Developing Vibrant Communities for the New Economy:

How to Attract, Build, and Serve the Businesses of Tomorrow

New Partners for Smart Growth Conference February 07, 2012

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The World Has Changed

The "Nature of Work" is dramatically different.



Cities will transform completely in response.



We have a unique window of opportunity to look ahead and leverage these changes to develop vibrant communities.

The "Old" Economy: Assembly Line Organization







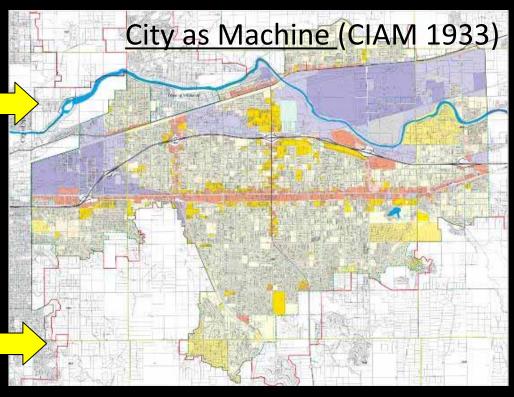
- Synchronized
- Low skill

- organized by component tasks
- Mass production

Economy Focused on Making & Moving Goods: Cities re-organized using Industrial Principles



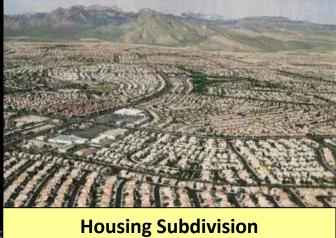




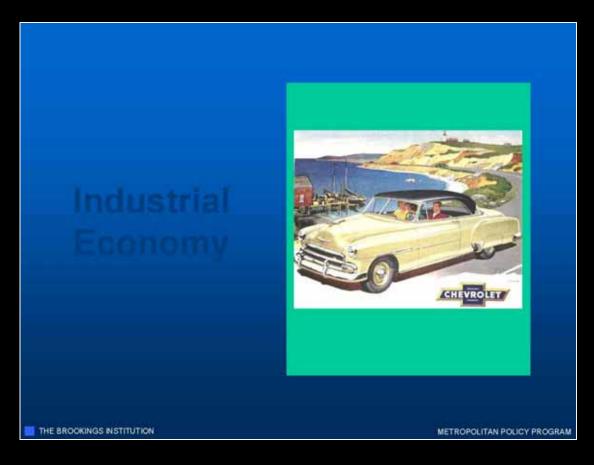
- Synchronized routines
- Segregated land uses connected by vehicle "conveyor belts"
- Mass consumption

Business park





The Experiment FIT with the industrial economy of the Era.



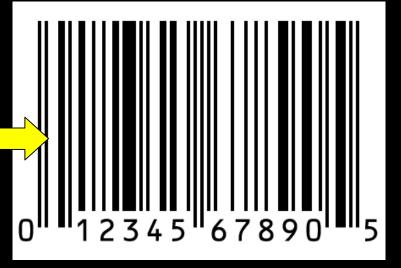
The New Economy

Beginning in the 1980s: Wide-spread Digitalization









1950 - 0% of information was digital 2007 - 94% of information was digital

"Gathering the whole of human knowledge"

1751 French Encyclopedia

71,818 articles

3,129 illustrations

volumes



2008 Wikipedia (English)



2,350,000+ articles

773,658 media files

1300 volumes (400 pages each - no images)

Source: Manual lima

At first, many thought it was just a change in tools. But digitalization has led to Fundamental changes in work activity



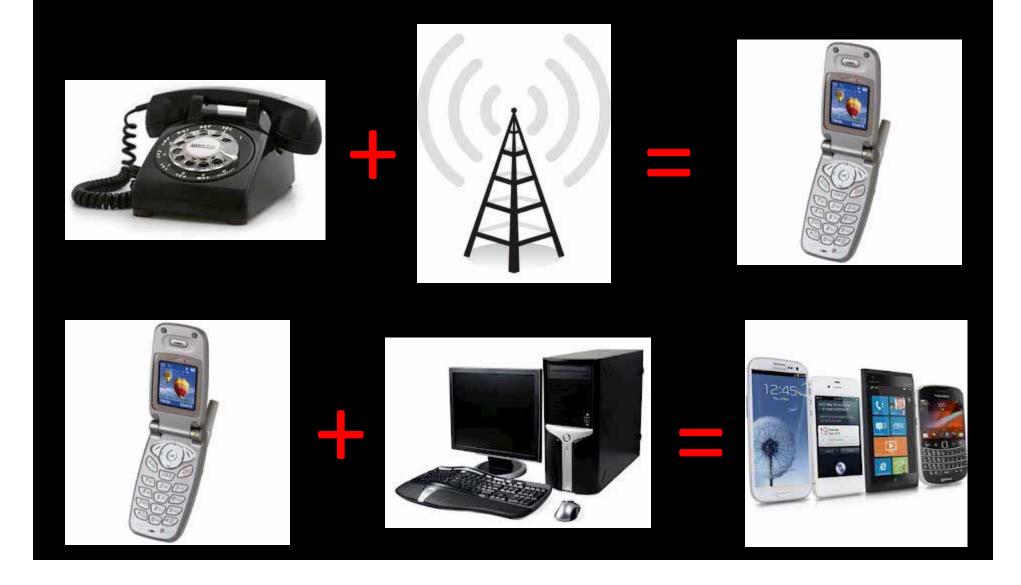






With significantly less labor needed to move and make things, people can spend more time thinking, strategizing, and analyzing (augmented by computing power)

This process if combining ideas to create new possibilities...



...is called <u>Innovation</u> and it has become the primary wealth-generator in the new economy.

Saskia Sassen: this is not just about software and design, but also about mining and agricultural industries, all industries.

Occupation and industry	Total employed	Used a computer at work		Used the Internet at work	
		Total	Percent of employed	Total	Percent of employed
OCCUPATION					
Total, 16 years and over Management, professional, and related occupations Management, business, and financial operations occupations Professional and related occupations Service occupations Sales and office occupations Sales and related occupations Office and administrative support occupations Noticel recurrence, construction, and maintenance occupations Farming, fishing, and forestry occupations Construction and extraction occupations Installation, maintenance, and repair occupations Production, transportation, and material moving occupations Production occupations Transportation and material moving occupations	48,252 19,600 28,652 21,887 35,492 16,051 19,441 15,003 1,270 8,392 5,341 18,189 9,736	76,986 38,398 15,842 22,556 6,025 23,874 9,577 14,297 3,965 140 1,589 2,237 4,723 2,878 1,845	55.5 79.6 80.8 78.7 27.5 67.3 59.7 73.5 26.4 11.0 10.9 26.0 29.6 21.8	57,892 32,391 13,938 18,452 3,490 16,990 6,949 10,041 2,497 79 1,046 1,371 2,525 1,577 948	41.7 67.1 71.1 64.4 15.9 47.9 43.3 51.6 16.6 6.3 12.5 25.7 13.9 16.2 11.2
INDUSTRY Total, 16 years and over	138,823	76,986	55.5	57,892	41.7
Agriculture and related industries Nonagricultural industries Mining Construction Manufacturing Durable goods Nondurable goods Wholesale and retail trade Transportation and utilities Information Financial activities Professional and business services Education and health services Leisure and hospitality Other services Government workers Federal State Local Self-employed and unpaid family workers	1,475 106,660 519 8,198 16,420 10,179 6,241 19,571 5,167 3,217 8,888 11,485 17,063 10,288 5,844 19,937 3,258 5,759 10,920	57,855 299 57,557 221 2,304 8,521 5,540 2,981 9,998 2,462 2,493 7,328 7,850 10,620 3,126 2,635 13,773 2,198 4,234 7,341 5,357	53.5 20.2 54.0 42.5 28.1 51.9 54.4 47.8 51.1 47.6 77.5 82.4 68.4 62.2 30.4 45.1 69.1 67.5 73.5 67.2 49.8	42,505 187 42,317 165 1,719 6,416 4,192 2,224 6,406 1,741 2,170 6,127 6,554 7,297 1,815 1,907 11,158 1,757 3,664 5,737 4,229	39.3 12.7 39.7 31.8 21.0 39.1 41.2 35.6 32.7 33.7 67.5 68.9 57.1 42.8 17.6 32.6 56.0 53.9 63.6 52.5 39.3

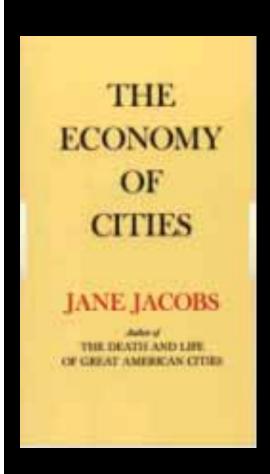
2011 Lynda Gratton

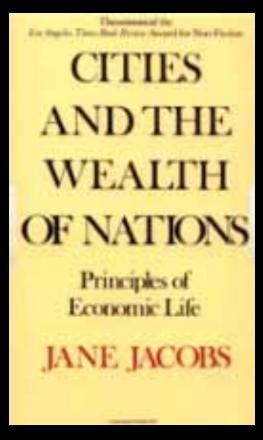
"We are witnessing now ...a break with the past as significant as that in the late 18th and early 19th centuries when parts of the world began the long process of industrialization."

LYNDA GRATT The future work is alrea

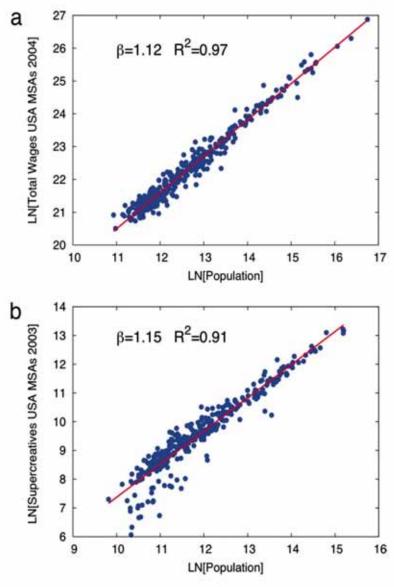
Have you made the crucial shifts for success?

Cities, not firms, are the wellsprings of innovation





"Whereas companies tend to specialize, cities give rise to a wide variety of talents and specialties, the broad diversity of which is a spur to innovation. The City's diversity is the true source of innovation and economic growth."



Bettencourt L M A et al. PNAS 2007;104:7301-7306

Dense Clustering of people, productivity, talents and skills powers economic growth

Innovation is a social process



Research has shown that innovation comes from:

- •Group collaboration rather than individual solitary effort.
- •Interaction between people with different specializations, experiences, and perspectives.

Essential Principal: Innovation is fostered by providing settings that bring people together to collaborate and exchange ideas



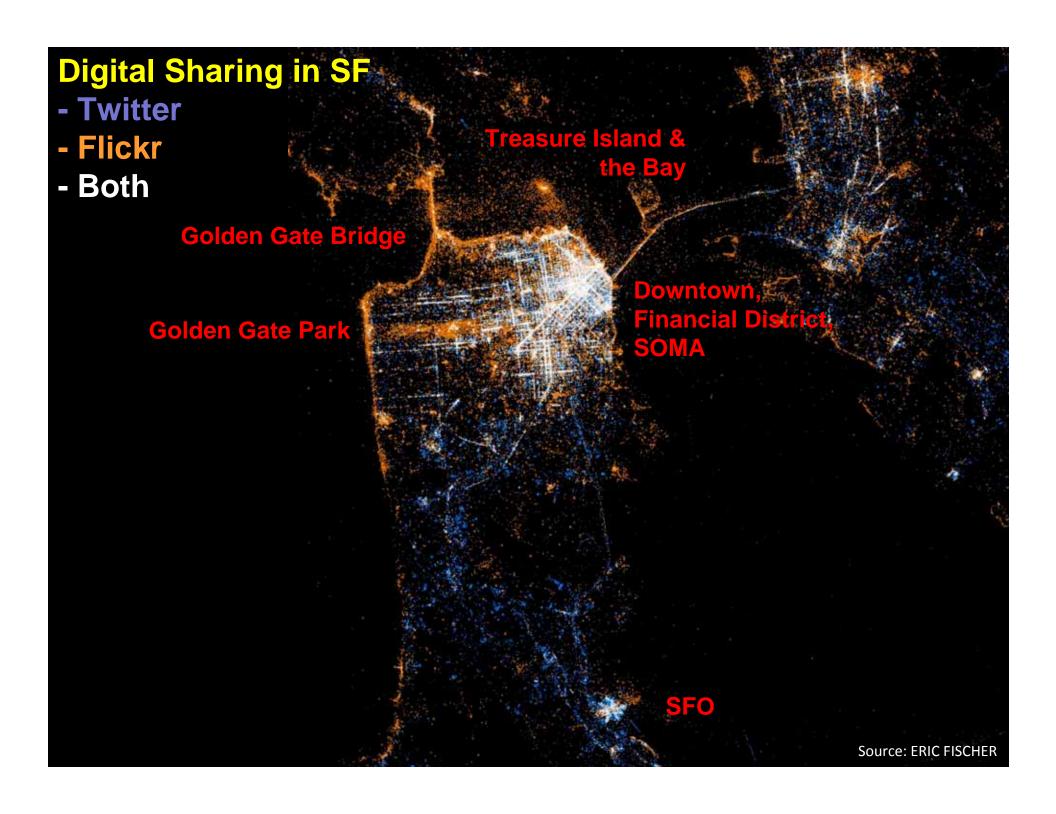






- In the office and the lab
- In the conference room
- In cafes, bars and restaurants

- During breaks, recreation and leisure
- Especially while socializing



To foster creativity & innovation cities must provide "Vital Centers" with clustering, density, mix, and settings for interaction





Centerless Workplace

"Vital Center"

Classifying and locating these centers is a critical strategic decision cities must make

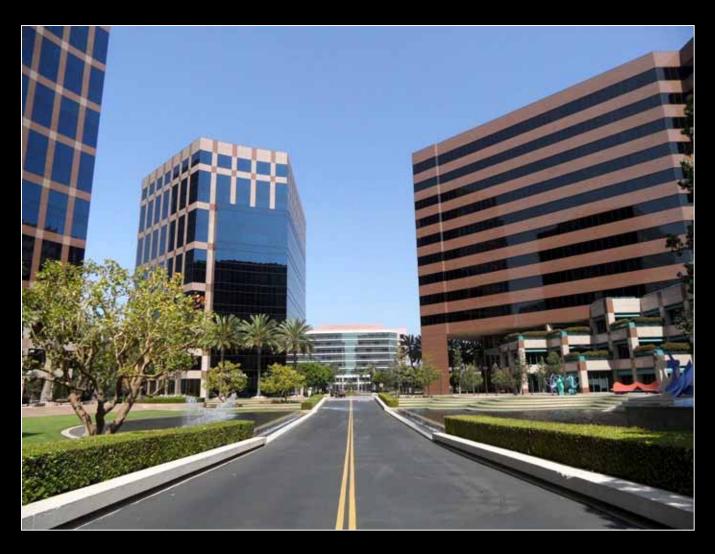
The 20th Century CBD and Business Park models no longer fit the needs of the innovation economy











Simply adding a few floors to the same model will not get us where we need to go

The evolution of the most innovative districts and cities points the way to

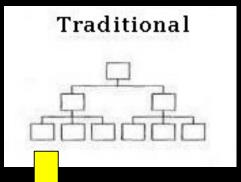
a new model of Vibrant Communities in the New Economy



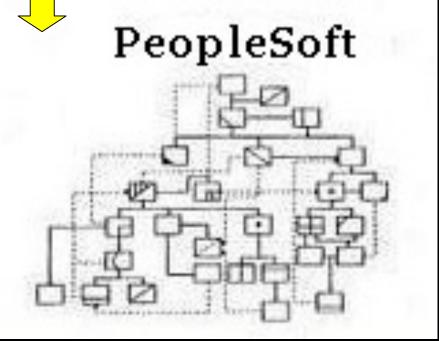
Changes Inside the Workplace are Underway

Changes INSIDE the Workplace: New work processes organized around collaborative teams



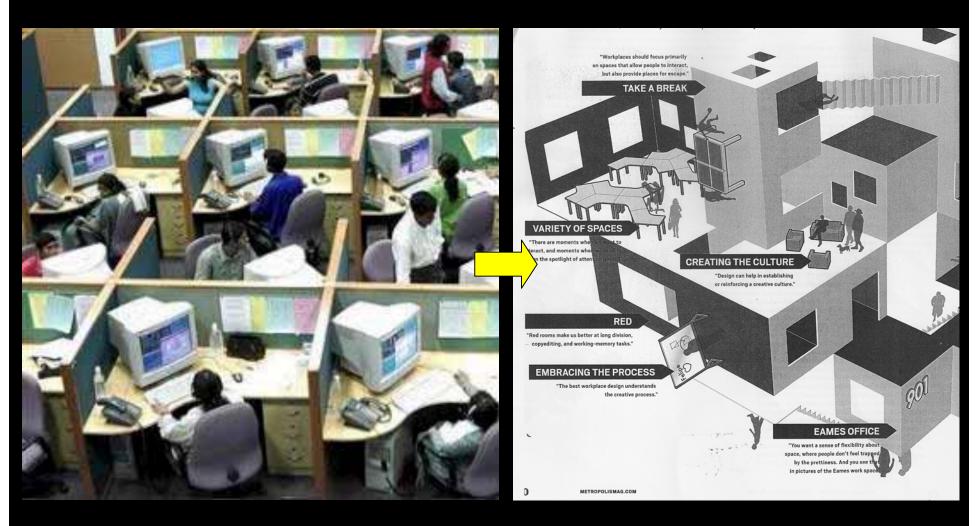






Decentralization, shared decision making, and skilled labor

Changes INSIDE the workplace (2): Offices designed to force interaction ("collision") and exchange



Leading examples: Pixar, 3M, Google, Amazon, Facebook

Changes INSIDE the
Workplace (3):
New workspace Formats
are emerging in
response to new
company structures







But Changes INSIDE the Workplace are Insufficient

To Attract, Build, and Serve
the Businesses of Tomorrow, we must
Physically re-shape cities
to attract and accommodate the needs of
innovators

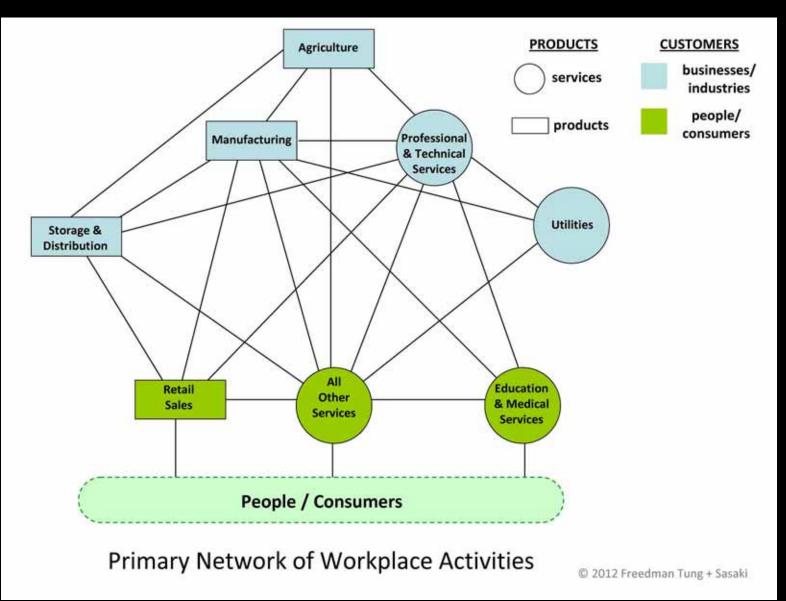
Reshape the City: Dynamic Mix of Uses

The Workplace District remains out of synch

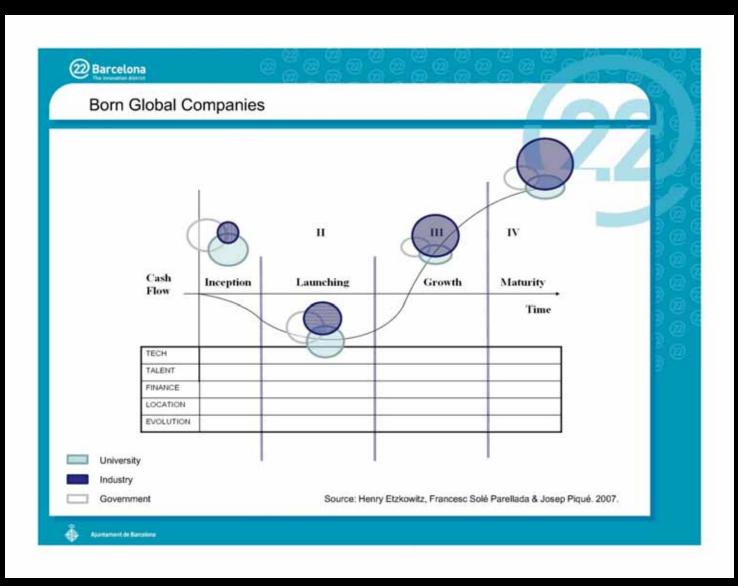
Segregated in *type of work* (office, R+D, manufacturing) with little variation



Innovation Ecosystem: Dense Collaborative Network of Partners, Suppliers, Customers

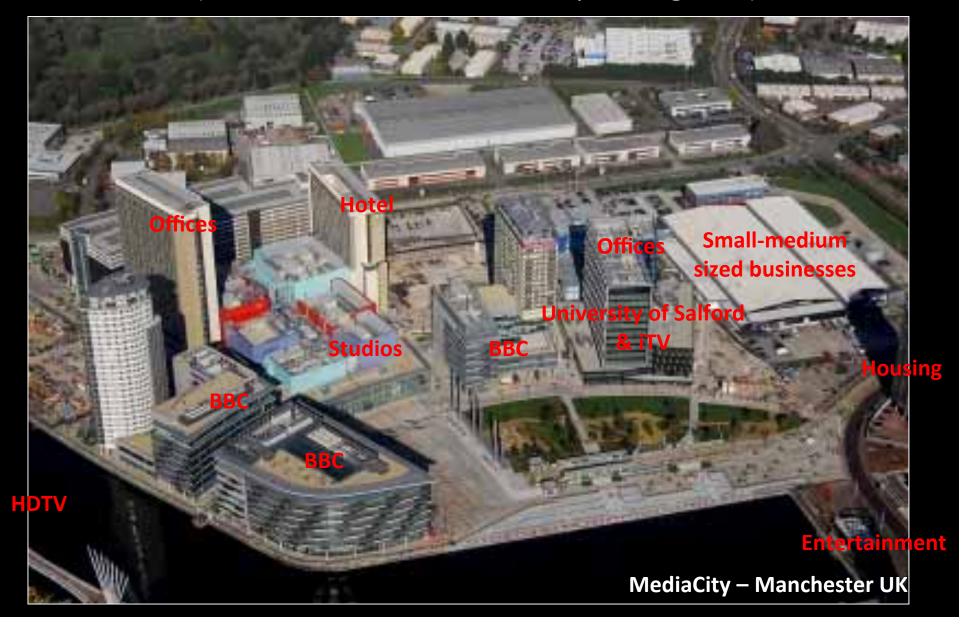


Innovation Ecosystem: Companies at Different Stages in their Lifecycle



A Dynamic Mix of Uses

(instead of the old habit of separating uses)



Range of Building & Workspace Types

Mixture of space costs, sizes, and configurations to match the needs of different work activity in close proximity



Quality Medium Sized Space



Creative rehab – lower cost spaces



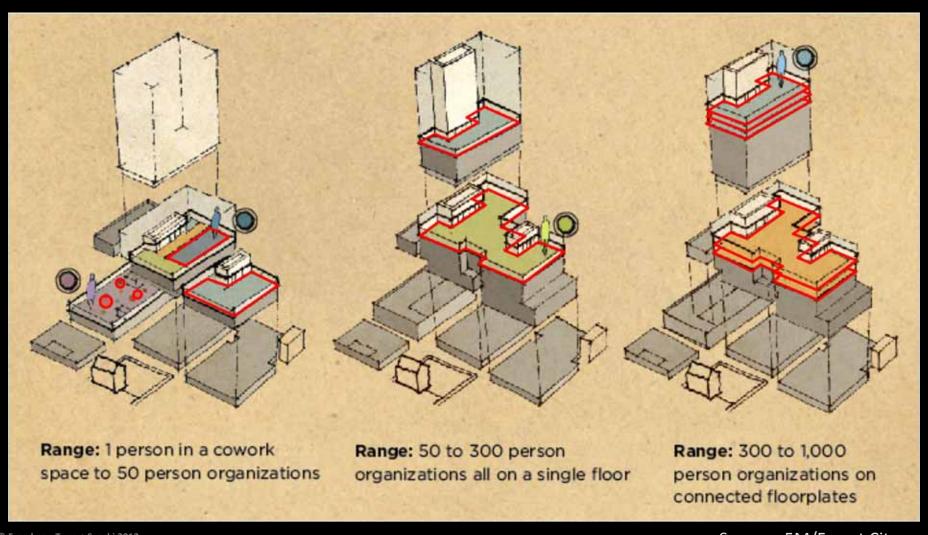
New lower cost, small scale space



Established Corporate Space

A Building Type for diverse tenants under one roof

Example - Planned 5M complex, San Francisco: Principle of "curating" the tenant mix applied to the scale of a workplace building complex



© Freedman Tung + Sasaki 2012 Source: 5M/Forest City

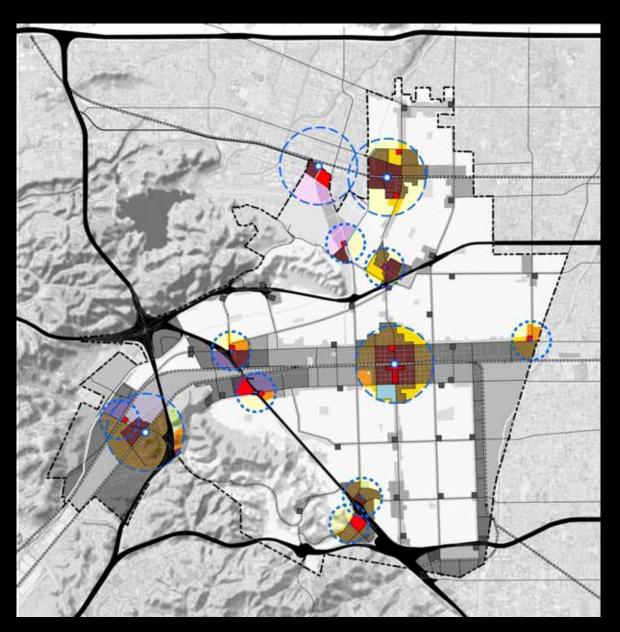
Reshape the City: Connectivity

The Workplace District remains out of synch



Low Density and Auto Oriented

Transit-Connected Hubs of Activity:



Multi-Nucleated
Pattern of walkable,
mixed, denser
development;
Integrated with a
Transit Network
offering modern
frequent service.

Reshape the City: Activity

The Workplace *District* remains out of synch



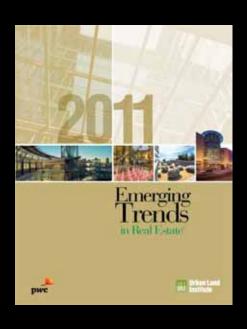


No activity focus or center

Activity generating retail is one of the most precious city building commodities. Urban vitality drives innovation and attracts "talent."

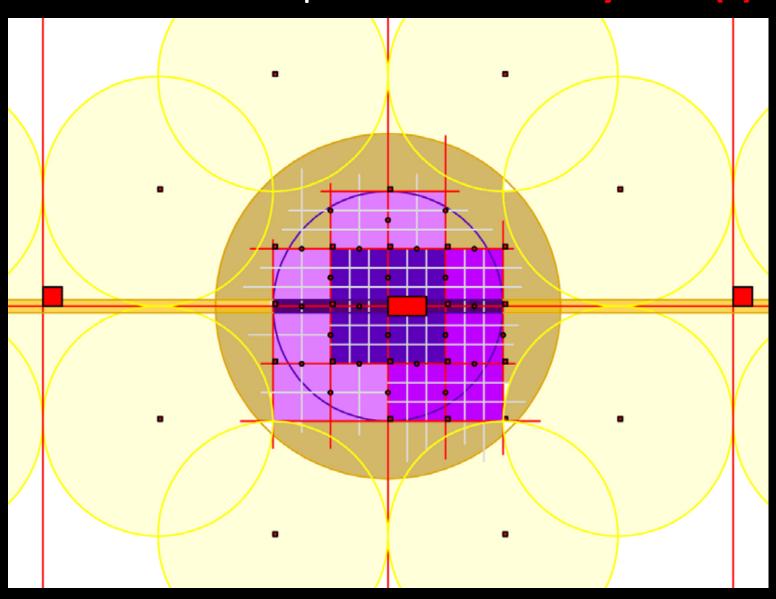
Acknowledge that the most important and most difficult decision in the design of the suburban metro area is where (and how) to strategically build the retail.

ULI Emerging Trends 2011: Commercial real estate needs to cope with "Era of Less"



Most areas need less retail, not more. Endless strip construction is over. [we must] rethink how we deliver retail in better transportation-linked urban centers, moving away from car-dependent models

Workplace districts must have a well distributed pattern of Activity Core(s)



Reshape the City: Amenity & Image

The Workplace *District* remains out of synch



Plenty of Open Space but no "Public" Space

The Emerging 21st Century Workplace District Model: Settings for Convenience, Interaction, Activity



SOMA near South Park, San Francisco

The 21st Century City must balance transportation infrastructure with enhanced "Place-Making"





Reshape the City: Put Ideas on Display

The Workplace *District* remains out of synch

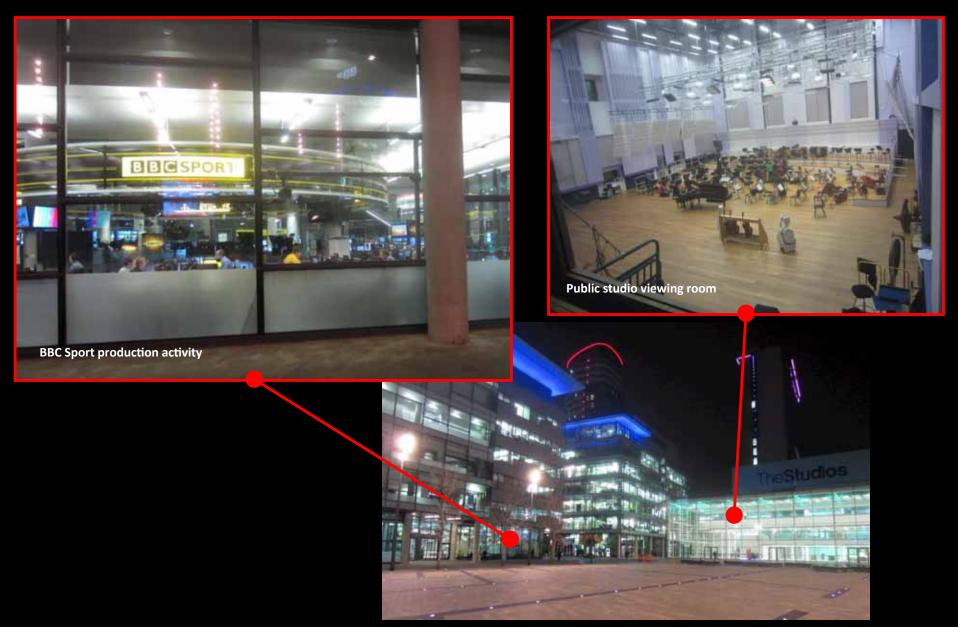


Ideas and activity are hidden

Put Ideas on Display: Architecture of Engagement & Information



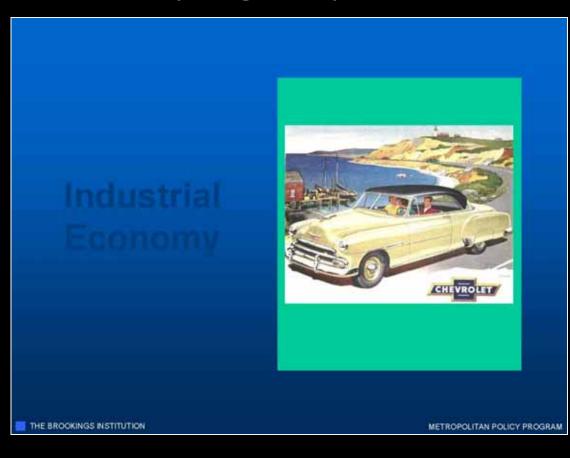
Put Ideas on Display: Make Work More Visible



New Economic Development in the Innovation Economy

PREVIOUS ERA: Economic Value

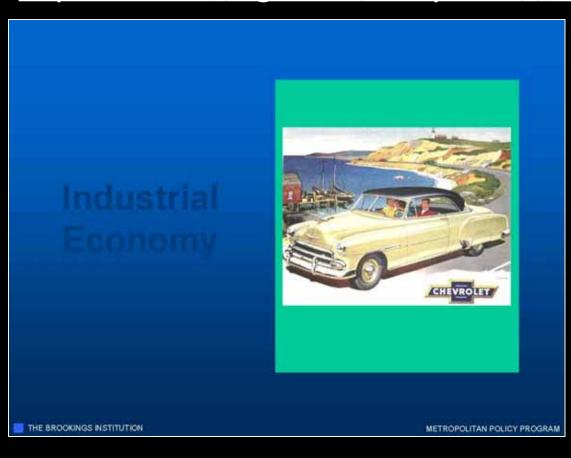
Created by large corporate firms



- Attracting Talent
- Training
- Compensation packages
- Services
- Infrastructure/Building Investment

PREVIOUS ERA: Economic Development

Tap into the "Big-Firm Ecosystem" by attracting large firms



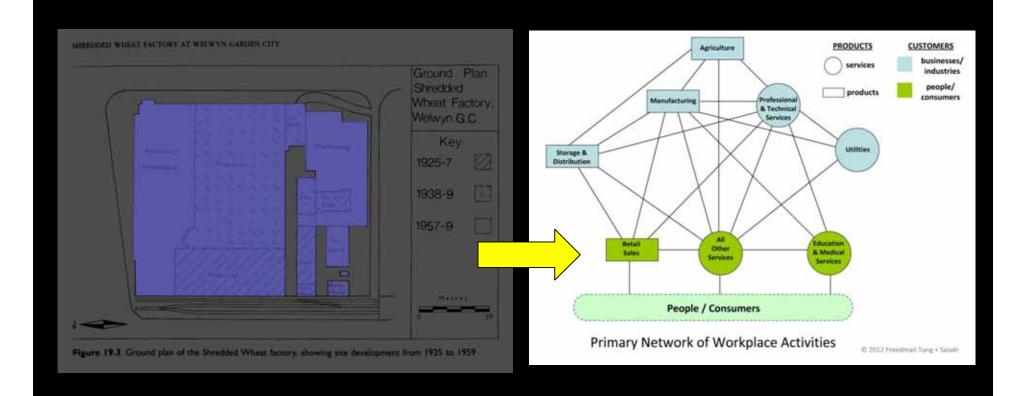
- Transportation access
- Financial incentives
 (tax incentives, land
 write-downs, etc.),
- Infrastructure improvements

Change#1: The scale & <u>complexity</u> of business operations has increased dramatically

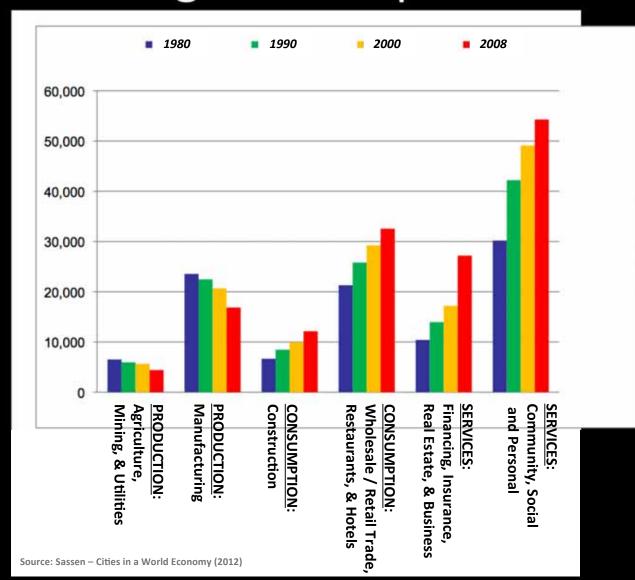




Change #2: Work is distributed among a highly connected network of specialized, collaborating partners



Change #3: There has been sharp growth in producer services



eater complexity operating with a etwork of partners of global, national of regional scales. Change #4: Small and medium-sized producer services firms have become the most dynamic component of urban centers.



Producer services are highly collaborative so they tend to <u>cluster in urban centers</u> to be near each other

To be successful in this transformed economic landscape, Cities must:

1. Attract and accommodate small and medium sized firms along with large ones.

The Critical Role of Small Firms & Start-Ups in the Innovation Process



Over 100 including: Android, Picasa, Frommers, Zagat



Over 30 including: Instagram



Over 40 including: Siri

Large firms innovate by purchasing small firms

To be successful in this transformed economic landscape, Cities must:

2. Attract and produce a pool of Knowledge Workers.

Major companies locate near "talent pools."





CEOs for Cities survey of 25 – 34 year old college graduates:

- Almost 64 percent of them reported they pick where they want to live before launching a job search.
- They are about 90% more likely to live in close-in urban neighborhoods

The "creative class" craves vital centers







Transit Streetlife Public Spaces

Drivable Suburban

Walkable Urban













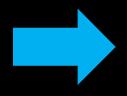
45% - 55% of Demand

Source: Leinberger (2008)

Attracting, Building, and Serving the Businesses of Tomorrow requires a new approach to Economic Development

Industrial Economy

Innovation Economy

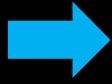


Physically re-shape cities

to attract and accommodate the needs of innovators

Focus Exclusively on Attracting Big, Vertically Integrated Firms





Assemble knowledge districts that foster innovation and produce innovators

Build on Local Strengths

- 1. Studies have shown that up to 80 percent of job growth is from existing businesses
- 2. In the new era of specialized, networked businesses, proximity matters



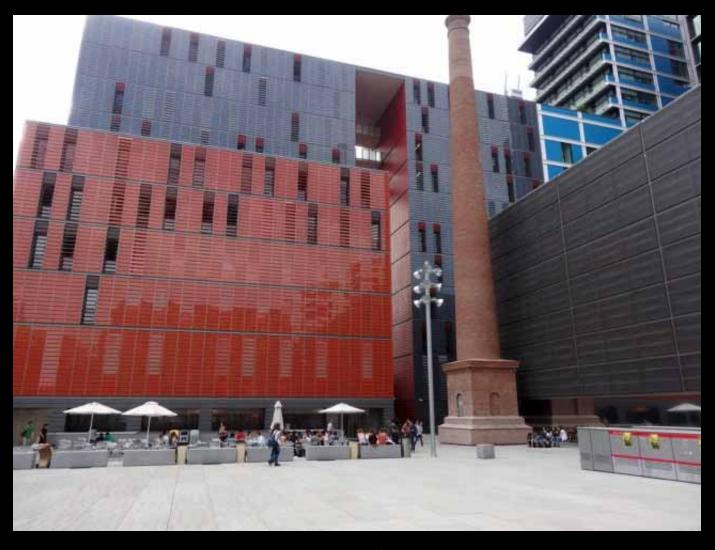
- 3. Focus on strengthening existing workplace districts / industry clusters
- 4. Target industries related to existing City assets

Make the District A "Knowledge Center"



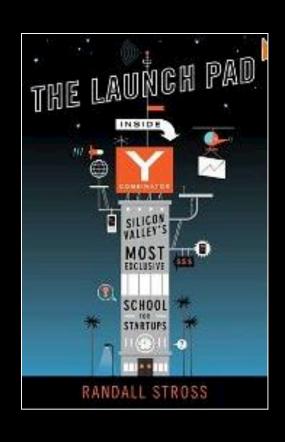
Grow and improve the local population of knowledge workers

Strategically Locating "Innovation Anchors"



University Media Department in 22@ Barcelona Innovation District

"Institutions" that actively facilitate innovation, collaboration, and knowledge exchange





Incubators, Accelerators, Training, Technical Assistance, Institutions, Regulators...

21st Century "Infrastructure": Beyond Data, Energy, & Transportation

MediaCity







Shared Production Studio Facilities:

logistics, management, and post production services, and satellite uplink.

Shared Research Facilities:

technology centers that promote collaboration and education.

Facilities provide scientists with technical know-how and access to state-of-the-art instrumentation, technologies, and materials.

Cities that can assemble these Innovation Districts are on their way to success in the New Economy

