



## Digital Bridge to Africa— The Digital Diaspora Network for Africa (DDN-A)

*Skyrocketing demand for information and communications technology personnel makes top scientists and technologists globally mobile. When they come from developing countries, their global dispersal creates Diaspora that can become valuable networks of finance, business contacts and skill transfer for their home country.*

**–UNDP HUMAN DEVELOPMENT REPORT 2001**

*The Digital Diaspora Network for Africa (DDN-A) is an initiative designed to tap the value of Diaspora communities in service to Africa. DDN-A also addresses the bigger challenge implied: The best and the brightest from developing countries are being drawn away by greater opportunities, perpetuating a systemic imbalance in favour of the prosperous to the detriment of their indigenous societies and communities.*

The trend is not likely to end in the foreseeable future—let alone reverse.

DDN-A is a collaborative effort among the United Nations ICT Task Force, the United Nations Development Fund for Women (UNIFEM), The United Nations Fund for International Partnerships (UNFIP), Digital Partners, and Gruppo CERFE, which promotes development in Africa by mobilising the technological, entrepreneurial and professional expertise and resources of the African Diaspora. Since vital expertise is unlikely to “go back,” DDN-A is to serve as an effective and efficient means to “give back.”

### **The Challenge**

Given the speed with which Information and Communication Technologies (ICT) are developing and the breadth of their socio-economic impact, it is imperative that some means be developed now if Africa is not to be excluded from the technological revolution. The use of ICT has been integrated into virtually every aspect of commerce, education, governance and civic activity in developed countries and has become a critical factor in gaining access to information and wealth worldwide. Yet in Africa, ICT has barely taken a foothold. Inadequate computer literacy and the lack of access to ICT are widely recognised as an increasingly daunting obstacle to the economic, civic and political development of Africa.

Many potential ICT entrepreneurs in Africa are limited in their actions by a lack of information about opportunities, potential partners, institutional contacts and resources. On the other hand, many Africans in the United States, and many others who feel committed to the development of Africa, have important skills and access to a wealth of human and material resources but perceive few avenues to apply them to benefit sub-Saharan Africa.

## The Opportunity

Many Africans in the United States and abroad, and many others who feel committed to the development of Africa have important skills and wealth in terms of human and material resources that could effectively address Africa's challenges. Nevertheless, few avenues exist to apply these resources to the benefit of sub-Saharan Africa. Furthermore, many potential ICT entrepreneurs in Africa could benefit from increased opportunities to meet and work with counterparts living outside of Africa.

According to Zachary<sup>2</sup>, Diaspora networks can be an effective mechanism for promoting economic development by:

- Creating a new mode of foreign assistance and investment: economic stimulus through self-organising Diaspora networks, spawned by civil society and the private sector but legitimised and sustained by government and multilateral institutions;
- Altering the terms of trade in human talent, by encouraging “brain circulation” in addition to brain drain;
- Strengthening support in rich countries for continued and deepened ties between ethnic communities in these countries and their countries of origin as a matter, not only of human rights, but of economic and political significance;
- Creating recognition within developing countries that overseas communities deserve political, economic and social means to maintain their links with their home country including support by their home society and government for ongoing, albeit episodic involvement of nationals who chiefly reside outside of the country; and
- Helping the Diaspora to play a more effective role in leveling the growing imbalance of power between wealthy and poor nations.

Zachary further notes that “political and social policies aimed at harnessing or managing Diaspora communities are in their infancy. There

are no multilateral agencies or international treaties concerned with the peaceful, voluntary movement of people across borders, and the subsequent transnational associations arising from these movements.”

### **A New Model for Development**

The benefits of traditional top-down development mechanisms are often lost in the complexities of government and corporate interests. DDN-A offers a new model of development based on engaging the motivations and interests of Individuals rather than institutions.

Over 350 individuals from the worldwide Africa Diaspora joined DDN-A after its inaugural meeting at the United Nations in July of 2002. These individuals have corporate, academic and government interests, which they will inevitably bring to bear as the Network continues to develop programs and projects for Africa that are of interest to them. Brought together with the growing number of organisations, corporations, foundations and academics promoting the application of ICT to assist Africa’s development, members of DDN-A can provide a rich source of ideas, skills and support for promoting digital opportunity in Africa.

As the Digital Diaspora Network for Africa (DDN-A) continues to reach out to Africa’s scattered community in the Americas, the Caribbean, Europe, Asia and elsewhere, it will serve to facilitate the exchange of ideas and information to help ICT entrepreneurs create opportunities and find the partners and resources they need to make use of them.

The development of the Indus Entrepreneurs (TiE) is instructive in terms of what is possible for Africa. TiE was started in 1992 as a small Indian-ethnic organisation of people eager to contribute to the cause of entrepreneurship among the Indus people in the Silicon Valley. TiE now has over 8000 members in 40 chapters worldwide and hundreds of successful TiE-inspired startups, many directly benefiting India’s economy. Most inspiring to the concept of the Digital Diaspora Network for Africa is the fact that TiE has now assumed a broader role for itself to foster socio-economic development globally.

In many ways, DDN-A seeks to start where TiE took 10 years to arrive: where economic development is not disengaged from social development; and where entrepreneurs in the US, Europe and Africa create a network interested—for whatever reasons, be it business, cultural, personal, or otherwise—in a broader goal of supporting development activities in their home countries and are willing to commit time and resources in support of such development activities.

## **Mechanisms for Impact**

A development model based on the use of ICT and the engaged interests of individuals is new. The intermediary institutions, the project-development methodologies, the funding mechanisms and the myriad of other development basics that evolved during the Industrial Age have not been updated to reflect the opportunities and challenges of the Information Age. DDN-A developed three programs designed to address critical elements necessary to activate the potential of the African Diaspora in service to Africa.

### **Networking and Coalition Building**

Digital Bridge Africa is an annual workshop that seeks to enhance the bridge linking ICT activities in North America and Europe with emerging activities in Africa, thereby enhancing entrepreneurship and development. Its general focus is on two main components:

- *Capacity*—developing the entrepreneurial and technical capabilities within Africa, and
- *Capital*—developing financial resources focused on ICTs in Africa.

The workshop particularly emphasises the role of social entrepreneurs who are using ICTs to open new avenues in markets, e-commerce, and information sharing, and explores models that are profit-making and financially sustainable.

The workshops bring together five groups that are critical to advancing ICTs for entrepreneurship and development. These are:

1. Leaders with practical experiences in working for the empowerment of the world's needy, including representatives of such people's organisations, and social and economic entrepreneurs;
2. Leaders among the donor community and international organisations experienced in implementing projects and generating resources on a large scale, including managers of global programs and foundations, multilateral institutions, and local underwriters of venture capital;
3. IT entrepreneurs and individuals with technical skills, such as innovators in the corporate sector, promoters of digital technology and e-commerce in African communities, Internet start-ups and incubators from local communities;
4. Government officials at all levels; and
5. Academics and scholars who are studying the practice and promise of ICTs for entrepreneurship and development.

A goal of the meetings is to link local entrepreneurs with technology and business mentors, explore potential synergies to companies and activities abroad, and develop options for financing and investment.

These workshops lay the groundwork for larger meetings that will bring together some of the world's largest social venture capitalists and industrialists to focus on issues of ICT and entrepreneurship in Africa.

## **Funding**

The Social Venture Fund for Africa was launched by Digital Partners to provide financial support for entrepreneurial projects developed or supported by DDN-A following the first Digital Bridge to Africa workshop. Participants at the first Digital Bridge Africa workshop set a goal

of USD 500,000. While started with modest initial aims, the fund is designed to grow into a collaborative effort supported by individuals, foundations, development agencies and corporations. The workshops and meetings will serve to support the development of a large social Venture Capital fund targeted at African ICTs.

Modeled on Digital Partners' Social Venture Fund for South Asia, the Social Venture Fund for Africa is an innovative financing structure developed to provide "seed capital" for initiatives providing modest financial returns with high social dividends. Building upon the current practices in "venture philanthropy," the Social Venture Fund provides support for pioneering non-profit organisations and for-profit businesses capable of fostering commercial markets serving the poor. Individuals, corporations, foundations or development organisations that invest in the fund get a tax write-off; Digital Partners pools the donations to invest or provide long-term loans or grants. Returns from the investment or loans are re-invested to support other projects, further leveraging each dollar contributed into the Social Venture Fund.

Digital Partners' model meets an as yet un-bridged gap between traditional venture capital funds, other social funds, and traditional foundation grants and investments. It provides a structure for social and IT entrepreneurs to learn from each other and to incubate outside-the-box solutions to the unmet needs of the poor. The fund particularly supports innovations that have profit potential but need financial support and incubation to get them to the point where they can seek more traditional forms of market support.

## **Project Development**

The Social Enterprise Laboratory™ (SEL) is a process developed by Digital Partners to bring ICT and market-development experts together with poverty-alleviation experts to create new social enterprises and promote a new generation of IT-empowered social entrepreneurs.

The Laboratory is a comprehensive package of services catering to international social entrepreneurs to increase their skills and provide

them access to opportunities to raise funds for their IT-enhanced social enterprises. A significant component of the laboratory is the *Mentoring Program*. It includes the hands-on participation and assistance of business executives, venture capitalists, industry professionals and graduate-student teams from leading US and developing country graduate programs in business and IT.<sup>3</sup>

In addition to supporting individual entrepreneurs and organisations through the Mentoring Program, the Social Enterprise Laboratory™ also works to increase the local capacity to provide on-going assistance to the SEL entrepreneurs and to serve as a foundation for generating increased social entrepreneurship.

The goal of the Social Enterprise Laboratory is to catalyse the potential of IT-empowered entrepreneurs in developing economies:

- Those who seek to serve markets at the bottom of the economic pyramid;
- Those whose vision and business models could help achieve connectivity for the rural poor; and
- Those who creatively use Information and Communications Technology as a tool for empowerment.

Projects developed through SEL have come from South Asia, Latin America and Africa.

## The SEL Process

### *Identification of Social Entrepreneurs and Social Enterprises*

The SEL application process is open and web-based. To help target high-quality applicants, the Digital Partners' worldwide network of individuals and partner organisations is engaged to solicit requests for proposals utilising ICT in social enterprises. Once a proposal is received, it is immediately reviewed to ensure that all relevant background information has been provided and that it meets specific minimum

requirements. Additional information is requested as needed and background research conducted in preparation for presentation to the selection committee.

The committee for African projects consists of seasoned ICT and business veterans and experts from the development field who are part of DDN-A. They individually review each project to select the enterprises based on the following criteria:

- *IT-Driven*—Innovative use of information technology must be an integral component of the business or project model.
- *Quality of the Management Team*—The management team should demonstrate the expertise and commitment necessary to enhance the concept's chance of success.
- *Market-Based for Sustainability*—The concept must show the potential to generate a market-based revenue stream (must have a demonstrable revenue-based business model) to ensure sustainability.
- *Scalable/Replicable*—The concept must show promise to be broadly scaled or widely replicated to serve much larger constituencies.
- *Bottom-up*—The concept should be initiated and benefit those at the grassroots level to assure that real needs are being met with customised solutions.
- *Partnerships*—The concept should show the potential to foster public, private, and/or civil society collaborations beneficial in increasing its impact and building capacity to support similar efforts.

Consideration is also given to those enterprises that Digital Partners feels it can best help, given the needs of each enterprise and the resources (such as DDN-A members and student teams) it is able to draw on. The bottom line of the entire selection process is to find the *diamonds in the rough*—the projects that show promise to lift individuals and whole communities out of poverty and effectively leverage the opportunities provided by ICT and the digital economy to create systemic change at the bottom of the economic pyramid.

## Mentoring Social Entrepreneurs and Social Enterprises

The selected projects are assigned a team of DDN-A members and graduate students from prestigious universities to assist the social entrepreneurs to:

- Effectively incorporate ICT and market mechanisms into their enterprise;
- Gain access to potential sources of funding;
- Develop funding proposals;
- Think through their business model, such as their business strategy, marketing strategy, and target market; and
- Re-write their proposals into business plans capable of convincing potential financial supporters of the project's viability, impact, and sustainability.

The ultimate objective of the mentoring process is to develop high-quality business plans or proposals that are suitable for funding from the Digital Partners' *Social Venture Fund*, sponsors of a particular *Social Enterprise Laboratory*<sup>TM</sup> foundations, corporations, social investors and other investor forums.

## Funding of Social Entrepreneurs and Social Enterprises

The refined project and business plans are presented again to the selection committee from the DDN-A for possible seed funding. Individual DDN-A members, foundations, and corporate sponsors provide the funds as a tax-deductible donation through Digital Partners' *Social Venture Fund*.

The financial support provided to the projects is not intended to fully fund the long-term needs of any one project. The Mentoring phase provides the social entrepreneur with a well-crafted proposal or business plan suitable for raising additional resources. Seed capital supplies

the initial monies needed to at least pilot the project and provide resources while additional funds are sought. Digital Partners helps with introductions to suitable contacts and assistance to the entrepreneurs in their longer-term fundraising efforts. The due diligence provided by SEL is expected to lend credibility to the projects and increase “investor” confidence.

Financial support from Digital Partners’ *Social Venture Fund* is given either as outright grants, long-term low-interest loans or even as equity investments. Currently, the *Fund* primarily provides grants. It is expected that as more social entrepreneurs enter the field, a larger percentage of loans and investments will be made. All returns will be reinvested to support the development and funding of other projects, further leveraging each dollar donated to the Social Venture Fund.

### **DDN-A Supported Projects in Africa**

The DDN-A is now taking the lead on all projects being developed and supported in Africa. Examples include the following:

#### *E-Academy, Tanzania*

E-Academy will address the high cost and inadequate quality of education in Tanzania via the creation of an on-line e-learning initiative that will make teaching materials developed by the “best brains” in the country available in the local Kiswahili language. E-Academy aims to provide quality, affordable education through e-learning to facilitate greater reach while establishing higher standards and creating Kiswahili content. ‘Best brains’ in their particular fields will be responsible for the development of quality courses in the Kiswahili language. E-Academy also aims to take advantage of the mushrooming of cyber cafes throughout Tanzania to provide Internet connectivity to subscribers of E-Academy, while CD Rom-based education will be available to reach those without an Internet connection. E-Academy requires development of a business/project plan and assistance with its marketing strategy.

*Youth for Technology Foundation, Nigeria*

YTF's TechPreneurship Program for Rural Women will equip women who run small businesses with the technology training they need to run their businesses more efficiently while promoting co-existence within religiously heterogeneous communities. The TechPreneurs Program at the Owerri Digital Village attempts to address the failure of women-owned businesses due to lack of knowledge of implementing sustainable business models and lack of access to resources. The TechPreneurs Program will teach participants the technology skills to manage their businesses effectively to enhance the Nigerian woman's personal status and her contribution to national economic development. Participants in the program will learn to use YTF's business management software and database application locally developed by YTF youth program members. The application will allow the women entrepreneurs to track their inventory, revenue and expenses for their small and medium businesses. Workshops will be offered on writing successful business plans, micro-credit facilities and credit programs. The program will assist women to develop their personal talents, increase their family incomes, meet local market demand, stimulate export demand, and contribute meaningfully to the public life of their communities while harnessing peaceful co-existence within religiously heterogeneous communities. The organisation is looking to refine its business plan.

*SATELLIFE and HealthNet Uganda, Uganda*

In an area where access to information is a scarce and potentially life-saving resource, the PDAs and Better Health In Uganda project will improve the decision-making capacity of health professionals by arming them with PDAs that will provide them access to the information they need to make timely diagnoses and provide appropriate treatments. In a country where many health workers do not have access to a telephone, let alone the Internet, information for decision-making is a scarce, potentially life-saving resource. Building on its experience implementing a PDA project in Uganda and Kenya, HealthNet Uganda is poised to

introduce this technology on a wider scale. PDAs can be used in the most remote locations, have the computing power required for simple but essential functions, are easily customisable to meet the particular needs of individuals and institutions, and can hold large quantities of timely, relevant, and appropriate content and facilitate rapid data collection and analysis. SATELLIFE and HealthNet Uganda have a competitive advantage in the introduction of PDAs because of their understanding of the real data and information needs of health professionals and their ability to work with the government, universities, NGOs, and private practitioners. In addition to project design, technical support and training, SATELLIFE provides a powerful combination of content, including country-specific clinical guidelines for malaria, tuberculosis, and HIV/AIDS, the World Health Organisation Essential Drug List, a country-specific essential drug list, a multi-functional medical calculator, medical references, customised local content, and customised survey instruments. The project partners hope that this activity will not only improve HealthNet Uganda's potential for sustainability, but also stimulate the PDA market for the private sector. HealthNet Uganda seeks help making the transition to a sustainable enterprise that weds its humanitarian mission with sound business practices and may include development of a business plan.

### **Matching Skills with Need**

Taking full advantage of the Internet to virtually eliminate location as a constraint in matching ability and resources to need, *AfriShare* is envisioned as a web-based platform to serve as a tool for collaboration and a knowledge-sharing facility. The implementation strategy is to respond to the needs and capacity of DDN-A as the network develops. Previous web-based efforts have taken a "build it and they will come" approach and have had limited impact in their effort to be all things for all users. A skills and interests database of DDN-A participants and password-protected sites for enterprise development were the initial

components identified by the membership as the first capacities to be developed.

### DDN-A in Action

The true value and impact of DDN-A will eventually be told by the web of connections and projects that will organically develop through the personal interests and connections of its members.

Early examples of members acting on their own initiative to mobilise partnerships for Africa demonstrate the potential of DDN-A as an individual-centred development force:

- Within weeks of the launch of DDN-A, members working with GE Capital, arranged to have high quality used computers shipped to schools in Ghana, Nigeria, and Tanzania. Other members working with Microsoft Africa secured free software.
- Commitments were also made to link the schools in Africa with schools in the US through Global Classmates, a collaborative learning platform developed by Digital Partners.
- Members also self-selected to serve as mentors for projects chosen for support by DDN-A through the Social Enterprise Laboratory process. Other members decided to serve on a Steering Committee to ensure that DDN-A maintained its momentum beyond the initial enthusiasm of its launch.
- A larger Advisory Committee was also established to take on broader roles and responsibilities. The committee identified *presence in Africa* as critical for the effectiveness of DDN-A. Individual champions within the network took the lead to establish Digital Partners/Ghana and Digital Partners/Nigeria to support the on-the-ground activities of DDN-A in these countries and in the region.
- A Digital Bridge Africa workshop is scheduled to be held in May 2003, in Ghana, with key partners to develop an action plan for DDN-A in assisting the effective development of ICT in Africa and lay the groundwork for its presence throughout Africa.

## **The Collaborative Partners of DDN-A**

For an effort of the scope and range of the Digital Diaspora Network for Africa to be successful, it requires the support of several key partners and organisations. DDN-A was launched with a clear vision and leadership provided by the United Nations ICT Task Force that was convinced that without the active participation of professionals from Africa itself, no projects undertaken will take root and become successful. With that in mind, the United Nations ICT Task Force mobilised an effort to create and launch DDN-A by establishing a collaborative framework among other UN agencies, such as the *United Nations Development Fund for Women (UNIFEM)* and the *United Nations Fund for International Partnership*. The objective was to expand the efforts of the individual organisations in order to have a much larger impact. *Digital Partners* mobilised the effort and modeled DDN-A on its successful South Asia effort in North America, whereas *Gruppo CERFE* was instrumental in launching DDN-E (Europe).

### *UN ICT Task Force*

The *UN ICT Task Force* was established to provide overall leadership to the United Nations role in helping to formulate strategies for the development of information and communications technologies and putting those technologies at the service of development. The Task Force focuses on forging a strategic partnership between the United Nations system, private industry and financing trusts and foundations, donors, programme countries and other relevant stakeholders in accordance with relevant United Nations resolutions through its various Regional Networks and Working Groups.

### *UNIFEM*

The United Nations Fund for Women (UNIFEM) promotes women's empowerment and gender equality. Since its creation, UNIFEM has supported numerous projects and initiatives throughout the developing world that promote the political, economic, and social empowerment of

women. Recently, UNIFEM launched a new program, “Bridging the Gender Digital Divide in Africa through Strategic Partnerships”. The program seeks to empower African women through innovative uses of Information Communications Technologies (ICT).

#### *UNFIP*

The United Nations Fund for International Partnerships promotes new UN partnerships and alliances with a variety of sources, including companies and foundations, as well as bilateral and multilateral donors, in furtherance of the Millennium Development Goals.

#### *Digital Partners*

**Digital Partners** is a Seattle-based not-for-profit organisation working on utilising the benefits of the digital economy to benefit the poor all over the world. Digital Partners has already developed a network of IT entrepreneurs in India, and is in the process of developing a similar network of entrepreneurs in Latin America and Africa. Digital Partners provides professional services and financial support to visionary social entrepreneurs interested in effectively utilising ICT to benefit the poor. They have created a venture capital fund model, a social venture fund, to invest in and incubate new initiatives designed by ICT and social entrepreneurs to trigger solutions to problems of poverty.

#### *Gruppo CERFE*

*Gruppo CERFE* is an association of European researchers belonging to non-profit institutes, whose purpose is to conduct a scientific research programme on the current situation of human societies around the world. The organisation has specifically been involved in development issues for many years and has supported initiatives such as the development of a network of African Habitat Professionals. The organisation has expertise in research and analysis of the needs and issues of the African Diaspora, specifically in Europe.

## NOTES

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1. David Feige and Deepa Ghosh provided research support for this chapter. David is a Program Officer at Digital Partners and Deepa is a Master of Public Administration Candidate at the Columbia University School of International and Public Affairs.
2. “Diaspora Capitalism and Exile as a Way of Life: Some Observations on the Political and Economic Mobilisation of Dispersed Peoples,” by G. Pascal Zachary, as part of the Nautilus Institute’s “Virtual Diasporas and Global Problem Solving” Initiative, [www.nautilus.org](http://www.nautilus.org).
3. Participating schools in 2002/2003 include Harvard Business School, the University of Washington, the University of California, San Diego, Theses (France) and Thunderbird.