culture is where our shared meanings are created and where we create our identity as a people. In a world of cyberspace the local will have to be brought back. You'll have to have intimacy, rootedness, a sense of place."

Jeremy Rifkin,
Wharton School of Business Fellow

Cultural Participation Develops Creative Capacities

Participation in arts and cultural activities helps develop creative capacities and plays a critical role in the personal growth of both youths and adults.

Arts and cultural programs play a particularly important role in the development of young people. Research reports that consistent participation in arts programs leads to increased academic, emotional, and creative achievement. For example, a recent study found significant association between high creative thinking abilities among fourth- through eighth-grade students and high levels of arts education (Burton et al. 1999). In addition, high school students participating in after-school arts programs demonstrated increased abilities in theory building and predicting; creating analogies; demonstrating, explaining, and negotiating; and displaying and assessing their work (Heath 1999). Participation in arts and culture has a positive effect on students' ability to process information intellectually and emotionally, making the students better equipped to address challenges and achieve creative solutions.

Engagement in cultural activities is beneficial in a number of ways. As creative thinkers and doers, both children and adults are better positioned to assimilate new skills, adapt to changes, and seize opportunities for personal success. Individuals who have consistent opportunities to "practice" creativity are more tolerant of ambiguity and are more likely to stick with a problem until they find a viable solution. In addition, cultural participation allows individuals to spend physical and mental time "off task," away from the immediate demands of work and home. Research attests that this balance leads to reflection—or "incubation" time—and increased creativity and productivity back at work.

"Both children and adults need time and places to practice creativity. This can be at school, at work, at home, or many places in the community."

Nancy Glaze,
David and Lucile Packard Foundation

Silicon Valley Needs to Leverage Creativity and Cultural Participation for Its Economic and Civic Future

Building on its economic and technologic success, Silicon Valley can become a new kind of Creative Community, leveraging creativity and cultural participation to sustain a prosperous economy and achieve a vital community. The region can evolve a distinctive identity as a place that nurtures creative exchange and cultural connections among people—a cultural milieu.

Becoming a Creative Community is essential for sustaining the technology economy and for strengthening fundamental elements of community vitality—social capital, sense of place, civic spirit, community innovation. As we look to the not-so-distant future, we see four main reasons why Silicon Valley needs to value and nurture creativity and cultural participation in a fundamental way:

1 ***New Economics Values Creativity.*** Creativity is essential for the new economics of Silicon Valley as the region continues moving from a material to a "weightless" economy. Cultural participation helps develop the creative skills that will be required by the Silicon Valley workforce as a whole.

2 ***Creative Sector Is a Key Part of Innovation "Habitat."*** The creative and cultural sector—including commercial businesses, nonprofit institutions, and independent artists—is becoming a more important part of Silicon Valley's innovation "habitat."

3 ***Culture Connects People and Place.*** Talented people—the Valley's most important input and import—are increasingly sophisticated consumers of place. Cultural participation can help bind Silicon Valley people to each other and to the place while providing a unique quality-of-life asset for all.

4 ***Civic and Social Creativity Is Vital.*** Creativity is urgently needed to address civic and social concerns in Silicon Valley. Cultural participation opens the door to civic and social creativity and can inspire more visionary strategies and novel approaches.

If we enhance Silicon Valley's creative and cultural life and connect it more deeply to economic life, Silicon Valley's legacy to future generations and the world will be not only a new kind of economy, but a new and improved kind of world community.

1 *New Economics Values Creativity.* *Creativity is essential for the new economics of Silicon Valley as the region moves from a material to a weightless economy. Cultural participation develops the very skills that will be required by the Silicon Valley workforce as a whole.*

As the nature of the economy has changed, so have the factors that play a critical role in economic growth. We see a shift from a focus on material inputs toward a focus on creativity.

Stanford economist Paul Romer has pioneered a new economic growth theory that highlights the role of ideas and innovation in economic progress and illustrates the shift that Silicon Valley is pioneering. Romer argues that ideas are the primary catalyst for economic growth. New ideas generate growth by reorganizing material goods (natural, human, capital resources) in more efficient and productive ways.

> We used to use iron oxide to make cave painting, and now we put it on floppy disks. The point is that the raw material we have to work with has been the same for all human history.

"This is the age of creativity because it is the age of knowledge."

John Kao,
Stanford University

> So when you think about economic growth, the only place it can come from is finding better "recipes" for rearranging the fixed amount of stuff we have around us. (Romer, 2000.)

The great advances in modern economies will come from developing and applying new recipes—the new ideas that come from the creation and innovation process.

The Valley has moved quickly through a series of economic stages in the past 60 years fueled by innovation.

- Defense (1940–60): driven by mechanical and electronic technologies such as missiles, radar, and avionics
- Semiconductors (1960–80s): driven by engineering and microelectronics
- Personal computers (1980–90): driven by engineering and design
- Software and the Internet (1990–2000): driven by design and service

In the earlier eras of Silicon Valley's economy, the key ingredient for success was the ability to manufacture new technology products such as transistors, semiconductors, and computers. The dominant skills were in engineering and electronics, and knowledge was based in science and physics. Since the late 1980s, the shift has been toward software, with a growing reliance on creative design. The Silicon Valley economy has become more "weightless" as value shifts toward information, knowledge, services, and design rather than the engineering and manufacture of goods.

The economic necessity of this shift is clear. As labor and land costs rise and competition intensifies, Silicon Valley companies continuously seek higher value and productivity by creating and applying new ideas and recipes that allow firms to compete in terms of innovation rather than cost. The shift from cost-driven commodities leads to a focus on creative design, customized products and services, time to market, and intellectual assets.

An indicator of the increasing importance of creativity to business is the growing marketplace for ideas themselves. Alberto Torres of McKinsey & Company's Silicon Valley office points to the growing marketplace for intellectual property as an indicator of the value of ideas both in and outside of companies. The total estimated royalty revenue among all companies is $100 billion and is likely to grow dramatically in the next few years.

Cultural participation, including arts and creative education, develops the very skills and personal qualities that will be required of the Silicon Valley workforce as a whole. These skills and qualities include analysis, synthesis, and critical judgment; curiosity and imagination; the ability to work as a team; and an understanding of and appreciation for diversity. Arts education also has a demonstrated effect on attitude, aptitude, and self-esteem—critically important in an economy and workplace that demand initiative and resilience.

Some Valley companies are starting to understand cultural participation as a human resource development tool. C. J. Van Pelt, executive director of the Cisco Foundation, explained the strategic reason why her company gave $1.2 million to local arts and cultural groups last year: "We hire very creative people, and the arts encourage that creativity."

"We hire very creative people, and the arts encourage that creativity."

C. J. Van Pelt, Cisco Systems

"Is a web page designer an artist? If so, the internet has expanded the artistic class a hundred-fold. But web art isn't localized and doesn't contribute the same sense of place as traditional art and cultural activity."

Todd Flynn, Smart Calendar, Inc.

2 ***Creative Sector Is a Key Part of Innovation "Habitat."*** *The creative and cultural sector—including commercial businesses, nonprofit institutions, and independent artists—is becoming a more important part of Silicon Valley's innovation "habitat."*

The Silicon Valley Edge: A Habitat for Innovation and Entrepreneurship William F. Miller et al., Stanford University Press, 2000 describes the business environment of the Valley and the critical role that innovation and creativity play in this community. The book argues that "what

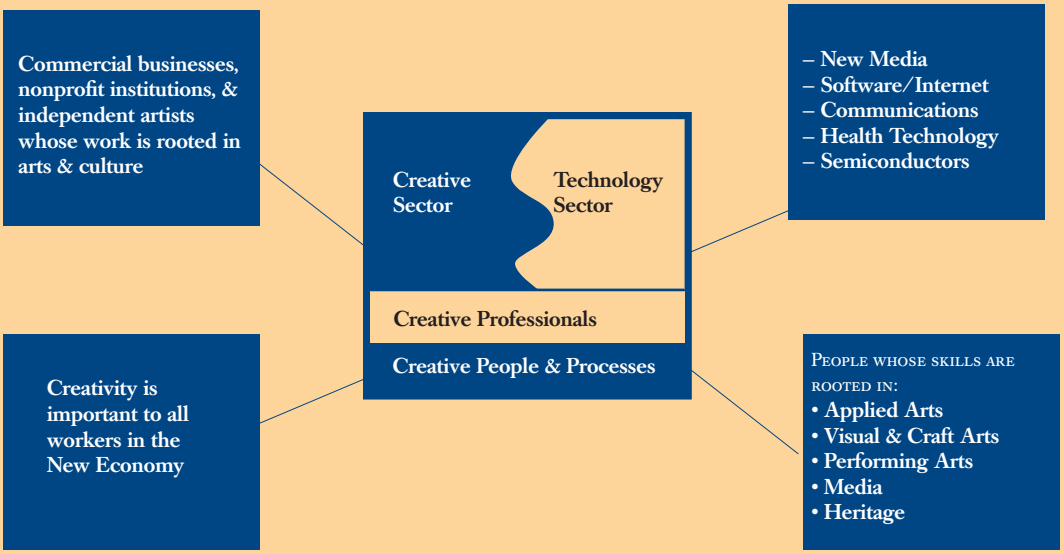
distinguishes the Valley is not its scientific or technological breakthroughs. Instead, its edge derives from a 'habitat' or environment that is tuned to turn ideas into products and take them rapidly to market by creating new firms." Networks of specialists form communities of practice within which ideas incubate and circulate and from which new products and new firms emerge.

This Silicon Valley habitat includes leading research universities that interact with industry, an exceptionally talented and highly mobile work force, and experienced and adaptive support services in finance, law, accounting, and marketing—all specialized in helping companies form and grow. In this habitat are a growing number of people in creative professions and industries, including advertising, design, commercial arts, and new media.

More and more, the development, production, marketing, and sales of technology products involve people trained in artistic skills. Graphic designers, creative writers, photographers, animators, and music producers are taking their place in the technology workforce. Career prospects for creative professionals, confined previously to the nonprofit sector or margins of the private sector, have widened dramatically. People trained in the applied arts, visual arts, literary arts, and media are in demand as technology companies race to make products engaging, exciting, and pleasing. They increasingly find themselves working in technology companies doing Web-site design, commercial video production, on-line publishing, product marketing, and corporate communications.

The "creative sector" itself is growing in importance in the world economy. Traditionally, people think of the creative sector as primarily nonprofit arts and cultural institutions, such as museums and performance groups. Leading regions—including New York, London, Austin, Boston, and Portland—are redefining the notion of the creative sector to recognize and reinforce the growing role the commercial creative sector—companies and self-employed individuals who produce or distribute products, content, and services rooted in arts and culture. Examples range from graphic design to industrial design, advertising to architecture, video producers to on-line publishers and commercial art galleries.

Silicon Valley's Creative Economy: Blurring Boundaries, Expanding Importance



3 ***Culture Connects People and Place.*** *Talented people—the Valley's most important input and import—are increasingly sophisticated consumers of place. Cultural participation can help bind Silicon Valley people to each other and to the place.*

To compete for the best talent in a global marketplace, Silicon Valley must provide not just economic opportunity but a distinctive lifestyle advantage.

In the old economy, talent moved to where the work was, often at the insistence of the employer. (Remember when *IBM* stood for "I've Been Moved?") In the early stages of the new economy, this pattern has continued as people have flocked to Silicon Valley for economic opportunity, albeit by personal choice. However, as the new economy advances to other regions globally, knowledge workers have an expanding range of places where they can pursue professional interests. Evidence shows that lifestyle factors are becoming as important as economic opportunity when professionals decide where to live. This shift is especially important when workers reach a stage of life where they think about putting down roots and developing more permanent connections to a community.

Silicon Valley residents rate the region high as a place to work and low as a place to live. The region's external reputation increasingly reflects this dichotomy: the negative aspects of the Valley's lifestyle and life quality contrasted with the region's enviable standard of income. As the economy and dot-com euphoria begin to cool and the costs of economic success become apparent, people are starting to talk about life beyond economic success. Can we make a good income, create innovative products, *and* live a good life? Can we create a rich community life that gives meaning and purpose to the tremendous wealth the Valley has created?

Development of an attractive cultural life will help people develop more permanent connections to Silicon Valley as a community and serve as an important counterbalance to the Silicon Valley work culture. The Valley may no longer be able to offer standard quality-of-life assets, such as an affordable house, but it can and must develop a new set of assets that are equally attractive to knowledge workers—or more so. These assets include tangibles—quality arts and cultural offerings, quality public spaces, beautiful architecture, accessible open space, walkable neighborhoods—as well as intangibles, such as intercultural interaction, varied lifestyle opportunities, civic spirit, sense of place.

Expanded cultural participation can build a more cohesive, connected Silicon Valley community. The Valley is particularly challenged to create and sustain social capital because of its rapid growth and extraordinary diversity—geographic, cultural, educational, socioeconomic, generational. By creating a sense of connectedness and belonging, cultural participation builds connection to place.

4 ***Civic and Social Creativity Is Vital.*** *Creativity is urgently needed to address civic and social concerns in Silicon Valley. Cultural participation opens the door to civic and social creativity.*

Creative people have a passion for solving problems. Now is the time to direct Silicon Valley's creative capacity to address the challenges associated with living together in the new economy. Though Silicon Valley is known worldwide for technical innovation, it needs civic and social innovation to solve the challenges associated with growth, technological advances, and societal change. Collectively, can we create a new urban form, new educational opportunities, new ways of helping people, and new forms of environmental stewardship aligned to the realities and promise of the new economy? In the 1990s, Silicon Valley's established business community started to get involved in solving civic problems.

"The quality of life in Silicon Valley must be consistent with the technology innovation that is going on here. There's a risk that we may have hit a plateau and will not be able to attract new employees and their families anymore."

Mike Hackworth, Cirrus Logic

We also started to see exciting innovation in the philanthropic sector. Yet civic innovation is far from being widely valued in Silicon Valley, and the emerging generation of business leaders has yet to demonstrate regional stewardship.

Cultural participation can play an expanded role in addressing social and civic issues, such as education, youth –at risk, healing therapy, neighborhood renewal, and criminal reform. As we mentioned earlier, cultural participation can play a critical role in building social capital in a community. This social capital, coupled with a creative orientation, is a powerful tool for addressing social and civic concerns. Because cultural participation often provides a neutral meeting ground, it is particularly conducive to bridging differences, be they socioeconomic, ethnic, educational, or generational. Through cultural participation, Valley residents can interact with people unlike themselves and learn to understand, value, and leverage difference. In this way, cultural participation opens the door to civic and social creativity. Silicon Valley can become a national model for creating synergy between cultural participation and civic innovation.

"If we can direct our creativity outward toward a noble end, it would inspire great work and a wonderful community. Great teams are not formed in the absence of great and worthy goals, nor great communities in the absence of great and worthy visions."

Barbara Waugh, Hewlett-Packard Company

Fostering a Creative Community: Measuring Progress

This paper was prepared to stimulate discussion about how to define and measure progress in creativity and culture in Silicon Valley. At their first meeting, the Advisory Group members suggested the elements of a working framework to guide the development of progress measures.

Progress measures could then be developed around:

- *Cultural Outcomes:* We should aim to measure the desired outcomes of cultural life: broad-based creativity, social connectedness among diverse people, and connection to place, contribution to the world.
- *Cultural Participation:* We should measure people's participation in arts and cultural activities, including the extent to which diverse people participate together.
- *Cultural Assets:* We should measure our cultural assets, including talent in the creative sector (nonprofit, public, and private), venues and facilities, and the aesthetic quality of our environment.
- *Cultural "Levers":* We should measure the extent to which we are leveraging and building our cultural assets and encouraging people's interaction with them through leadership, investment, and policies.

Assumptions Underlying the Framework

- Vision of Silicon Valley is of a creative, connected, contributing region with a prosperous economy and attractive quality of life.
- Cultural life is a key element of Silicon Valley's quality of life. Participation in cultural life can enhance people's connections to each other and to place.
- Creativity is important to Silicon Valley's future. Cultural participation can enhance creativity.
- Silicon Valley should aspire to contribute to the world, including but going beyond its technology contribution. Cultural participation can produce new ideas and expressions that contribute to global well-being.
- Twenty-first-century Silicon Valley will define "desired outcomes" of cultural life differently than do other region and generations.
- A richer, more active cultural life can help shape the broader "regional culture" of Silicon Valley (e.g., values, beliefs, lifestyles.)

Questions for regional discussion:

- How important are culture and creativity to Silicon Valley's economic and civic future?
- What should be the desired outcomes of arts and cultural life in twenty-first-century Silicon Valley?
- How would you measure progress?

References

Australia Council for the Arts, http://www.ozco.gov.au/ , accessed 7/17/2000.

Brown, John Seely, and Duguid, Paul, *The Social Life of Information*, Harvard Business School Press, 2000.

Burton, J., and Horowitz, R., and Abeles, H., "Learning in and through the Arts: Curriculum Implications" in Fiske, E.B., Ed., *Champions of Change: The Impact of Arts on Learning*, Arts Education Partnership, 1999.

Cohen, Gene, M.D., Ph.D., *The Creative Age: Awakening Human Potential in the Second Half of Life*, 2000.

Csikszentmihalyi, Mihaly, *Creativity: Flow and the Psychology of Discovery and Invention*, HarperCollins Publishers, 1996.

Fleming, Tom, Ph.D., ICISS Report – "Local Cultural Industries Support Services in the UK: Towards a Model of Best Practice," Manchester Institute for Popular Culture, 1999.

Hall, Sir Peter, *Cities in Civilization*, Pantheon Books, 1998.

Harris, Craig, *Art and Innovation: The XEROX PARC Artist-In-Residence Program*, The MIT Press, 1999.

Heath, S.B., and Roach, A., "Imaginative Actuality: Learning in the Arts During Nonschool Hours," in Fiske, E. B., Ed., *Champions of Change: The Impact of Arts on Learning*, Arts Education Partnership, 1999.

Kao, John, *Jamming*, HarperCollins Publishers, 1996.

Kotkin, J., and Siegel, F., *Digital Geography: The remaking of city and countryside in the new economy*, Hudson Institute, 2000.

Leadbeater, Charles, *Living on Thin Air: The New Economy*, Penguin Group, 1999.

Lee, Chong-Moon et al., eds., *The Silicon Valley Edge: A Habitat for Innovation and Entrepreneurship*, Stanford Business School, November 2000.

National Library of Australia, http://www.nla.gov.au/creative.nation/intro.html, "The Commonwealth's Role in Australian Cultural Development," accessed 7/14/2000.

New England Council, *The Creative Economy Initiative: The Role of the Arts and Culture in New England's Economic Competitiveness*, New England Council, June 2000.

Oldenburg, Ray, *The Great Good Place: Cafes, Coffee Shops, Bookstores, Bars, Hair Salons, and other Hangouts at the Heart of A Community*, Marlowe & Company, 1999.

Oregon Creative Services Alliance, *Portland Creates: A Newsletter for Portland's Creative Community*, Portland Development Commission, Spring 2000.

Portland Development Commission. *Creative Services Center Site Solicitation narrows List to Two*, http://www.portlanddev.org/news/mar3.html, March 3, 2000.

Portland Creative Conference, Ninth Annual, Mayor's Speech, http://www.ci.portland.or.us/mayor/speeches/2/creative.htm, September 18, 1998

Powell, Dana, "Synthesis: Making Sense, Finding Patterns, Discerning Educational Implications," in Mitchell, Mathew, "The Creative Community," (unpublished study), University of San Francisco, 1998.

Putnam, Robert, *Bowling Alone: The Collapse and Revival of American Community*, Simon & Schuster, 2000.

Romer, Paul, *Changing Tastes: How Evolution and Experience Shape Economic Behavior*, Cambridge University Press, 2001.

Smith, Chris, *UK Politics: Talking Politics Britain's Creative Industries Booming*, BBC News.

cultural
initiatives
silicon valley

Cultural Initiatives Silicon Valley
1153 Lincoln Avenue, Suite I
San Jose, CA 95125
408.283.7000
www.ci-sv.org

Designed by The Thought Farm