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WIRING THE AFRICAN ECONOMY

Ernest J. Wilson III

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The buzz word around the world these days is 'electronic commerce', and for good reason. It is estimated that the business of shopping, ordering, transacting and paying for goods and services 'on line' via the Internet and the World Wide Web accounted for \$11 billion globally in 1997, and will account for an estimated \$205 billion in the first year of the new millennia. For businesses, this is indeed the 'next big thing'. Table 1 illustrates some of these changes.

	1997	2001*	% change 1997-2001*	% total market 1997	% total market 2001*
Select Retail Markets**	2,142	17,514	718%	19%	9%
Financial Services	1,200	5,000	317%	11%	2%
Business-To-Business Sales	8,000	183,000	2188%	70%	89%
TOTAL	11,342	205,514	1712%		

** ticket event, entertainment, travel, apparel, PC, books, and music sales.
* data for 2001 is estimated.
source: Source: http://www.hp.com/Ebusiness/index_commerce.html (12 Aug 1998).

Despite these dramatic changes, one little noticed aspect of e-commerce are the links and ties that business associations (BIAs) are creating to fasten themselves together in a *virtual community*. Interviews by this author in China, Malaysia and Brazil show that business associations in developing areas are beginning to link themselves to one another and to their member firms in order to cut communication costs, increase the quantity and quality of member services, and to interact more effectively with potential suppliers and buyers abroad. In these first fledgling steps toward a robust e-commerce, where does the world's least developed region - Africa - stand in this global strategy of wiring the business sector?

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IT use by business associations in Africa today is a mixture of enthusiasm and aggressive first steps, but it still has a long way to go. Interviews in Africa with local entrepreneurs and business association executives reveal growing interest in using the Internet to enhance African business associations. The Internet is growing in popularity with old line associations like the Ghana Chamber of Commerce and the Ghana Chamber of Mines, as well as newer bodies like the Ghana Association of Women Entrepreneurs (GAWE). In Senegal, the association of informal sector firms is on line, and so is the leading regional business association of 300 members from 12 West African States, the West African Enterprise Network (WAEN). Still, taken as a whole the business association take-up of these services has been modest.

Business leaders around the continent are recognizing the Internet's commercial potential. For example, in Accra, Ghana the chief executive of a new peak association, the Private Enterprise Foundation, spoke for most business association executives in the region when he said "Everybody recognizes that you need to get Internet and get connected if you are to survive in this very competitive world."¹ But he and all his counterparts also recognized that African business associations are just starting down the information superhighway.

What is the status of the Internet in Africa, how can African BIAs use the Internet, and what can African BIAs concretely do to wire themselves and their members to be full participants in e-commerce and the Information Revolution?

BIAs Connectivity in Africa

The World Chambers Network,² which is a global listing of contact information for Chambers of Commerce, lists a total of 118 Business Associations in Africa. Of these nineteen are in North Africa (Morocco, Algeria, Tunisia, and Libya) and thirty one are in South Africa, leaving the balance of sixty eight BIAs in the remaining forty six countries. Among the forty six countries,

¹ These findings are drawn from interviews conducted by this author in Africa with executives of BIAs in 1997.

² <http://www.worldchambers.com>

thirty five have a single BIA, and four have three or more BIAs. In this context Ghana is noteworthy with eleven BIAs. Of the sixty eight BIAs, most have listed neither their own web site nor e-mail address. In the this listing only eleven have a web pages or an e-mail addresses. Among these , six have their own web site, four have web pages on the World Chamber site., and 1 has e-mail only.³ Contrasting these relatively well connected BIAs are seventeen BIAs without even a telephone listing.

Yet, it must be emphasized that the World Chamber lists only includes Chambers of Commerce, and that other business associations not listed have web sites, such as the West African Enterprise Network and the East African Tea Trade Association.

The Status of the Internet Market in Africa

In 1996 average aggregate economic growth in Africa rose to a peak of 4.0%,⁴ more than twice the anemic 1.8% growth of the early and mid 1980s.⁵ In countries like Uganda, Mali, Senegal, and Tanzania 1997 growth rates ranged even higher from about 7% to 14.4%.⁶ As a result of this reprise in commercial activities, international and local businesses are jumping into the market for sophisticated information services.

U.S. companies are more and more engaged in all ends of the Information Technology (IT) business. Some, like SBC, have participated in the spurt of recent privatization (South African Telekom). Others like EDS and Oracle are engaged in data management and systems integration throughout the continent. And of course satellite services like Teledesic and Iridium are being launched and will expand Africa's information options.

Under these dynamic economic and IT conditions we would expect to see an explosion of private sector interest in the Internet, and we do.⁷ A 1996 report identified the for-profit private

³ See Appendix A for a complete listing of BIA WWW URLs.

⁴ Economic Commission for Africa , *Africa Economic Report* 1998, Table 1.2.

⁵ *World Bank Annual Report* 1992, Table 3.2.

⁶ Economic Commission for Africa, *Africa Economic Report* 1998, paragraph 61

⁷ Ernest J. Wilson III, "The Information Revolution Comes to Africa" *CSIS Notes* Number 185, June 1996.

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sector as "the strongest generators and users of electronic information resources."⁸ Africa Online (AfOL)⁹ a leading and pioneering African commercial ISP, is active in 6 countries in the region,¹⁰ and has targeted business as one of its prime markets. In Kenya and Cote d'Ivoire AfOL offers Internet business directories.¹¹ Reflecting increased demand, AfOL Ghana "has gone from zero to 30 employees in a year."¹² In the same time period AfOL Ghana reports its user base grown from 0 to over 1000 . France Telecom is also active in the African business market, as are other foreign companies, like, Telecom Malaysia, who have purchased significant portions of African PTTs when they were privatized.

Local firms are also actively providing Internet services to businesses and reacting aggressively to increased demand. There is a "buzz" about Internet use in business that is almost palpable. For example, the customer base of Ghana's first commercial ISP, Network Computer Systems (NCS), grew from about 2,000 (of the 3,000) Internet customers in August 1997,¹³ to more than 4,500 in July 1998.¹⁴ NCS reported in 1997 that among their users, 17% use the internet for research, 38% for communication, and 37% to access data. NCS weekly traffic analysis reveals significant drop off of internet usage on weekends as well as during non-business hours. This suggests that the an important component of NCS's user base is located in the business community. In addition to these results, business Internet-application stands as a prominent feature of the NCS web site. NCS, two other Ghanaian ISPs offer full Internet connections and two e-mail service only.¹⁵ And, on the content side, a number of Ghanaian firms are developing web sites for public

⁸ Linda J. Leonard and Steve D Dorsey. *Country Assessment and Implementation Strategy: Ghana* (AED: Report Prepared for USAID/Ghana, June 1996) p12.

⁹ Founded in 1994 by African Expatriates who had meet while studying in Boston, and now a Division of Prodigy Inc. (<http://www.africaonline.com>).

¹⁰ Ghana, Kenya, Cote d'Ivoire, Uganda, Tanzania, and Zimbabwe.

¹¹ <http://www.africaonline.co.ke/businessdirectory/>

¹² John Perry Barlow, *Wired* January 1998, as cited at <http://www.africaonline.com/AfricaOnline/newsstand/pressrelease09.html>

¹³ National Research Council, *Internet Counts*, Appendix D, 1998

¹⁴ <http://www.nsrc.org/db/lookup/operation=lookup-provider/ID=890201860355:497424075/fromPage=GH>

¹⁵ University of Ghana <http://www.ug.edu.gh>; NCS <http://www.ghana.com.gh>; Association of African **Ernest J. Wilson** *Wiring the African Economy*

and private sectors. AfOL Kenya also reported in November 1997 that the business community was there primary targeted user base. In North Africa, Morocco is seeing a similar explosion with 43 ISPs registered in a market of 7000 to 8000 customers. In this case most of the ISPs are run by Moroccan entrepreneurs.

The potential for applying IT services to African business associations is quite substantial as BIA executives realize. Indeed, the potential may be greatest in Africa than in any other area, reflecting, in part the difficult geographic and infrastructure conditions of the region. The impetus for aggressively developing the Internet market comes from sub-Saharan Africa's physical distance from key global markets in North America and Europe, which the Internet could help reduce since the net is in many ways the 'death of distance'.¹⁶

The imperative for the Internet in Africa also springs from the lack of good information on both sides of the trade and investment equation. Potential investors in Asia, Europe or the Americas don't know about African commercial opportunities.¹⁷ Within Africa, local firms typically lack adequate knowledge about external customers and suppliers, especially outside the traditional former metropolitan markets of France and Britain. Two cases of how increasing this kind of knowledge can have important and immediate impacts and changes on commerce are illustrated further below.

Not only is there an absence of critical information about pricing and availability, but there is also a lack of knowledge about US business practices. This emerged clearly as a theme in Congressional hearings and administrative inquiries into the need for an African trade and investment bill, now before the Senate. This same lack of familiarity with American business practices and regulatory requirements was confirmed in interviews by this author with BIA officials in Africa and in the U.S.¹⁸

Universities (AAU) <http://www.aau.org>, Africa Online <http://www.africaonline.com.gh>; Internet Ghana <http://www.internetghana.com>

¹⁶ For an example of Internet marketing see the gem business Gath Gemstones (Kenya) Ltd. at <http://www.africaonline.co.ke/jgath/index.html>.

¹⁷ For an example of Internet BIA information dissemination see East Africa Tea Trade Association at <http://www.africaonline.co.ke/eatta/index.html>.

¹⁸ For a more detailed discussion see Ernest J. Wilson and David Gordon "The United States and Africa: Toward a New Relationship" Working Paper Series, Center for International Development and Conflict *Ernest J. Wilson Wiring the African Economy*

Long distance communication costs between Africa and the rest of the world are among the highest anywhere, in part because African PTTs hold external prices high to makeup for low domestic demand. The Internet can help lower these long distance communication costs. For example, the cost of a four pages from Addis Ababa to London is estimated to be about US\$ 14.00, while by 9.6 kbps e-mail is US \$ 1.60.¹⁹ Not only is this a question of cost, but also of time, reliability, and convenience.

Impacts the Internet: Two Examples

The Kenyan automobile market: This market, which reportedly imports the majority of its vehicles as used vehicles from Gulf states, has experienced a fundamental shift in supplier-retailer-consumer relationships. One observer attributed this change to the use of the internet. He reasoned that since many consumers, competing dealers, and suppliers can now easily compare prices on-line, a new level of comparison shopping is possible. As a result more traditional supplier-dealer relationships are broken and commercial actors have a greater choice about who to buy from and sell to. Another impact is that down prices have been driven down.

The Kenyan spare-parts business that deals in used mechanical-industrial machinery: Prior to Internet access an African dealer in this business might search for several months before locating a specific replacement part. A time consuming and relatively expensive search involved writing out multiple letters of inquiry, paying postal fees, and waiting for posted replies. This lengthy process did not guarantee any positive results. With Internet connectivity African dealers are accomplishing these this in much shorter time. The firm now quickly locates both new and used replacement parts. Using the Internet a part can be located, the supplier contacted, and a variety of price quotes secured. Then price comparisons can be made, and the most economical or profitable supplier identified.

Source: CIDCM Staff, *The Internet and Kenya: Impacts and Development*, Working Research Paper Series, Telematics for Development Program, Center for International Development and Conflict Management, April 1998.

Management, April 16, 1997.

¹⁹ *Electronic Networking for West African Universities*, p19.

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Beyond the core business of telecommunications, there is growing demand among private companies and Non Governmental Organizations (NGOs) for greater official transparency in areas such as customs clearing and port administration, tax collection, activities where modern IT can make a big difference in performance and public confidence. This is always a very high priority for local business associations, especially among importers and exporters.

Some West African Examples

Interviews with the Executive Director of the Ghana National Chamber of Commerce (GNCC) revealed that they had just recently installed an Internet connection at their headquarters in Accra by the third quarter of 1997. They found the biggest challenge was first to train the Chamber staff, and then to build awareness of the Internet's capabilities among business members as well as their own staff. Thus, the effects of the new technologies are now just starting to be felt by the organization. Progress will be slow in many countries because the Chamber has so many small indigenous firms as members, as well as large multinationals. The Ghana Chamber could not count on easily reaching the majority of their members using the Net. "The \$33 per month is just too much for them", he reported. "The banks, mines and insurance companies can afford the fees and they are already connected."

Still, the Executive Director says the Internet seems to be making a difference already. It is most valuable now where it facilitates more regular contacts with overseas Chambers, especially the Brussels-based group of European chambers which closely followed the Lome Treaty trade arrangements. He explained the Internet is helpful in identifying possible commercial partners for his members. For example, the Chamber is now linked to the Group of 77 (G-77) Network of Chambers of Commerce, a consortium of chambers in developing countries.²⁰ Their *IBNet*, or the "Electronic Silk Road" links the GNCC (and selected other African chambers) to the global system. But unlike other countries, while the GNCC has its own e-mail address, it still lacks a web site

²⁰ <http://www.g77tin.org>

which it maintains itself, and locates its web page on the site maintained by G-77.²¹ A similar situation is occurring with the Ghana Chamber of Mines, which was just getting up and running, struggling to get one of its administrative staff trained as their new information officer.

One of the most engaged associations is the Ghana Association of Women Entrepreneurs (GAWE). A relatively new body (three years old), GAWE has about 250 members and represents women, who make up about 70% of business people in the informal sector. GAWE was able, on its own, to secure temporary access to the Internet to advertise its trade fair and investment forum on-line. When over 400 people attended, they attributed the high numbers in part to their willingness to inform others about the Association and its work. Through a partnership with AID's Leland Initiative, GAWE will soon link its headquarters to their growing chapters in the interior of the country.

Are there chambers uniquely encompassing information and communications service companies? The answer in most countries appears to be no. While in Ghana there is a local chapter of the International Internet Society, there are not yet enough ISPs to start a suppliers association, as there are in many Asian countries. One exception might be the Nairobi based East African Internet Association, whose 3000 members include both individual Internet Users, ISPs, other firms interested in the Internet. On the demand side, since the consumer population is split between international aid organizations, local NGOs, universities and schools, as well as businesses, a business consumer group has not yet emerged. It is the case, however, that most ISPs frequently interact with and consult one another.

In Ghana the utility of the Internet as a policy tool is somewhat limited because the government, while generally supportive of the internet, has been very slow to take up the Internet in an organized fashion. For the BIAs, this means that informal and virtual public-private consultants cannot take place through the Internet.

In Senegal this author found similar patterns. At the time interviews were conducted in

²¹ Web: <http://www.g77tin.org/gncchp.html> and e-mail: gncc@ncs.com.gh
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August 1997 there were about 2,000 customers in total²² and about ten separate Internet suppliers of various types. Since then the customer base has grown to about 2,500.²³ For such a small market it is rather sophisticated, with a large cybercafe, and a number of telecenters and businesses that host several hundred clients on the side. As with Ghana, none of the ISPs interviewed claimed they were yet profitable. All of them had grown their ISP as a collateral activity out of their original core business, usually selling and servicing computers and selling software packages. Connection fees in the cybercafes are about three dollars an hour, and an email account is about \$20 monthly plus telephone charges.²⁴ The importance of the Internet to commercial activity is described by the U.S. Embassy, Dakar as follows:

services and companies using [the] Internet have been growing exponentially [since full internet was introduced in March 1996]. Cybercafes and private cybercenters are [now] booming in the capital city Dakar. Teleservices companies still in their early stages are becoming more popular. Dynamic private entrepreneurs have successfully implemented teleservices companies operating mainly with French contractors.²⁵

In Senegal, as is the case in Ghana, there is not yet a national suppliers association. There is however an excellent publication on computers and Internet in Senegal and substantial interest in the research communities, but there seemed only modest penetration of the commercial establishment. Those that do have Internet tend to use it, according to the ISP *ARC Informative*, to search for information globally and to communicate with suppliers.

The principal association of Senegalese entrepreneurs in the informal sector recently installed Internet at their headquarters, and similar to their Ghanaian counterparts' experience, they too found email links with external bodies to be more valuable than the links (they were able to create) with their members. However, the Executive Director also echoed others' thoughts when he said the Net will be critical to their success as a chamber.

²² *Internet Counts*, Appendix D.

²³ Mike Jensen, *An Overview of Internet Connectivity in Africa* August 05, 1998.

²⁴ One interesting implementation of Web based commercial support in Senegal can be found at *Business Facilitator page US Embassy, Dakar* Web site <http://www.dakarcom.com/>.

East and Southern Africa

While these findings draw on the experiences in West Africa, research on East Africa and interviews in Kenya²⁶ suggest the same pattern of e-commerce and BIA just ramping-up on the Information Superhighway. As in West Africa, in Kenya, Uganda, and Tanzania, Internet connectivity is still expensive and diffusion is limited. Yet one can point to important developments such as the East African Tea Trade Association, which is discussed in more detail further below. The East African Internet Association (EAIA), which is based in Nairobi, but has members in Eritrea, Ethiopia, Kenya, Tanzania and Uganda. The EAIA is a "not-for-profit group formed in April 1995, seeking, by pooling resources and sharing experiences, to promote and expand cooperative electronic communications."²⁷

Another network of businesses in Nairobi, Kenya is Africa Pride,²⁸ a Grameen-based lending institution with 31 East African branches. Since its founding in 1989 it has made over 40,000 loans valued at over five million US\$ in Uganda and Tanzania. Africa Pride reports that their use of the Internet is mainly for communication (e-mail) as well as data transfers, "and without it we would be far less effective."²⁹ Some Kenya professional associations use the web. Reflecting an even more preliminary stage of Internet use, the Federation of Women Lawyers (Kenya) a web site³⁰ of a single information page.

In Southern Africa, the continent's best connected region, there are numerous BIAs with internet connectivity. Of course South African BIAs lead the way with over 30 Chambers and the best Internet connections in Africa. Yet, even in South Africa many chamber do not have Internet sites. Among the 30 Chambers listed nine have Internet sites, two e-mail only, and the remaining nineteen only have telephones. This translates to a 30% internet connectivity, or about twice that of

²⁵ <http://www.dakarcom.com/>

²⁶ CIDCM Working Research Paper Series, Telematics for Development Program papers by S. Aiyer, *Down the Electronic Bylane: Kenya and Electronic Commerce* April 1998; and CIDCM Staff Report, *The Internet in Kenya: Impacts and Development*, April 1998.

²⁷ <http://www.djembe.dk/afrika/4intnet.html>

²⁸ <http://www.africaonline.co.ke/prideafrica/index.html>

²⁹ Correspondence.

³⁰ <http://www.africaonline.co.ke/fida/index.html>

the other SSA regions. Aside from increased connectivity, Southern African BIA sites are clearly more sophisticated than those in other regions. For example, the Confederation of Zimbabwe Industries site³¹ provides a wide range of information for the public as well a information restricted to members only.

Regional and Bilateral Initiatives

Especially interesting are the successes of the West African Enterprise Network (WAEN), an association of over three hundred business people spread across 12 countries in West Africa. The Internet has proven to be quite helpful and contributed to WAEN's objective to create a common private sector group to lobby all national governments in the region for pro-business policies. In interviews with one of their officers, Mr. Ken Afori-Atta, he emphasized that the key element in the success of the WAEN (and of his own financial services firm, DATABANK, as well), is building Internet awareness³² and listening seriously to feedback from the members about what they want an inter-chamber network to do. WAEN began with a series of breakfasts to sound out their members on the services they most needed that Internet could help provide.

Another regional association is the East African Tea Trading Association (EATTA) founded in 1957 and based in Mombasa, Kenya. EATTA has members in Kenya, Uganda, Tanzania, Rwanda, Burundi, Zaire, Zambia and Malawi. On its web site, the EATTA provides updated information of global and regional (detailed) tea production, prices at auction, as well as tea market reports.

The Leland Initiative,³³ an initiative of the U.S. Agency for International Development, is designed to increase Internet connectivity in Africa, and has helped chambers and other bodies get connected. Active in more than 20 countries, it is funded at \$15 million dollars and has worked with

³¹ <http://www.afribiz.co.zw/czi/> or www.czi.org

³² Awareness building also has been identified as an important aspect of a Internet usage, as the mentioned in AED report cited in note 9. In Abidjan the operator of an Internet café said that despite conditions that should favour his business, his café is not busy because "Ivoirians don't have the Internet culture." (New York Times, January 26, 1998 Section D, p.1) .

³³ <http://www.info.usaid.gov/regions/afr/leland/>
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business associations in Ghana and other African nations. Its motto of "pipes, people and policy" is the kernel of the initiative's ideas - to provide not only the hardware ("pipes"), but also to help governments create a more liberal market-driven pro-Internet environment and train people to sustain Internet development. Leland representatives have worked with chambers in most African regions, such as GAWA in Ghana. Another initiative specifically designed to help BIAs get wired is the Group of 77s Trade and Information Network referred to above, which targets African chambers for briefings and tries to link them with overseas counterparts. The South Africa-based African Business Roundtable grew out of initiatives of the African Development Bank, and it aims to be continent-wide, but it too faces organizational hurdles which Internet alone cannot resolve .

Next Step for Interested BIAs

Given the current modest levels of Internet use by chambers, but the rising interest of their executives in it, what can chambers, associations and individual business people do to learn more and do more to get their business association on the Information Highway? Six steps that an interested chamber could follow are outlined below

Six Steps for BIAs to Improve Internet Effectiveness

1. Broad based publicity of the Internet to build awareness of what the Internet is and what it can provide members of the chamber.
2. Identify contributors to and elements of a positive Internet culture, that is, a culture that accepts the Internet as a viable business tool within member organizations.
3. Provide informational, technical, financial, and administrative support for members' Internet connectivity
4. Focus and develop members' attention on their knowledge of how the Internet can achieve goals
5. Integrate the benefits identified in step 4 to the BIA as a whole as well as member organizations and firms.
6. Evaluate the utility of the Internet and re-orient future projects accordingly.

Conclusion

As with other developing areas, the Internet is new to Africa (1995). Only after 1996 was full Internet access a viable option. Currently, most chambers are just getting up and running, training their staffs, and trying to attract the interests of their members. This is a challenge since many firms that could most benefit from Internet services lack connectivity, which tends to be quite expensive in Africa and not always reliable despite the high cost. Yet among today's BIA leaders there is a sharp and unambiguous awareness of the importance of this new technology to conduct commerce in the next millennium. Because of the unique challenges to African commercial development, the Internet can provide an invaluable tool for commercial advancement in a global economy. As in other contexts, African business leaders are discovering that the technological side of Internet use is far less important for business success than ensuring that the organizational and policy elements are in place for success. It's not just hardware or software that the associations need, its 'peopleware'.

Appendix A: Select African Chamber of Commerce WWW site information

Cameroon Chamber of Commerce, Industry and
Mines
Web: www.g77tin.org/ccimhp.html

Addis Ababa Chamber of Commerce
Email: AACHAMBER1@telecom.net.et
Web: WWW.addischamber.com

Ghana National Chamber of Commerce
Email: gncc@ncs.com.gh
Web: www.g77tin.org/gncchp.html

Kenya National Chamber of Commerce and
Industry
Email: kncci@arcc.permanet.org
Web: www.g77tin.org/knccihp.html

Chambre de Commerce Belgique Madagascar
Email: gruloos@bow.dts.mg
Web: www.zanesville-ohio.com/muskgm.htm

Malawi Chamber of Commerce and Industry
Email: mcci@eo.wn.apc.org

Namibia National Chamber of Commerce and
Industry
Web: www.republicofnamibia.com/

Chamber of Commerce of Dakar
Email: cciad@telecom-plus.sn
Web: www.g77tin.org/cciardhp.html

Swaziland Chamber of Commerce and Industry
Email: chamber@dial.pipex.sz
Web: www.iafrica.sz/biz/chamber/

Uganda National Chamber of Commerce and
Industry
Email: uncci@starcom.co.ug
Web: www.uganda.co.ug/

Confederation of Zimbabwe Industries
Email: czi@primenetz.com
Web: www.afribiz.co.zw/czi/ or www.czi.org

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