Harvard Business Review

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Microcapitalism and the Megacorporation

by Debra Dunn and Keith Yamashita

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Microcapitalism and the Megacorporation

More than a hundred miles from Bangalore, India, the dusty road that runs through Kuppam is bustling with cars, carts, auto rickshaws, and pedestrians. The people from the rural areas surrounding Kuppam often travel for hours to use what's here—to shop, to catch the bus that travels to towns beyond, to access government services and resources.

But the services here are not enough to meet the region's growing challenges: Of the nearly 300,000 people who call the villages around Kuppam home, more than half live below the poverty line. When wage earners can find work, it's usually as migrant laborers or farmers. One in three citizens is illiterate, more than 50% of households have no electricity, and in Andhra Pradesh, the Indian state where Kuppam is located, more than 4 million children do not attend school. These problems are compounded by a high rate of AIDS—more than 400,000 residents of Andhra Pradesh, including many who were among the most able-bodied earners, are HIV positive.

It's exactly this challenging atmosphere that prompted Hewlett-Packard to choose Kuppam as one of its first "i-communities," initiatives where the company creates public–private partnerships to accelerate economic development through the application of technology while simultaneously opening new markets and developing new products and services. By assembling an ecosystem of public and private partners, HP hopes to turn the Kuppam region into a thriving, self-sustaining economy where greater access to technology permanently improves literacy, creates income, and provides access to new markets, government services, education, and health care. (For a glimpse into that ecosystem, see the sidebar "An Hour in the Life of an Information Center.")

It's still early in the project's intended three-year life span—the Kuppam i-community has just celebrated its first anniversary. (For a description of the project's four phases, see the exhibit "Making a Sustainable Contribution.") But progress has already been made and much has been learned. As multinational companies, governments, nongovernmental

organizations (NGOs), and communities join to drive economic and social change in a variety of nations, the Kuppam i-community project can serve as a place to test new ways of working and achieving results for communities around the world.

A Better Way to Make a Difference

This i-community project represents a new breed of initiative that fuses HP's global-citizenship strategy and its business strategy. What does that mean? For one thing, it means HP's efforts there do not fall under the heading of philanthropy. Philanthropy is important to Hewlett-Packard, but we at HP want our contribution and involvement in global-citizenship initiatives to have a far greater impact than simply writing a check would.

Consider the impact Hewlett-Packard is having on the lives of two young women in the village of Thodialyellagatti. Saraswati and Gowri are both intelligent and energetic, but they had to drop out of school after completing seventh and fifth grade, respectively, because their families could not afford their schooling. Today, both are members of a self-help group in their village that has equivalents in other areas of the country. Members of such groups, almost all of whom are women, put aside small sums of money each week; the pooled money is then available for loans to members. Once a group's assets reach a certain point, the government matches the money for loan-making purposes. Some self-help groups have grown large enough to fund business start-ups, such as food processing and textile companies, that require capital equipment.

When HP decided to pilot a new solar-powered digital camera and printer setup small enough to fit in a backpack, the company went to the self-help group in Thodialyellagatti. The idea was to test the digital photography solution as a vehicle to generate new jobs for Kuppam residents. We wanted to determine what kind of revenue could be generated for holders of the new jobs and find out whether there was a sustainable business model that HP could replicate more broadly. Saraswati and Gowri were among ten women chosen to be trained as village photographers and given free cameras, printers, and other equipment. After two weeks of training, they were able to serve as the official photographers for the debut of the first round of i-community solutions and services at a week-long launch event.

That "solutions week" culminated in an inauguration ceremony presided over by Chandrababu Naidu, the chief minister of Andhra Pradesh. Seeing how people loved having their pictures taken with their elected representative, Saraswati and Gowri seized on a business opportunity: They followed Naidu on his rounds, selling inexpensive photo ops. In the course of just a few days, both women earned the equivalent of a month's income. Today they continue to earn money, if at a less frenetic pace, selling photo IDs. Positioning themselves in front of a government office at peak hours, they are Kuppam's equivalent of an instant-photo booth. They also photograph engagement ceremonies, public works in progress, and a wide variety of other events and scenes that in the past were not documented because photography was too expensive for anything but very special occasions.

For Saraswati and Gowri, the additional source of income will mean a better education for their children, not to mention the prospect of a water tap at home. But the experience has had an even larger impact than that. Recently, the two women were talking excitedly about their upcoming meeting with the manager of a co-op bank; the plan was to discuss a line of credit for their self-help group. This, they said, would not have been conceivable before they had found success as photographers. They would not have had the confidence.

This inspiring story grew out of HP's commitment to what we call "e-inclusion"—using technology to close the economic and social divide as a matter of both global citizenship and business strategy. Taking on citizenship initiatives that make sense in terms of our business strategy means we become a better global competitor in the process. It also means greater social impact, because we can bring HP's business strengths to bear.

Applying Management Practices

One effect of aligning our global-citizenship strategy with our business strategy is that we are applying the rigor and processes of a well-managed company to problems that need to be solved. It's partly an issue of mind-set: Because we have clear strategic objectives for the initiative, we approach the project as business managers. It's also a matter of Hewlett-Packard's particular capabilities; we follow

Debra Dunn is the senior vice president for corporate affairs at Hewlett-Packard, with leadership responsibility for HP's global-citizenship efforts. **Keith Yamashita** is a cofounder and principal of San Francisco–based Stone Yamashita Partners, which consults to companies undergoing large-scale strategic change. He worked closely with Dunn to design the fused strategy described in this article.

certain practices very well. We're employing seven of these practices in Kuppam, as detailed in the following pages.

Unearthing Customer Needs. In the technology industry, breakthrough products and services rarely come about as a result of asking customers what they want. Customers are notoriously unable to envision what doesn't exist. Instead, successful companies divine the needs of their customers by probing at underlying problems and transferring that understanding to the innovation process. Few community development initiatives benefit from this line of thinking, however. Perhaps it's because these programs are funded as purely philanthropic endeavors and the relationship between the companies making the donations and the communities being targeted typically depends on an intermediary nonprofit. Whatever the reason, this phase is usually addressed in a cursory manner or bypassed altogether.

From the start, HP has approached the economic and social challenges in Kuppam by investing in a needs-finding process, which features an iterative cycle. When we unearth a need, we rapidly prototype a solution to it. We deploy that solution on a limited basis and closely observe Kuppam residents' experience with it. Based on what we learn, we make modifications, allowing the solution to evolve—then we begin the cycle anew. As a result, each generation of solutions is more sophisticated than the last, and over a short period, solutions become tightly matched to what citizens truly need. It's a methodology we refer to as a "living lab," and it's based on the methods we use in HP Labs to develop new products and technologies. In Kuppam, we've made it possible for local entrepreneurs to build community information centers where residents can tap into online government services. As they are rolled out, the centers are refined based on the responses of the citizen-customers.

Fielding a Diversely Talented Team. Envisioning a solution tailored to unmet customer needs is only part of the challenge. We also have to scale those solutions to the larger community. That requires a diverse set of talents. Here again, we take what we've learned in

An Hour in the Life of an Information Center

The community information center in Kuppam is located downtown, a stone's throw from the main bus terminal. Surrounded by houses, fruit sellers with pushcarts, and stalls and stores offering utensils, bangles, and flowers, it's in the heart of the central bazaar. Its large sign features the yellow and red "PCO" that is ubiquitous in the Indian landscape today, indicating that it's a public call office—people can go there to make phone calls. The sign also announces that customers can make photocopies and use various communication services, such as faxes.

A narrow flight of stairs leads to a 400-square-foot office with a neat line of four workstations, each housing one computer. Users can obtain information about services and programs by using the computers to access the HP-built i-community portal.

Uma Rani, the 25-year-old high school graduate who is one of the three co-owners of this CIC, is on-site this morning. She and two other first-time entrepreneurs were chosen after a rigorous selection process by World Corps, an organization whose mission is to generate employment in developing countries. The three joined forces for the first time in starting this venture, which is funded by a loan offered under the auspices of the chief minister's Employment of Youth program. Hewlett-Packard provided much of the equipment in the center and designed many of the Web-based services on the i-community portal that can be accessed at the CIC.

Chelliah is a typical walk-in customer. This 65-year-old native of the adjoining village of Kankundi retired a year ago after serving as the headmaster of the only school in his village. He is visiting Kuppam to follow up on a petition he presented to the government regarding his land records. He needs to photocopy documents that have to be submitted. As Uma Rani begins the copying, she strikes up a conversation with Chelliah about his family and life in Kankundi. She also takes a moment to apprise him of new services he can apply for at the CIC via the HP i-community portal. She asks if he has heard of the government's program for retired teachers. He hasn't. After getting a little more information from him, Uma Rani is able to print out a list of programs he might avail himself of.

Before Chelliah has left, an application for the program for retired teachers has been submitted electronically and acknowledgement of the submission has been received. The application for the benefits will have to be approved at the district level; he can expect to have a response within a week. Uma Rani informs him that, as it happens, her partner Suresh will be in Chelliah's village the following week, leading a team of high school students reading electricity meters after school hours. Uma Rani will ask Suresh to pass on the word about the application's outcome.

Meanwhile, in the station next to Uma Rani's, her other partner, Krishna, is handing a check to Lakshmiamma, a pregnant woman. Lakshmiamma's scenario was similar to Chelliah's in some ways: She had happened into the CIC last week to make a phone call while visiting Kuppam for her monthly checkup at a hospital. She is entitled to benefits through a government program aimed at helping pregnant women below the poverty line. But she had not even known that such a scheme existed—until she walked into the CIC.

business and apply it in the community. Traditionally, most multinational companies entrust their community-engagement and development initiatives to professionals with backgrounds in philanthropy and development. We know we need to tap such experts, but we also want to see other perspectives and capabilities on the team—like deep business acumen, line-management skills, expertise in government affairs and policy analysis, and a rich understanding of the specific culture in which the initiative will be deployed. The i-community project in Kuppam is led by HP's Emerging Market Solutions team and powered by HP employees from HP Labs, Philanthropy, Education, Government Affairs, and HP's e-inclusion team. The effort also encompasses the local leadership and employees of HP India, along with volunteers there. It's a complicated undertaking to assemble and manage such a diverse team, but we believe this model of engagement is essential for creating maximum economic and social value.

Taking a Systems Approach. In HP's own reinvention efforts as a company, the leadership team has taken a systems approach—that is, rather than isolate parts of the system and attempt to improve their performance separately, we consider the parts in context and work to optimize the whole. We've framed all of the elements of our business—strategy; structure and process; metrics and rewards; and company culture and behavior—and we are working every aspect simultaneously to drive results. We're taking a similar systems approach in Kuppam, and with a similar frame. We're simultaneously examining the strategy of sustainable development in India; the structure of the team and community to make progress; the metrics that help us assess how we're performing; and the culture we need to instill in the HP i-community team and in the Kuppam community.

The point is that although technology is central to making progress in Kuppam, far more is required to ensure a sustainable contribution. Community leaders must advocate for the solution, trusted individuals within the community must lend their reputations to the effort, Kuppam businesses must get involved, and other technology companies must integrate their technology into the solution. That brings us to another aspect of our approach.

Creating a Leading Platform. It's a truism in the information technology industry that to achieve effective solutions, a company must address the full value chain: the set of product and service providers that, taken together, satisfy a customer's need. The best way to serve customers—and therefore to fuel profitable growth—is to design a value chain that will deliver a total solution, not simply provide point solutions. This is not to say that HP believes it should provide the entire value chain on its own. Instead, we work to develop a platform to which partners can add technologies and applications.

In Kuppam, we are similarly finding that there are many benefits to creating a leading platform. The platform we're creating consists of a 2-megabit-per-second network, five community information centers, and on-line services—health information, literacy programs, information for farmers, assistance to people applying for government programs, and so forth—that we are developing with the government. The platform has succeeded in attracting additional partners and developers. World Links (a global network for the improvement of teaching and learning through the use of information technology), Digital Partners (an organization that links entrepreneurs in the IT realm with social entrepreneurs, foundations, and development institutions), and other for-profit and not-for-profit organizations are now coming to Kuppam to build their own solutions on top of it. We expect that the benefits of HP's initial actions will be greatly multiplied by the organizations that leverage the platform.

Building an Ecosystem of Partners. From the get-go, we've structured the initiative to draw on the strengths of the Andhra Pradesh government, Kuppam's municipal leadership, local businesspeople, informal networks within the community, health care professionals, NGOs, local and international technology partners, and the community as a whole. Anyone who has led a large community initiative for a multinational will tell you that this isn't the easiest path to take in the short term. Balancing the interests, work methods, and preferences of the various groups is a challenge. Each participant has its own core motivation, metabolism for change, tolerance for risk, and scorecard for what constitutes success. That's probably why, for all the talk about public–private partnerships, there are still remarkably few examples of highly successful models

Because we have clear strategic objectives for the initiative, we approach the project as business managers.
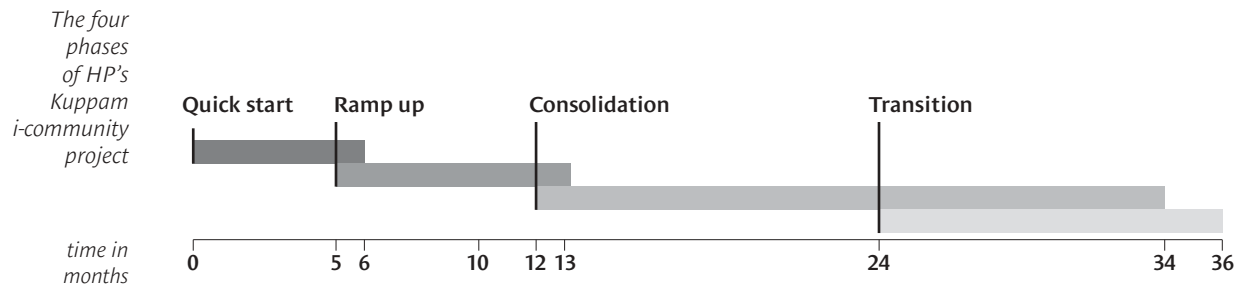
in developing nations. But we are convinced that, as in the technology industry, the most sustainable communities are those in which many different players have a vested interest in perpetuating a given solution. So instead of attempting to drive all the value ourselves, we are trying to create a healthy ecosystem of partners, all dedicated to solving the problem.

Setting a Deadline. To improve the likelihood of productive results, we believe it's important for us or for any multinational corporation to set a time limit for participation in a community-based project. It's critical to state from the beginning that your objective is to create a self-sustaining initiative—and to signal that, you must make clear from the outset how long you intend to take part in it. (The Kuppam project, as we've mentioned, is a three-year commitment on the part of HP.) Such a time limit has two positive effects: First, urgency keeps all the participants in the partnership focused. Second, it biases the initiatives toward action, not rhetoric, encouraging participants to find points of highest common purpose rather than to focus on the differences between them.

Solving, Stitching, and Scaling. Finally, we bring to Kuppam the pragmatism that HP has

Making a Sustainable Contribution

The four phases of HP's Kuppam i-community project

Quick start **Ramp up** **Consolidation** **Transition**

time in months

0   5 6   10   12 13   24   34 36

■ **Quick start**
Host conversations with representatives of the full community.

Stage a "visioning" exercise, in which a graphic facilitator depicts the community's ideas and hopes in a rich, vibrant mural; that approach enables broad participation, regardless of language and literacy, and keeps the focus on overarching goals.

Reach agreement on areas that would be well served by enhanced information and communications technology.

Gain high-level alignment with partners in the private and public sectors.

Develop a prioritized list of Web- and other technology-based solutions.

Outline projects to prototype, touching on all of the community's focus areas.

Establish credibility and momentum by achieving some quick successes.

■ **Ramp up**
Gather resources required for prototyping.

Create prototypes of Web-based services and solutions in areas such as education, health, and agriculture.

Involve partners and "users" (community members) throughout the process to test the validity of each approach.

Evaluate solutions for their usefulness in the community and their potential for success in other developing markets.

Design and build the necessary communications infrastructure.

Train stakeholders so they can begin to own the initiatives and assume leadership of them.

Turn the ecosystem of global and local partners into a true coalition, with defined expectations and performance metrics for all parties.

■ **Consolidation**
Evaluate the intellectual property, relationships, and practices generated to date.

Help local partners decide which solutions to deploy more widely within the community.

Take the best ideas to scale; stop projects that are not likely to reach their goals.

Figure out how to replicate the successful parts of the initiative in other communities.

■ **Transition**
Identify leaders in the community.

Transfer power, know-how, and process skills to local participants.

Ensure that the solutions are sustainable without HP's day-to-day involvement.

Living labs like Kuppam offer an unmatched opportunity for managers to develop the skills they need to lead businesses in the twenty-first century.

learned through years of taking generations of new products to market. With a new technology solution, it often makes sense to focus the first prototype on one high-profile customer's version of the problem, rather than try to provide, out of the box, for all the forms the product will eventually take. Such a first customer is known as a "lighthouse account" because, if it is well served, the customer will point others toward you. It serves as proof of concept and a shining example. In Kuppam, we are not attempting to solve the entire problem from the outset. Instead, we are focusing on solving parts of it well—and, in the process, building a collection of subsolutions. As we make progress, we stitch those together to create a total solution and then take it to scale. That approach isn't unique to Hewlett-Packard in the business world. What distinguishes our method is that we apply our usual pragmatism to global-citizenship initiatives.

Kuppam's Business Value to HP

We've been discussing what HP brings to the table in Kuppam, the organizational approaches and strengths that enable us to be a valuable partner in that community's efforts. But by design, the exchange of value is two way. HP has also been a beneficiary, gaining knowledge and contacts that will make the company a stronger competitor in the global economy.

The Kuppam i-community will lead to new kinds of technology solutions that will prove valuable in India and other areas too. We've already mentioned our project involving solar-powered digital photography. That particular solution—the photo studio in a backpack, as it were, with its potential for creating jobs and income—grew out of conditions and needs observed in Kuppam, where it's simply not realistic to expect that many people would buy PCs, cameras, and color printers for personal use, as they do in the United States. Many of the online services we're developing are similarly promising for applications beyond Kuppam. In addition to new products, we are creating intangible assets—like new networks and increased familiarity with new markets—that will have an important impact on our bottom line.

In the process of accomplishing all this, we are also developing world-class leaders. Consider the responsibility that now belongs to HP

leader Anand Tawker, who was chosen to lead the i-community effort in India. Marshaling and focusing the talent of diverse groups requires insight, vision, cultural understanding, and business acumen. HP was confident that Tawker would bring strong business-planning skills to the project; he had run several business initiatives at HP and other technology companies. He was fluent in technology development and innovation processes. Perhaps just as important, Tawker, who is of Indian descent, could ensure that Hewlett-Packard would operate in a culturally appropriate way within the i-community. Yet even with all these past successes and capabilities on his side, Tawker says his current post as the director of the Kuppam i-community effort has challenged him. "In so many ways, I think my previous experience was just a prelude to this job," he says. "But in the same breath, I'll tell you that Kuppam pushes me in so many different, unexpected ways—calling on every fiber of what I know so we can invent new things, new solutions, and new ways of working."

The mark of successful companies in our industry is that they can reinvent themselves, and that requires capable, resilient leaders. Living labs like Kuppam offer an unmatched opportunity for managers to develop the skills they need to lead businesses in the twenty-first century. More can be learned in three years in a living lab than in virtually any leadership-development program or graduate course. Indeed, though it wasn't among the primary goals of the i-community, teaching leaders new ways to lead may be one of the largest competitive benefits of the initiative. Ultimately, it's the knowledge that these leaders and their teams gain in places like Kuppam that will allow HP to become a stronger competitor.

A New Framework for Global Engagement

Fusing our global-citizenship and business strategy is about doing good and doing well in the same activities—as opposed to doing well in order to do good. This hasn't been our traditional approach. Certainly, like many multinational companies, HP has a history of philanthropic efforts. In 1939, founders Bill Hewlett and Dave Packard donated a portion of their first year's profits to local causes. In the years since, HP has contributed more than $1 billion in gifts, in-kind donations, and time to causes

around the world. A few years ago, however, we realized that while our philanthropic efforts were generating results, the results were suboptimal. We saw that we could achieve much more if doing good and doing well were mutually reinforcing (and with recent world events, we felt we *needed* to be doing more). At the same time, we thought we could achieve more for HP's business in the process—a vital consideration for our shareholders as well as for our competitiveness.

This is why we developed the HP Global Citizenship Framework. (See the sidebar "A Focus for Global Citizenship Efforts.") We wanted to map out and clearly communicate our priorities in this area and help our organizations align around this new way of thinking.

The Kuppam i-community initiative demonstrates our commitment to e-inclusion and community engagement and makes a great deal of business sense for Hewlett-Packard. As a high-priority growth market for HP, India has many potential customers for new HP technologies, products, and solutions. We also chose Kuppam because of what it could help HP learn about nascent or "white space" opportunities—the high-potential opportunities that lie between markets or outside HP's current focus areas. We believe HP's richest opportunities and best chances for innovation lie in regions that rank user and organizational needs very differently from the way established markets and customers do. Finally, Kuppam is a community on the move, led by a particularly ambitious network of government officials, business owners, and social leaders who want to create change for the citizens of the region. In fact, it was because Kuppam has such strong, willing leadership—and the fundamental institutions required to support change—that HP chose to put its first i-community project there.

No question: We are placing the highest priority on communities where we can "engage the engageable." In Kuppam's case, Chandrababu Naidu, the chief minister of Andhra Pradesh, has a powerful vision for his constituents, and the use of information technology is central to that vision. Among his other goals is achieving a 100% literacy rate within a three-year period. Naidu and his team have played an active role in selecting community leaders in Kuppam to anchor various parts of the initiative.

A multinational corporation is not a government—we are always mindful of that. We know we can have an impact only if there's a base level of functioning systems, institutions, and programs. Change is not possible until there is a capable network to support it. When

A Focus for Global Citizenship Efforts

What does it mean to be a good global citizen? At Hewlett-Packard, we now use a simple framework to answer that question. At its core are values that must never change. Strong ethics and appropriately transparent governance form the platform of integrity on which all our policies and decisions must be based. And deep engagement with key stakeholders in the communities where we do business is essential to ensuring a positive impact.

More particular to our industry and the current moment are the three burning issues we're focused on: privacy, the environment, and "e-inclusion" (which has a strong component of education). Regarding privacy rights, we were the first company in the *Fortune* 50 to join Safe Harbor, the international data-protection agreement outlin-ing rules for transfer of consumer data across international borders. On the environmental front, we have an explicit goal of designing new products so as to minimize their ecological impact, from production through disposal. Our e-inclusion and education program focuses on using technology to give people access to social and eco-nomic opportunities. Our goal is not simply to participate, but to be a leader, in each of these areas.

Finally, the outer edge of the framework highlights three key competencies or assets that we deploy. We work with the U.S. government and governments around the world to shape and influence policy. We make philanthropic contributions of funds and resources. And we communicate broadly, to raise consciousness of the problems we see and to increase awareness of effective solutions.

Deceptively simple, the framework reflects many long hours of complex analysis and discussion. It allows us to easily communicate the new strategy to employees and partners so that they can align their actions with ours.

global-citizenship efforts and business efforts are being fused, it's important to choose initiatives based on the strength of local leadership. Naidu will take full advantage of the i-community to improve the effectiveness and reach of government services, use technology to disseminate information about public health, and use the pilot project to generate new jobs and economic opportunities. We picked Kuppam because we knew HP could be a catalyzing force for his initiatives.

The Long View

Kuppam's i-community now encompasses five physical community information centers—with more on the way—where students, teachers, parents, and others can learn skills and get access to information and services via the Internet. It features a government portal—usable from any Web-enabled device—that gives Kuppam residents access to government Web sites and services. The i-community also features a mobile service center with wireless access and new technology-empowered social programs such as Naidu's literacy program. These are the kinds of tools Kuppam needs to unleash its talents and ambitions. The journey of the next two years is to scale these nascent solutions to meet the needs of the full community.

But we are already hearing that Kuppam's people are thinking inventively to improve their lives. There's the self-help group that is beginning to use computers to track the performance metrics that enable members to qualify for financial aid and government services; they'll no longer have to rely on complicated ledger systems that require specialized bookkeepers. There's the village photographer helping farmers by transmitting snapshots of crop pests to distant experts who can advise on how to control the damage. There are stories of parents using a Web-based service to find the basic health information they need to care for their children.

The results of this living-lab approach are specific solutions that meet the needs of the Kuppam community. But more than that, the solutions are proof of an approach that we believe will unearth ways to solve the needs of governments, businesses, communities, and individuals in emerging markets in other areas of the world.

These are the kinds of projects that corporations must collectively embark on—weak economy or no. They are not about short-term profits but about the opportunity of achieving long-term growth and, in the process, fundamentally improving the human condition in the regions where companies do business.

We chose Kuppam because of what it could help HP learn about nascent or "white space" opportunities that lie between markets.

Further Reading

This article is from the HBR special issue, **Leadership in a Changed World**. Additional articles from this August 2003 issue include:

Trouble in Paradise
Katherine Xin and Vladimir Pucik
Product no. R0308A

In Search of Global Leaders
Stephen Green, Fred Hassan, Jeffrey Immelt, Michael Marks, and Daniel Meiland
Product no. R0308B

Abraham Lincoln and the Global Economy
Robert D. Hormats
Product no. R0308D

The New World Disorder
Nicolas Checa, John Maguire, and Jonathan Barney
Product no. R0308E