

## **The Innovation Network for Communities: Using Social Innovations to Transform Community Systems**

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### **A Social Innovation at Conception: University Preparatory Academy**

On a sunny September morning in 2000, a social innovation was born in the windowless basement of the Promise Land Baptist Church in a desolated neighborhood of Detroit's inner city. It was a new school, University Preparatory Academy (UPA), and like many innovations, it was an audacious concept.

UPA's founders hoped to transform the dismal performance of the city's public schools. Most Detroit students didn't finish high school; year after year, more than 60 percent of entering freshmen left before graduating and not many of the remaining graduates enrolled in college. In contrast, UPA, a publicly funded charter school, was designed to graduate 90 percent of its freshmen and send 90 percent of them on to college and other post-secondary learning institutions—a dramatic boost in performance even though UPA had the same amount of money, same mix of African-American and low-income kids, and same labor market and pay for teachers as traditional Detroit schools.

Like any social innovation at conception, UPA was unproven. Its superintendent, Doug Ross, was an accomplished politician, but he'd never run a school before. What the school's founders (including two authors of this article, Cleveland and Plastrik) did have was an idea about how to achieve their goals. Several had studied the latest theories about learning and the problem of high school dropouts; they had met with dozens of teachers, principals, and district administrators who said their schools were trapped in an endless rut of mediocre performance. One had been an elementary school principal in Ann Arbor for many years. Ross himself had visited the few urban schools in America that seemed to produce far better results than the distressing average. Out of this research and experience, the team had designed a school based on learning theory and some of the model programs it had seen.

UPA would not operate like traditional schools that provide students with the curriculum and instruction needed to become college-ready high school graduates. These schools do little to develop a student's motivation to learn and "cultural competence" to navigate successfully in college, business, and the professions. In Detroit and other large cities, more than half of the African-American and Hispanic children who enter high school are not ready to learn. They do not believe they can succeed in school and see no connection between the academic courses they must take and their future life chances. They do not have the learning skills, study habits, and exposure to the broader world that generate the aspirations and hard work that lead to college and careers. And so they drop out of school.

Urban schools that simply offer these students a chance to take subject-matter courses completely fail to engage large numbers of them in meaningful learning. Like

many other successful social innovations, UPA had a concrete “innovation hypothesis”-- powerful learning will happen naturally when students are actively engaged. UPA’s approach: build powerful relationships between *every* student and several adults— teachers, a principal, an outside mentor—who care personally about their students; get to know the students’ families well; work with the students’ interests, whatever they are, rather than handing out textbooks; encourage, coach, and coax students into trying more challenging learning; broker learning resources for students, such as opportunities for internships at businesses; and model success for young people. Building this social capital for young learners that motivates and sustains them requires a different school design.

Each UPA school (elementary, middle, and high) is small—no more than 500 kids—so that no student is anonymous or falls through the cracks. It has small classes and keeps “advisories” of students together for three or four years so they form a learning community and their teachers really know and care about them. It uses project-based learning that is personalized to each student, so kids can use their own interests to drive their learning. It organizes extensive internships in business and community settings so students have learning opportunities with real-world relevance and exposure. Ironically, UPA’s approach has drawn concern from the education bureaucracy, because it is not “inside the box,” even though it is working.

On the first day of school at UPA in 2000, 112 sixth-grade started classes in the basement. Six years later, the school enrolled more than 1,200 students, randomly selected in a lottery, from kindergarten to twelfth grade. On June 9, 2007, UPA’s first high school graduating class received diplomas at the Detroit Opera House, watched through tear-filled eyes by their cheering families, school staff, founders, and the school’s allies. UPA had met its targets: 95 percent of its students graduated—only a handful dropped out--and 100 percent of them enrolled in colleges, community colleges, or post-secondary training.

“We have learned,” said Doug Ross, “that the 50 percent or more dropout rates that afflict virtually every big urban school system in America are unnecessary.”<sup>1</sup>

#### **Four Challenges of Social Innovation**

In addition to helping develop UPA, the authors have been involved for two decades in creating and implementing social innovations in various sectors and settings— economic and workforce development and urban sustainability—working with inspired and skilled social entrepreneurs.

In 2005, we helped the West Michigan Strategic Alliance attract a \$15 million grant from the U.S. Department of Labor to create an “innovation lab” for workforce development—and then prototyped a dozen potential innovations. These ranged from employer-cooperatives that boost entry-worker retention rates and cut return-to-welfare rates to portable academic credentials recognized by high schools, colleges, and employers. We also managed the two-year process of investing, step by step, in each

innovation—killing some and introducing greater rigor into the plans and implementation of others.

In the 1990s, we worked with Shorebank, now a \$1-billion community development bank headquartered in Chicago, to prototype a new kind of “double-bottom line” financial institution, a BIDCO for rural economic development in northern Michigan.

We created the “Green CDCs Initiative” in 2001, a novel partnership uniting environmental and community development organizations to revitalize ecologically and economically distressed areas. The Initiative provides community development corporations with access to one-stop technical assistance and financial resources in green design and development. It also published a landmark report establishing the business case for high-performance, energy-efficient affordable and low-income housing.<sup>2</sup>

We are working with the Center for Neighborhood Technology, a national leader in promoting sustainable cities, on the design, prototyping, and launch of several innovations, including one of the largest non-profit car-sharing companies in the country.

Each of these innovations followed the same basic path as UPA. It starts with development of the concept, which can take years, then proceeds to the design of a prototype, drilling down into myriad details, and moves on to prototype implementation or testing, which at UPA took seven years, from the original sixth-grade class to its graduation ceremony. The tested innovation is then launched—the point UPA has reached. Finally, the proven innovation is ready to scale at the system level.

But each experience also illuminated four great challenges social innovations face in achieving impact.

**1. Social innovation is an inherently difficult process, and the social sector makes it more difficult than it needs to be.**

The business sector has clearly demonstrated that innovation can be a disciplined, repeatable process, but the social sector typically lacks this clarity and discipline. As the Young Foundation reported in 2006, “surprisingly little is known about social innovation compared to the vast amount of research into innovation in business and science. . . . In a survey of the field, we have found little serious research, not widely shared concepts, thorough histories, comparative research or quantitative analysis.”<sup>3</sup>

What the social sector means by “innovation” is unclear; the word is used alternately to describe change in general or a specific change, a big, breakthrough change or a small, incremental change—without distinguishing one from the other. Few social entrepreneurs have an explicit framework explaining how social innovation occurs. Some social entrepreneurs leap from concept to full-scale launch, or even scaling up, without thoroughly testing their ideas. Meanwhile, social change funders—mainly foundations and the social-entrepreneur development organizations—often rely on the “spray-and-

pray” approach, trying lots of things and seeing how they turn out, rather than using a rigorously analytical, step-by-step investment process. As the Young Foundation report concluded, social innovations often fail “because of the lack of adequate mechanisms to promote them, adapt them and then scale them up.”<sup>4</sup>

## **2. Efforts to support social innovation tend to focus on entrepreneurs pushing a particular innovation, but miss the potential of achieving large-scale impact by transforming community systems.**

The recent surge in social entrepreneurship activity is impressive. Organizations such as Ashoka, Echoing Green, New Profit, the Schwab Foundation, the Skoll Foundation, and Social Venture Partners support social entrepreneurs, link them to each other, develop their skills, and help them manage innovations. Many of these innovations involve products or services for consumer markets.

These organizations have made significant strides in building support systems to help individual entrepreneurs succeed. But very little social innovation aims systematically to transform place-based or community systems. Yet, practically every goal social entrepreneurs care about—better education and jobs, environmental sustainability, poverty reduction, to name a few—can only be achieved by working on systems that are regulated or managed, at least in part, at the community level. For example, while school performance depends on many factors entrepreneurs can directly influence (the quality of teachers and principals, the effectiveness of curriculum, and so on), other factors are less easily remedied, such as local school boards, parents, and the students themselves, whose attitudes, ideas, relationships, and capacities are shaped largely by local conditions. “Local control” is an unavoidable part of other community systems as well, such as economic development and land use.

Our assessment, based on extensive work and research in scores of communities, is that places are ripe for change. Cities, towns, and regions across America are rubbing up against powerful forces that are changing the rules of community success. Economic globalization; the expanding reach of the Internet; degradation and collapse of natural systems and the looming threat of climate change; unprecedented immigration of non-Europeans to urban, suburban, and ex-urban communities; the rise of nonprofits and private foundations as unelected yet powerful civic actors: these changes are forcing, and in some case enticing, communities to search for dramatic innovation, rather than cling to the status-quo or settle for incremental improvements.

## **3. Transforming community systems requires more than just scaling up a social innovation, as hard as that tends to be; systemic change requires an “ensemble of innovations.”**

Single innovations, like UPA in Detroit, do not usually result in *system* transformation, because they do not—and cannot—tackle the entire system. UPA targeted the problem of dropouts and the lagging academic achievement of low-income, minority students. Even replicating UPA to several more schools will not transform the

performance of the Detroit school system. Teach for America and other education innovations are in the same boat. Important as they may be, they only affect a piece of a large, complex system.

System transformation requires an *ensemble of innovations*, an assemblage of component changes that add up to a systemic revolution, even while each innovation can be put into place on its own. As Peter Senge describes, after the Wright brothers proved powered flight was possible, it took nearly 30 years to develop, one by one, the retractable landing gear, wing flaps, air-cooled engine, and other component technologies that were assembled to make the DC-3, the first commercially successful airplane.<sup>5</sup> Ensembles of innovations are needed to transform community systems, but most of us are still working on specific components.

To transform a school system like Detroit's requires not just many more innovative schools, but also new systems that link the skills and knowledge students develop to what colleges and employers are looking for; fully prepare students to complete college studies, not just get accepted in college; leverage the power of after-school programs; recruit large numbers of new teachers who are prepared to work in these new school environments; accelerate the learning and credentialing process for students who don't need to spend four years in high school; and much more.

Thus, a systems change strategy for public education requires integrating multiple innovations together in the same place, in a community. In turn, this requires the presence of innovation "brokers" and "integrators" at the local level--a skill set that is not well developed or supported by existing social innovation organizations.

**4. The transformation of community systems is constrained as much by the capacity of communities to understand and adopt known innovations, as it is by the capacity of individual entrepreneurs to develop and scale up their innovations in the first place.**

It is rare to talk with social entrepreneurs and not end up flogging the problem of scale--how to spread an innovation through replication, viral effects, policy mandates, or other means. Some social innovators are working hard on this--understanding how to determine when an innovation has achieved "proof of concept" and is ready to go to scale; how to build scaling hypotheses into the early genetics of an innovation; and how to sustain work on innovations over the many years and even decades it requires to prove and scale them.

However, much less attention has been paid to the capacity required in communities to sustain the process of social innovation (launching and scaling new innovations, as well as "importing" existing proven ones developed elsewhere). The problem of how a community builds its social innovation capacity is as important as how individual entrepreneurs build their capacity.

But few communities have been intentional about developing, linking, or coordinating the many capacities needed to support social innovation for community systems. Moreover, our experience has been that place-based innovation is driven in large part by a particular type of social entrepreneur--“social innovation brokers”--who do not necessarily “invent” the innovations, but instead build the local demand for innovations, connect innovators and innovations together, and run interference with sources of potential resistance.<sup>6</sup> This kind of social entrepreneur is as important as the celebrated “social innovation inventors” that organizations like Ashoka and Echoing Green nurture. But they receive less attention and resources.

#### **Four Strategic Hypotheses for Social Innovation**

These challenges prompted us to form the Innovation Network for Communities (INC) in early 2007, with support from the W.K. Kellogg Foundation.<sup>7</sup> Through INC, and working with some 30 partner organizations and individuals to date, we have begun exploring more deeply the relationship between social innovations, systems change, and communities. We want to help social entrepreneurs get to their end game faster and more efficiently. And we are doing this at the community level, focusing on place-based innovation.

INC started with several strategic hypotheses regarding the community systems segment within the large field of social innovation. We do not claim to have all the answers for the whole field and understand that our hypotheses may prove to be wrong. We are open to this conclusion especially because failure, we believe, will teach us how to succeed. Our four core hypotheses are:

***(1) The process of social innovation in communities can be systematized into a replicable practice at the community level.*** This requires the development of a set of practices and standards for the social innovation process and the creation or strengthening of a support infrastructure for community innovation, which we call a “community innovation infrastructure.”

***(2) The elements of a community innovation infrastructure mirror the elements of a commercial innovation infrastructure.***<sup>8</sup> These include: a supporting culture; innovation scanning; innovation import/export capacity; social entrepreneurship development; innovation management systems; sources of innovation development and investment capital; and success measures.

***(3) Systems change at the community level requires the ability to assemble an “ensemble” of innovations and integrate them together in a place.*** As we noted earlier, this requires more than just finding or developing individual innovations – and requires the presence of “innovation brokers” who can weave together or recombine packages of innovations.

***(4) Social innovation in communities can be supported and leveraged by drawing upon knowledge and other resources from individuals, organizations, and***

**networks operating at national and international levels.** This requires the development of new capacities to perform applied research and development for specific types of innovations, which we call “innovation sector hubs.”

These hypotheses form the theoretical basis for the activities INC has undertaken since early 2007 to accelerate and spread place-based social innovation—and are driving our learning.

### **Designing a Disciplined Process for Social Innovation**

Borrowing from the commercial innovation field, we define a place-based social innovation as any new product, process, service, enterprise, or system that *boosts performance of any given community system by at least 40-50 percent*. For instance, UPA’s graduation rate of 95 percent amounted to at least a 100 percent improvement in results of the public schools at no additional cost. Successful community innovations deliver much more than the incremental “continuous improvement” many successful organizations achieve and the vague “better results” many nonprofits seek. Innovations are breakthroughs and their impact is measurable. Moreover, in our view, a social innovation should only be considered successful when it is both financially sustainable and scalable, meaning it has a predictable flow of revenue and is not heavily dependent on conditions in a particular context. Here, again, UPA illustrates the point: its funding will come from government as long as it has students enrolled and its design is being used to create other schools in Michigan.

An innovation develops in stages. Entrepreneurs hone a concept and then design a way to test it. The testing leads to redesign of the innovation and then the entrepreneur launches the redesigned innovation. Once launch is completed, entrepreneurs often turn to scaling up the innovation—expanding its impact.

Businesses typically use a “stage-gate” process to manage the evolution of an innovation through these stages, but this concept-to-scale process does not usually occur in the social innovation field. INC has developed its own stage-gate system, adapted from the private sector, applying world-class methods of knowledge and idea creation, due diligence, business planning and partnering to the tasks of identifying and developing community innovations. It’s a highly disciplined investment process: at each stage, entrepreneurs (and their investors) decide whether to continue investing in the next stage and under what conditions they will invest.

**Table 1: The Stage-Gate Model for Managing Social Innovations**

<b>Innovation Stage</b>	<b>Deliverables from Each Stage</b>
<i>Concept</i>	A defined and testable innovation concept, with an analysis of why the opportunity for innovation exists; a written description of the innovation, including its primary features and benefits; and a broad understanding of the resources required to make it a reality.
<i>Design/Prototype</i>	A refined design for the innovation, including strategic, customer,

	market, technical, and financial analyses, and a working prototype of the product or service, with performance characteristics verified by users.
<i>Launch</i>	Finished products, processes or services based on the prototyping experience, with established pricing/costing; a marketing plan; distribution systems; and necessary support services. Development of a detailed business plan for the innovation and introduction of the innovation into the system.
<i>Scaling Up</i>	Spread of the innovation to multiple locations and/or applications through franchising, wholesale distribution, expansion, intermediaries or other methods of growth.

The stage-gate process is designed to weed out ideas that do not meet criteria for the innovation. A majority of early-stage innovations do not make it to the implementation stage; the innovation process looks like a narrowing funnel, not a steady-width pipe. These “failures” provide valuable information for future innovation development. Of course, using a stage-gate process in the social innovation sector means that social entrepreneurs have to become more comfortable with the idea of failing early and failing often.

We used this stage-gate process in the management of the \$15 million WIRED West Michigan invested in a number of local innovations to transform its workforce development systems to match the needs of the changing economy. This resulted in several projects being terminated because their innovation hypotheses did not withstand scrutiny. In most other projects we made significant changes to the business plan and strategy as a result of applying the stage-gate process.

### **Building Community Innovation Infrastructure**

A few years ago, the owner of a large manufacturing company in Detroit spoke out publicly about the need for better schools in the city, whether they were operated by the traditional school district or public charter schools not a part of the district. Dave Bing’s declaration was an act of civic leadership in a community that has been torn apart politically by controversy over the charter schools that enroll nearly 20 percent of the city’s students. Other Detroit leaders—community activists, foundation executives, and the city’s mayor—added their voices to the demand for schools that produce good results, whatever their governance. Bing, who was a member of the UPA board of directors, decided in late 2007 to help Doug Ross, the UPA superintendent, start another school—a math-science “college prep” middle-high school based partly on the UPA design. Ross, meanwhile, was working with Steve Hamp, founder of Henry Ford Academy, another high-performing charter school serving Detroit students, on creating a More Good Schools Incubator to create additional schools designed for Detroit’s students. The duo quickly figured out where they could obtain some of the seed capital needed to jump-start the project.

The Bing-Ross-Hamp story reveals several key elements of a community innovation infrastructure. Bing and others' public statements helped shape a *supporting culture* that recognizes the need for change and enables innovators as one source of change. The knowledge that Ross and Hamp have about what works in urban education and their connections to school entrepreneurs around the country has provided an efficient *innovation scanning capacity* to help identify and “acquire” promising innovations. Ross and Hamp also are playing the role of *community innovation brokers* in getting a new schools going, and will recruit and prepare other entrepreneurs to operate the schools. The funding for launching the school will come from *sources of innovation capital* that have supported previous innovative efforts in Detroit. And the links among Bing, Ross, Hamp, and many others are part of a *robust network* connecting civic leaders, innovators, investors, and other allies.

The example is a modest one. Detroit's innovation infrastructure has been weak for many years. But it is making a comeback. The creation of a new \$100 million regional New Economy Initiative, capitalized by a half-dozen foundations, should accelerate the process. Few communities have a well-developed infrastructure for innovation, but many, like Detroit, have in place some pieces of the puzzle, even if they are of varying strength or quality.

Community innovation infrastructures are highly decentralized; no place has a single organization that manages local innovation activities. Instead, communities contain a number of people and organizations that loosely share a point of view about what needs to get done in the community and attempt to coordinate their activities (usually without the innovation discipline we describe above). An innovation infrastructure is more of an episodic improvisation around a project, like the UPA school, than a carefully managed process, like the supply chain of a manufacturer or retailer. It also seems that community innovation infrastructure tends to organize around specific sectors, such as economic development, education, or environmental sustainability. “Clusters” of investors, entrepreneurs, incubators, and capital sources coalesce around specific issues, but the capability does not extend to a broader, more integrated agenda.

INC is exploring how communities can be more intentional about building their capacity for social innovation. How can they become more knowledgeable, for instance, about the elements of such an infrastructure? How can they work on developing standards for innovation shared by the local players, and on sharing their practices? How can they fill gaps in their infrastructure and strengthen what already exists? How can they bring together ensembles of innovations to achieve system transformation?

In Detroit, for instance, we are beginning to develop a network of social entrepreneurs—in public education, creative industries, social enterprises, and double-bottom line funds—to connect and learn with each other; obtain technical assistance for promising innovations; raise innovation capital; and build relationships with civic leaders in the region.

## **Developing Innovation Sector Hubs**

An innovation sector hub is an organization or network of organizations focused on identifying innovation opportunities within a sector, and on designing, prototyping, incubating and scaling innovations to meet those opportunities. (The Young Foundation refers to these as “social innovation accelerators” or “sectoral accelerators.”<sup>9</sup>) We believe the social innovation field in the U.S. needs a broad network of vibrant innovation sector hubs that share a certain level of business discipline about social innovation, working on innovation scanning, assessment, due diligence, and development; talent recruiting; deal making; and capital raising.

An innovation sector hub is part research and development laboratory; part best-practice networker; part business incubator; and part commercializer of intellectual property. Over time, an innovation sector hub builds deep knowledge about how a sector works, and builds strong relationships with key practitioners within the sector. This provides increased access to innovation opportunities. Innovation sector hubs are different from individual social entrepreneurs because their focus is on building applied knowledge and spawning as many innovations as possible out of that knowledge.

Many organizations in the social sector perform one or more of the key functions of an innovation sector hub, but few integrate all of the functions to create a “pipeline” of continuous innovation to transform a sector or field of practice. Entities that focus on best practices, public policy, or advocacy are rarely in the innovation development and incubation business in a serious way. Philanthropic institutions may support innovation, but are not usually staffed and organized to carry out an innovation sector hub’s functions in a disciplined way. The many networks supporting and enabling social entrepreneurs do not typically concentrate in any one sector; their focus is more on developing successful entrepreneurs than on transforming a field of practice.

We have found some organizations that are, or have the potential to become, innovation sector hubs. The Center for Neighborhood Technology has been working for well over two decades on solutions to urban sustainability issues. The Council for Adult and Experiential Learning has been pioneering lifelong learning practices in adult education and workforce development. The NewSchools Venture Fund has the mission of “transforming public education through powerful ideas and passionate entrepreneurs” by investing in education innovations. The Roberts Enterprise Development Fund is an innovation incubator focused on non-profits that create revenue-generating businesses that employ and educate at-risk individuals in the San Francisco Bay area. A trio of organizations—Sustainable Systems, Strategic Development Solutions and Economic Innovation International—is developing a capacity to create regional Double-Bottom Line Funds blending commercial returns with environmental and community benefits. Finally, the Center for Financial Services Innovation, an affiliate of Shorebank Corporation, assists the financial services industry in developing ways to serve “underbanked” people.

Organizations like the above, we believe, have the experience, networks, and motivation to help transform their respective sectors and practice areas. INC is currently in discussions with these and other potential partners about developing innovation sector

hubs in the following practice areas: Community College Innovations Laboratories; Double-Bottom Line Funds; Market-Based Economic Development; Transnational Immigrant Communities; Urban Learning; and, Urban Sustainability.

## **The Promise of Place-Based Innovation**

INC’s work is in its early stages; we have yet to reach any conclusions about our hypotheses. The challenges, however, are readily apparent. For example, applying the disciplined stage-gate process to develop individual innovations defies many of the habits and norms of the social innovation field. Meanwhile, our ideas about community innovation infrastructure have led to an intriguing question: Is it better to “design” such a structure, a priori, or to allow it to “emerge” organically through a series of transactions? The development of innovation sector hubs, we have found, requires deep sectoral knowledge and the application of an “innovation lens” to that knowledge—a rare combination in the field. And when it comes to social innovation brokers, while we might say “we know one when we see one,” we are not at all certain about what it takes to develop the skills to perform this role.

As we test our hypotheses, we are eager to connect, share, and collaborate with others who are grappling with similar issues and questions. Our experience in the social innovation field has taught us the importance of building and using networks—harnessing a diverse set of institutions and ideas and tapping the collective wisdom that emerges—when it comes to achieving success. This simple insight is the inspiration for, and aim of, our work.

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<sup>1</sup> For more information about University Preparatory Academy and lessons learned, download “Urban Schools that Work” at [www.in4c.net](http://www.in4c.net).

<sup>2</sup> “The Costs and Benefits of Green Affordable Housing,” (New Ecology, Inc., Local Initiatives Support Corporation and Tellus Institute, 2004)

<sup>3</sup> The Young Foundation, “Social Silicon Valleys—A Manifesto for Social Innovation,” Spring 2006, p. 8.

<sup>4</sup> Ibid.

<sup>5</sup> Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization* (New York: Doubleday, 1990), p. 6.

<sup>6</sup> Andrew Hargadon gives a good profile of these “innovation brokers” in his book *How Breakthroughs Happen: The Surprising Truth About How Companies Innovate* (Cambridge, MA: Harvard Business School Press, 2003).

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<sup>7</sup> INC's founding board of directors is: Richard Anderson, Keith Cooley, Alvaro Lima, Juan Olivarez, Peter Plastrik, and Janet Topolsky.

<sup>8</sup> The private sector has developed a robust innovation infrastructure to support process, product, and business design innovation. The system for identifying, screening, developing, prototyping and launching ("commercializing") private market innovations is well articulated and financed. Rewards for success are competitive and the field attracts some of the best human talent in the marketplace. Systems for due diligence and screening have been well honed over many years of trial and error. Commercialization enterprises have relationships with many different sources of capital to match the stages of development of an innovation. A robust set of different business designs for innovation commercialization is constantly evolving.

<sup>9</sup> The Young Foundation, "Social Silicon Valleys," p. 49.