University-Driven Hyper-Local Innovation Ecosystems: How to Grow & Leverage Their Strategic Potential

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To continue its advance toward the top-tier of research universities, UC Davis must establish a world class hyper-local innovation ecosystem.

This should be a top 3 (not just top 10) strategic priority for the UC Davis STEM-B* Programs…

*STEM-B: Science, Technology, Engineering, Math & Business/Management
Agenda: *Hyper-Local Innovation Ecosystems*

1. Brief Bio
2. Framework for How University Innovations Get Commercialized
   - The 4Ms: *Morphed, Mined, Milked & Marketed*
   - University startup *spin-outs* versus *blast-outs*
   - *Co-founders* versus *uber-founders*
3. Bifurcation of Activities that Drive Commercialization
   - Systematic activities that have an *asymptotic* impact
   - Organic activities that have an *exponential* impact (and are cost-effective)
4. University Hyper-Local Innovation Ecosystems (Hy-LIE)
   - Definition & segmentation
   - Strategic value to university
   - Role of accelerators to localization
5. Hy-LIE 10 Best Practices & 5 Predictions
6. Town-Gown Case Study: Berkeley CA
Bio: Commercializing Leading-Edge Technology

1. Engineering undergraduate degree
2. Systems Engineer @ HP (back when most admired company)
3. MBA degree
4. Sun Microsystems Inc (product manager)
5. Mips Computer Systems Inc (product line manager)
6. Silicon Graphics Inc (product family of servers, $100M revenue)
7. Netpulse Networks Inc (co-founder, $10M+ in venture funding)
8. Peak Democracy Inc (co-founder, bootstrapped lean startup)
9. UC Berkeley
Bio: UC Berkeley Research, Concepts & Initiatives

RESEARCH (1)
How Do University Innovations get Commercialized?

CONCEPT (2)
4Ms Framework (morphed, mined, milked, marketed)

RESEARCH (3)
How to Maximize Commercializable University Innovations?

RESEARCH (6)
How to Maximize the Commercializing of University Innovations?

CONCEPT (4)
Research-Oriented Approach to Managing University IP

CONCEPT (5)
University Research & Ecosystem Segmentation / Strategy

RESEARCH (8)
UC Berkeley esp STEM-B
- Total Mission Integration
- Grow, Move, or Die

RESEARCH (9)
City of Berkeley Especially Downtown & West Berkeley

INITIATIVES (10)
- Berkeley Angel/Mentor Network
- Berkeley Skydeck IT Accelerator
- QB3 East Bay Wetlab Incubator
- Berkeley Startup Cluster . com
- Building Owner Edu Campaign
- East Bay Green Corridor

RESEARCH (10)
How Do University People Start Companies?

CONCEPT (7)
Exponential Impact of the Hyper-Local Innovation Ecosystem (vs Asymptotic Impact of Systematic Programs)

CONCEPT (8)
Uber-Founder or Co-Founder

CONCEPT (10)
9/26/13
UC Berkeley Innovation Commercialization
Research: *How Univ Innovations Get Commercialized?*

- **Questions:** How do university innovations get commercialized?
  - Conventional answer is linear (research => invention => license => commercialize)
  - What and/or who catalyzed the commercialization?
  - How are universities involved in the process?
  - How can universities increase innovation commercialization?

- **Answers:**
  - Researched commercialization of >50 UCB & LBNL innovations
  - Research revealed 4 common patterns/pathways
  - Developed a useful framework based on 4 patterns
  - Developed strategies for optimizing the 4 pathways
4Ms Framework: 4 Pathways for Commercialization

Organic Activities by University & External People

Systematic Activities by University Employees

- **Mined**: Methodically out of research by corporate collaborators
- **Morphed**: Gradually out of research by team member(s)
- **Milked**: Opportunistically by entrepreneurs (e.g. MBA students) that scour campus
- **Marketed**: Periodically to industry by campus (e.g. PI, PR, IPMO, etc)
4Ms Framework: **Morphed, Mined, Milked, Marketed**


- **Drivers:**
  - Quantity & Quality of Research
  - **Ecosystem: Spin-out vs Blast-out**

- **IP:**
  - Some obtain exclusive license to improve biz plan & attract investors
  - Some ignore or abscond with IP
4Ms Framework: *Morphed, Mined, Milked, Marketed*

- **Examples:** Adura Tech, Aurora Biofuels, CommandCAD, Euclid Media, MediFuel, NanoRay, nanoPrint
- **Drivers:**
  - Quantity & Quality of Research
  - MBAs, Biz plan comp, OTL mrktg
- **IP:**
  - Many obtain exclusive license to improve biz plan & attract investors
  - Some ignore or abscond with IP
- **Comments:**
  - Pathway with highest growth rate
  - MBAs are the campus’ s EIRs
4Ms Framework: *Morphed, Mined, Milked, Marketed*

- **Examples** (*that licensed IP*):
  - Analog Devices, Nueprene (XL Tech), Google, Honeywell, Intel, Berkeley Bionics (first morphed then milked)

- **Drivers**:
  - Great sponsored research with optimized terms (i.e. 1st access, NERF, open source, etc)
  - Off-campus corporate labs (i.e. BWRC, Intel, Cadence, Yahoo, Starkey, etc)

- **IP**:
  - Some jointly own IP
  - Some obtain a license to legally use IP or thwart competitors
  - Some ignore or abscond with IP (why license when get know-how)
4Ms Framework: *Morphed, Mined, Milked, Marketed*

- **Examples:** Arkal Medical, Cisco, ClimateCooler, FuelFX, Luminus Devices, Honeywell, Microchip Biotech, Renovis, Sand9, Silicon Basis, Solexel, Vitesse, 3M

- **Drivers:**
  - Quantity & Quality of Research
  - Marketing (i.e. IP Licensing offices, University PR programs, Faculty pubs & ppts, Patent pubs, etc)

- **IP:**
  - Most obtain exclusive license to stay legal, improve BP, attract investment, or thwart competitors
  - Some ignore IP or abscond with IP

- **Comments:** Didn’t get *morphed, milked* or *mined* because tech or market too nascent when invented
4Ms Framework: *University Startups*
University Startups: Spin-outs vs Blast-outs


University Resources (e.g., Biz Plan Competitions, Incubators/Accelerators, Mentor Networks, etc)
University Startups: *Tapping into Ecosystem*

**Product Status**
- Conceptualized
- Prototyped & Tested
- Proven @ Lab-Scale

**Team Status**
- Emerging Growth Team
- Recently Formed
- None
University Startups: *Founder vs Early Employee*

**Founder:**
- Conceive or mine for innovations
- Launch company & provide ongoing value
- Lots of control, but very challenging

**Early Employee:**
- Mine for startups
- Help startup grow & succeed
- Still *ground-floor opportunity*

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Team Status:
- Emerging Growth Team
- Recently Formed
- None

Product Status:
- Conceptualized
- Prototyped & Tested
- Proven @ Lab-Scale
## University Startups: Uber-Founder vs Co-Founder

### Co-Founder:
- Team-up with complementary expertise: tech, biz, sales, mrktg, etc
- But some overlapping knowledge is important

### Uber-Founder:
- Typically science/tech lead
- Learning business side

### Early Employee:
- Mine for startups
- Help startup grow & succeed
- Still *ground-floor opportunity*

### Team Status
- Emerging Growth Team
- Recently Formed
- None

### Product Status
- Conceptualized
- Prototyped & Tested
- Proven @ Lab-Scale

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**Scientist + Story Teller**
### Research: What Campus Activities Drive the 4Ms?

<table>
<thead>
<tr>
<th>Pathways (4Ms)</th>
<th>Activities, Catalysts, Programs, Initiatives</th>
<th>Recent Progressive Approaches</th>
<th>Offices</th>
<th>Ideas &amp; Comments</th>
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<tbody>
<tr>
<td><strong>Morphed</strong></td>
<td>• Entrepreneurship classes</td>
<td>• On-campus incubators</td>
<td>• CET (CoE)</td>
<td>• SBIR/STTR help center</td>
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<td>• On-campus Incubators</td>
<td>co-located with special lab</td>
<td>• Haas (MOT, Lester)</td>
<td>• Berkeley Startup Cluster</td>
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<td>• Entrepreneurial Admissions</td>
<td>facilities</td>
<td>• OTL</td>
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<td>• Entrepreneurial Culture</td>
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<td><strong>Mined</strong></td>
<td>• Entrepreneurial MBA Program (EIRs)</td>
<td>• Cleantech-2-Market Course</td>
<td>• Haas (Lester)</td>
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<td>• Biz Plan &amp; Tech Competitions</td>
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<td>• OTL</td>
<td>• Berkeley Center for Growth Companies</td>
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<td>• Research-to-Market Courses (C2M)</td>
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<td>• Seminars &amp; Poster Sessions (YAPS)</td>
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<td>• Haas Speaker Series &amp; VC Office Hours</td>
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<td>• QB3</td>
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<td>• Haas Bancroft Incubator</td>
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<td>• Student Clubs (BERC)</td>
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<td><strong>Milked</strong></td>
<td>• Institutional response to RFPs</td>
<td>• Research-Oriented Approach</td>
<td>• VCRO</td>
<td>• Adjacent R&amp;D Office Parks/Buildings</td>
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<td>• Opportunistic PIs</td>
<td>to Managing IP rights (e.g.</td>
<td>• IPIRA (IAO &amp; OTL)</td>
<td>• Research Enterprise Marketing</td>
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<td>• Sponsored Research Agreements</td>
<td>NERFs, BIP, SRA IP grants, etc)</td>
<td>• CoE</td>
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<td>• Visiting Industrial Fellows</td>
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<td>• CITRIS</td>
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<td>• Faculty Consulting &amp; Student Hiring</td>
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<td>• QB3</td>
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<td><strong>Marketed</strong></td>
<td>• Newsletters &amp; Press Releases</td>
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<td>• Searchable Web Listings</td>
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Bifurcate Campus Activities: **Systematic** & **Organic**

**Systematic via Programs & Practices**
- Searchable web listings
- Proactive marketing
- Biz plan competitions
- Lab-to-market courses
- Events & poster sessions
- IP rights agreements, etc

**Organic via Innovation Ecosystem**
- Startups & Established Corps
- Startup incubators
- Tech vets & entrepreneurs
- Early stage investors
- Vet, Mentor, Staff, Fund, Partner, etc

**Market-Driven**
*The extent that the market drives the transition from research to product*

**University-Driven**
*The extent that the university drives the transition from research to product*
Systematic v Organic: Impact - Asymptotic v Exponential

Market-Driven
The extent that the market drives the transition from research to product

Moderate

High

University-Driven
The extent that the university drives the transition from research to product

Moderate

High

Too High

Systematic via Programs & Practices
- Searchable web listings
- Proactive marketing
- Biz plan competitions
- Lab-to-market courses
- Events & poster sessions
- IP rights agreements, etc.

Organic via Hyper-Local Innovation Ecosystem
- Startups & Established Corps
- Startup incubators
- Tech vets & entrepreneurs
- Early stage investors
- Vet, Mentor, Staff, Fund, Partner, etc.

Contrived*
- Incorporating
- Branding (logos)
- Housing
- Capitalizing
- Quasi-Staffing

* Suboptimal use of funding & resources
* Can’t force winners
* Baby vs facilitate entrepreneurs
Systematic v Organic: Comparing Position & Potential

**Market-Driven**
The extent that the market drives the transition from research to product

**University-Driven**
The extent that the university drives the transition from research to product

- **High**
  - Stanford, UCSF
  - MIT-Harvard
  - UC Berkeley-LBNL
  - Tsinghua
  - UT Austin
  - Georgia Tech
  - CMU
  - UCD
  - Cornell
  - University of Iowa

- **Moderate**
  - *Suboptimal use of funding & resources*
  - *Can’t force winners*
  - *Baby vs facilitate entrepreneurs*
Research: University’s Hyper-Local Innovation Ecosystem?

**Situation:**
- UCB / UCD is a California public university (not a Berkeley university)
- UCB / UCD prides itself on its global perspective & reach
- UCB / UCD has been delighted with just getting its innovations commercialized – regardless of where (from Berkeley to Boston)

**Question:** Should UCB / UCD be indifferent as to where its innovations get commercialized?
- Does local commercialization only help the local economy?
- Could local commercialization also help the University?

**Answers:**
- Defined what is a University Hy-LIE & Assessed what are its benefits
- Hy-LIEs have strategic value to university – not just econ value to region
Hyper-Local Innovation Ecosystem (Hy-LIE): Definition

University Hyper-Local Innovation Ecosystem:

Cluster of R&D-oriented entities readily accessible to the campus – including small & large corps, tech vets, entrepreneurs & early stage investors as well as related supply chains & service providers

Accessibility (not just Proximity) to Campus

Hyper Local:
Convenient: walk, bike, shuttle or short drive (with easy parking)

Local:
Less than 30 minutes drive + easy parking

Metro:
About 30-60 minutes + - commuter traffic

Regional
National
Global
Hy-LIE: Strategic Value to University

Relationship-Driven Opportunities for the University’s Mission

High

Innovation Ecosystem
(introductions > relationships > collaborations)

Accessibility to Campus

Hyper Local:
Convenient: walk, bike, shuttle or short drive (with easy parking)

Local:
Less than 30 minutes drive + easy parking

Metro:
About 30-60 minutes + - commuter traffic

Regional
National
Global
Hy-LIE:  Bolster Research, Education & Tech Xfer

1. Sponsored research from established corporations
2. Sponsored research from young companies (via STTR & SBIR)
3. Commercialization of campus innovations (& licensing of IP)
4. Experiential learning, careers & internships for students
5. Advisory board & consulting roles for faculty
6. Visiting Industry Fellows
7. Entrepreneurs in Residence (on-campus)
8. Customers for campus-based service facilities
9. *Advantages to attract & retain top faculty & students
10. Serendipitous discussions: researchers, entrepreneurs, investors

* See white paper: University Hy-LIEs: Grow, Move or Decline

**Relationship-Driven Opportunities for the University’s Mission**

**Innovation Ecosystem** (introductions > relationships > collaborations)

**Accessibility to Campus**

- **Hyper Local:** Convenient: walk, bike, shuttle or short drive (with easy parking)
- **Local:** Less than 30 minutes drive + easy parking
- **Metro:** About 30-60 minutes + - commuter traffic
- **Regional**
- **National**
- **Global**
Hy-LIE: Achieve “Total Mission Integration”*

Education Mission

(HYPHER) LOCALIZE
commercialization of innovations from Berkeley research
(i.e. innovation centers for startups & nurturing ecosystem)

Research Mission

ACCELERATE
commercialization of innovations from Berkeley research
(i.e. biz plan competitions & lab-to-market courses)

Localization

CATALYZE
commercialization of innovations from Berkeley research
(i.e. license IP)

Service Mission:
(including economic vitality & quality-of-life
via commercializing university innovations)

* Source: University of Utah
Localization: *Role of University Startup Accelerators*

Over 300 Startup Incubators-Accelerators

Why Do We Need Yet Another?

What Makes the **Berkeley Skydeck** Different & How Can We Leverage It?
Localization: Accelerator Segmentation

Mission

Research, Education & Econ Dev
Social Impact
Return on Investment

For Profit
- Equity
- Real Estate (shared office space)

Non Profit

Business Model

Over 300 Startup Incubators-Accelerators
Why Do We Need Yet Another?
What Makes the Berkeley Skydeck Different & How Can We Leverage It?
Localization: Accelerator Landscape

**Mission**

- University* Incubator-Accelerator (Berkeley Skydeck, QB3 Garage)
- Government* Incubator-Accelerator (San Jose Bio Center & Environmental Business Cluster)

**Business Model**

- For Profit
  - Equity
  - Real Estate (shared office space)
- Non Profit

**Social Impact**

- Code-for-America (Gov 2.0)
- GreenStart
- The Hub
- QB3 East Bay Innovation Center

**Return on Investment**

- Frequently, these operations are collaborations between a university & government, but typically the university or government takes the lead in funding & management.
Localization: **Deep Integration into Univ STEM-B***

*STEM-B: Science, Technology, Engineering, Math & Business

**BENEFITS:**

- Commercialization of campus innovations (& licensing of Intellectual Property)
- Experiential learning & internships for students
- Entrepreneurship opportunities for graduates
- Collaborations with university faculty
- Mentorship from alumni & UC Berkeley network
- Exchanges with partner university incubators
- Advantages to attract top faculty & students
- Serendipitous discussions that create corps (researchers, entrepreneurs & investors)
Trend: *Hy-LIE Effect on STEM-B Programs*

- Rating of University STEM-B Programs
  - High
  - Not High

- Status of Hyper-Local Innovation Ecosystem
  - Weak
  - Super-Critical Mass
Trend: **Hy-LIE vs STEM-B Segmentation**

- **Rating of University STEM-B Programs**
  - High
  - Not High

- **Status of Hyper-Local Innovation Ecosystem**
  - Weak
  - Super-Critical Mass

- **Long-Term Competitive Advantage** (Cultivate)
- **Long-Term Competitive Disadvantage** (Call-to-Action: Grow, Branch or Envy)
- **Long-Term Challenge** (Can’t Compete?)
- **Long-Term Potential** (Catapult)

**Super-Critical Mass**

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9/26/13

UC Berkeley Innovation Commercialization
**Trend:** \textit{Grow, Branch or Envy (Die)}

**Rating of University STEM-B Programs**

- **High**
  - Cornell \textit{branchING: NYC}
  - UPenn Wharton \textit{branchED: SV}
  - CMU \textit{branchED: SV}
  - UC Berkeley \textit{growing}
  - Tsinghua \textit{growing}

- **Sustainable Competitive Advantage (Cultivate)**
  - MIT, Harvard, Stanford, UCSF

- **Long-Term Competitive Disadvantage (Grow, Branch or Envy)**
  - UC Berkeley \textit{growing}

- **Long-Term Challenge (Branch)**
  - UCLA \textit{growing: Silicon Beach}

- **Long-Term Potential (Catapult)**
  - Santa Clara University
  - San Jose State University
  - Singularity “University”

**Status of Hyper-Local Innovation Ecosystem**

- **Weak**
  - UCLA \textit{growing: Silicon Beach}
  - UPenn Wharton \textit{branchED: SV}
  - Tsinghua \textit{growing}

- **Not High**

- **High**

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Trend: Univ Ratings Based on Many Factors

Rating of University STEM-B Programs

High

Long-Term Competitive Disadvantage (Grow, Branch or Envy)

- Yale (New Haven CT)
- Hopkins (Baltimore MD)
- Princeton (Princeton NJ)
- Dartmouth (Hanover NH)
- Brown (Providence RI)

Not High

Weak

Status of Hyper-Local Innovation Ecosystem

Super-Critical Mass

Sustainable Competitive Advantage (Cultivate)
Trend: Dilemma for Some Public Universities

Rating of University STEM-B Programs

High

- MI > ?
- WI > ?
- UCD > ?
- UCSB > ?

Difficult to grow Hy-LIE in state & Can’t branch to Hy-LIE out of state

Weak

- IL > Chicago
- NY > NYC
- CO !! Boulder
- TX !! Austin

Status of Hyper-Local Innovation Ecosystem

Super-Critical Mass
Hy-LIE: 10 Best Practices to Foster University Hy-LIEs

1. **Students & Faculty**: Entrepreneur-oriented MBA & tech management programs – from admissions to curriculum to culture

2. **Mixers**: MBA, applied sciences & engineering events: yet-another-poster session (YAPS), seminar series, etc – even across nearby institutions (i.e. UCB & LBNL)

3. **Competitions**: startups, biz plans, tech innovations, big ideas

4. **Research-to-Market Courses**: Project-based classes with interdisciplinary teams (i.e. UC Berkeley’s Cleantech-to-Market course)

5. **University startup accelerators** (i.e. Skydeck & Foundry) & idea incubators

6. **Office park(s)** for mature corps to leverage university & act as an anchor for startups

7. **IP Management** with an “impact-oriented approach to IP” (not just $)

8. **University resources** (not just IP rights): students as workforce; faculty as advisors; alumni as mentors; the university as an early (beta) customer to help establish a startup’s credibility in its market

9. **Startup service packages** (with local biz): legal, finance, SBIR, etc

10. **Partnering**: university, local biz & gov (i.e. BerkeleyStartupCluster.net)

- **Not**: University funding of startups (that circumvents organic vetting process, & is different from proof-of-concept (POC) funding)
Hy-LIE: 5 Predictions on Hy-LIE Impact

1. Research universities will have a campus startup accelerator (just as they have libraries, sports stadiums, fitness centers & student centers): ETTC

1b. Many universities with accelerators will establish “University Startup Accelerator Stock Equity (U-SASE) programs to monetize the support provided to startups

2. Many research universities will have campuses located in 1 or more leading Hy-LIEs (analogous to how many US corporations became multinational entities)

3. Many research universities will have economic development collaborations with their local governments (many already do): SARTA

4. Many research universities will have an employee responsible for local innovation ecosystem development

5. Hy-LIE attributes will become a new metric by which to evaluate & rank research university excellence (this will be problematic for some public universities that can’t grow or branch)
Case Study: Berkeley Hy-LIE – Inspiration

Objectives
Established

- Research-driven local economic development
- Thriving tech cluster near the Campus & Lab can bolster the research & education missions

Challenges
Identified

Solutions
Commenced (see White Paper)

Serendipitous Opportunity
Arises

East Bay Green Corridor

Years
2008  2009  2010  2011
Case Study: *Berkeley Hy-LIE – Challenges*

**Objectives**

Established

- Research-driven local economic development
- Thriving tech cluster near the Campus & Lab can bolster the research & education missions

**Challenges**

Identified

- History of *innovation drain* & squandered opportunities
- Dearth of office space conducive to startups & emerging growth corps
- Underdeveloped network of tech vets, early stage investors, & serial entrepreneurs
- Low exit barrier to leading SV & SF require local competitive advantages

**Solutions**

Commenced (see White Paper)

**Serendipitous Opportunity**

Arises
Case Study: Berkeley Hy-LIE – Solutions

**Objectives**

Established

- Research-driven local economic development
- Thriving tech cluster near the Campus & Lab can bolster the research & educational missions

**Challenges**

Identified

- History of innovation drain & squandered opportunities
- Dearth of office space conducive to startups & emerging growth corps
- Underdeveloped network of tech vets, early stage investors, & serial entrepreneurs
- Low exit barrier to leading SV & SF require local competitive advantages

**Solutions**

Commenced (see White Paper)

- Edu campaign to building owner-developers: “if you build it, they will stay”
- Feedback: Change zoning laws in West Berkeley for R&D use
- Biotech Incubator (wet labs): QB3 East Bay Innovation Center (the Bakery)
- IT cluster: Berkeley Startup Cluster.NET

**Serendipitous Opportunity Arises**
**Case Study: Berkeley Hy-LIE – Opportunities**

**East Bay Green Corridor**

**Objectives**
Established

- Research-driven local economic development
- Thriving tech cluster near the Campus & Lab can bolster the research & edu missions

**Challenges**
Identified

- History of *innovation drain* & squandered opportunities
- Dearth of office space conducive to startups & emerging growth corps
- Underdeveloped network of tech vets, early stage investors, & serial entrepreneurs
- Low exit barrier to leading SV & SF require local competitive advantages

**Solutions**
Commenced (see White Paper)

- Edu campaign to building owner-developers: “if you build it, they will stay”
- Feedback: Change zoning laws in West Berkeley for R&D use
- Biotech Incubator (wet labs): QB3 East Bay Innovation Center (*the Bakery*)
- IT cluster: Berkeley Startup Cluster.com

**Serendipitous Opportunity**
Arises

- Intel Research Berkeley “lablet” closing
- Berkeley “Skydeck” accelerator *conceived*
- Thinking Big: transform area near campus into world-class IT cluster (EBI, BWRC, Skydeck, & more to come…)

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2008   | 2009   | 2010   | 2011
Case Study: Berkeley Hy-LIE – Next Steps

**Execution**

- Skydeck accelerator becomes epicenter for the Berkeley Startup Cluster
- The Berkeley Startup Cluster grows events (see website)
- The Berkeley Startup Cluster forms an Advisory Committee:
  - Civic and business missions
  - Berkeley residents who are successful tech vets, entrepreneurs or early stage investors

**Status**

- Accelerators:
  - Skydeck (software)
  - Foundry@CITRIS
  - QB3 East Bay Innovation Center

- Startup Office Space:
  - NextSpace – Berkeley
  - HUB – Berkeley
  - Sandbox Suites - Berkeley
  - Skydeck building full

**Plan**

- More Class A office space
- More events
- Larger & denser people networks
- Better connections between Campus & Berkeley Startup Cluster to West Berkeley (~2 miles from campus)

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2012  2013  2014
Case Study: Berkeley Competitive Strategy

Berkeley Advantage

- Cost
- Capacity (appropriate space)
- Capital (easy access to VC)
- **Change** (inertia of relocating)
- Coolness (of space & hood)
- Customers (proximity / density)
- Credibility (proximity to known corps)
- Colleagues (recruiting, support services)
- Commute (finish degree/relocate)
- Collaboration (with UCB people)

Berkeley Advantage

Virtual Step (Dorm, Apt, Cafe, Libe, etc)

Baby Step (Free space: Incubator, Garage, etc)

Big Step (Pay for space)

Big Leap (Pay for space with growth)

Locating into the Community

9/26/13

UC Berkeley Innovation Commercialization
Case Study: Berkeley Competitive Strategy

Berkeley Advantage

- Cost
- Capacity (appropriate space)
- Capital (easy access to VC)
- Change (inertia of relocating)
- Coolness (of space & hood)
- Customers (proximity / density)
- Credibility (proximity to known corps)
- Colleagues (recruiting, support services)
- Commute (finish degree / relocate)
- Collaboration (with UCB people)

Berkeley Startup Cluster

Locating into the Community

Virtual Step (Dorm, Apt, Cafe, Libe, etc)

Baby Step (Free space: Incubator, Garage, etc)

Big Step (Pay for space)

Big Leap (Pay for space with growth)

Leverage these existing advantages
Case Study: **Berkeley Competitive Strategy**

- **Berkeley Advantage**
  - Cost
  - Capacity (appropriate space)
  - Capital (easy access to VC)
  - Change (inertia of relocating)
  - Coolness (of space & hood)
  - Customers (proximity / density)
  - Credibility (proximity to known corps)
  - Colleagues (recruiting, support services)
  - Commute (finish degree/relocate)
  - Collaboration (with UCB people)

- **Leverage these existing advantages**
- **Establish these potential advantages**

**Locating into the Community**

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Case Study: Berkeley Competitive Strategy

- Can’t expect advantages with these attributes, but need to be competitive with alternatives
- The only way to establish an advantage is to be the incumbent & minimize CHANGE

Establish these potential advantages

Bay Area & beyond especially San Francisco & Silicon Valley; but including EBGC

Cost
Capacity (appropriate space)
Capital (easy access to VC)

Change (inertia of relocating)

Coolness (of space & hood)
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Locating into the Community

Leverage these existing advantages

Berkeley Startup Cluster

East Bay Green Corridor (including Berkeley)
1. Brief Bio
2. Framework for How University Innovations Get Commercialized
   - The 4Ms: Morphed, Mined, Milked & Marketed
   - University startup spin-outs versus blast-outs
   - Co-founders versus uber-founders
3. Bifurcation of Activities that Drive Commercialization
   - Systematic activities that have an asymptotic impact
   - Organic activities that have an exponential impact (and are cost-effective)
4. University Hyper-Local Innovation Ecosystems (Hy-LIE)
   - Definition & segmentation
   - Strategic value to university
   - Role of accelerators in localization
5. Hy-LIE 10 Best Practices & 5 Predictions
6. Town-Gown Case Study: Berkeley CA