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INFORMATION-FOR-DEVELOPMENT: BUSINESS AS USUAL, OR BREAKTHROUGH?

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The key question confronting us is whether information-for-development is another round of business as usual, now sheltered under the new umbrella of digital capitalism, or whether it holds a potential for a breakthrough in development. To this question, there are two main approaches.

One is to take information-for-development in a light sense (ICT4D lite). Then, it is about recycling old computers by donating them to developing countries. It is about Microsoft offering software discounts to Indonesia on condition that the Indonesian government takes measures against software piracy. It is about UNDP teaming up with Cisco Systems to set up training courses in developing countries. This kind of approach often comes with ideas of IT as a techno-fix that makes it possible to leapfrog development, and at times with an extraterrestrial optimism about the potential of ICT and development. Media reports discuss, for instance, 'Ethiopia's Digital Dream' and the enthusiasm about applying IT in e-government, education and telecommunications across the country, an aim that is pursued with great zeal despite poverty and in the hope that digital solutions can make up for the lack of infrastructure (Cross, 2005). Yet, if we look at the fine print, we find that to implement this, the Ethiopian government and Telecommunications Corporation teamed up with Cisco Systems and Business Connexion of South Africa, and the reporter visited the country as a guest of Cisco Systems, which prompts a question: is this Ethiopia's digital dream, or that of IT corporations? This illustrates a key dilemma of ITC4D.

Alternatively, we can take information-for-development in a strong sense and seek a serious assessment of its contributions. This begins with recognizing that development is an intervention in a field of power and resources, and that ICT represents the latest wave of capital accumulation.

As the latest major wave of capital accumulation, ICT is part of a series - think railroads, electricity and chemical industries in the nineteenth century, and automobiles and telecommunications in the twentieth century. Each accumulation wave comes with its cycle of innovation, overinvestment and maturity. Boosterism is part of this cycle: it is not sufficient for new products to be made; they must also be invested in, sold

and used. They must be the talk of the town. ICT is both a dream space of multinational capital, the spearhead of market-led development in a world-to-come of minimal regulation, and typically faces preferences for the national regulation of telecoms.

ICT for development is a strategic part of ICT expansion: ICT4D is digital capitalism looking South -to growing middle classes, rising educational levels, vast cheap labor pools, regimented labor conditions, and yet difficult regulatory environments. It is about market expansion and converting unused capacity into business assets on the premise that new technology is the gateway to hope. And it is about the deepening of the market by bypassing regulations and pressing for liberalization and opening up spaces for competition and investment, and devising new regulations that will shape the future. In this context, ICT4D is a package deal in which the means of bridging the digital divide contradict the very idea of bridging the digital divide. If implemented without caution, ICT4D is a Trojan horse that locks developing countries in a software-hardware arms race that will yield never-ending compatibility problems, because ICT is essentially being designed for advanced markets. It may be true that in the information economy the cost of a copy is zero (Verzola 2004), but the cost of the delivery systems -infrastructure, hardware, software and human ware- is far from zero.

ICT4D stands at the crossroads of today's major forces in private, public and social spheres: telecoms, international institutions, states and civil society groups and cyber activists; it is a prism in which key problems of neoliberal globalization are refracted. What is at stake in contemporary globalization is both different national capitalisms, each of which is dynamic and in flux, and the interaction of capitalisms which is mediated through complex layers of technology, international finance, trade, international institutions, knowledge systems, legal standards and proprietary arrangements. From the package-character of ICT4D emerges the actual task of ICT4D, which is to unpack ICT4D so its development potential can be harnessed.

ICT4D as breakthrough

Considering whether ICT holds the possibility of a breakthrough in development takes us well beyond the occasional critical pinpricks of 'tactical media'. One question is: who is the agent of information-for-development? Here the role of development aid and NGOs may be overplayed. Foreign aid, despite frenetic activity, may not have much to offer in ICT4D. The foreign-funded ICT projects of NGOs display the usual dilemmas: reliance on project funding; uneven NGO unaccountability (to donors more than to communities); authoritarian or non-participatory management styles; non-replicable projects because they rely on specific capabilities and social capital, so most projects are not locally owned and not sustainable; pilot projects that give little attention to the problems of 'scaling up'; and projects that ignore that ICT also requires major organizational change (Wade 2002). Alternative

development produces alternative dependency, and when the funding dries up, the projects usually die.

Government-supported information projects with government providing inputs of content (making access to government forms and licenses available online) may be more viable than foreign aid projects, but usually fall short of their promise (Gupta, 2005). Besides, the appeal to the public sector when the public sector is under financial squeeze, when public goods are under-funded and political capital is scarce, may not be the way to go.

If we look to ICT4D as a new threshold in development policy rather than as business as usual, then aid on the part of bilateral or multilateral agencies and government provided services may not be the first place to look. Realistically, the first place to look is at IT services that are provided by the private sector.

In many developing countries, village phone networks such as n-Logue in India (www.n-logue.com) and Grameenphone (www.grameenphone.com) have a considerable impact. Consider for instance the mobile phone coverage of Safaricom in Kenya (www.safaricom.co.ke). For large corporations, providing IT services in many developing countries, and especially in the countryside, is not profitable; but small profit margins are adequate for small and medium size enterprises. There is no reason to exaggerate the significance of these initiatives; their purpose and reach are limited. But these private sector firms are not dependent upon external funding sources, and operating at low profit margins they have a greater reach and are more sustainable than donor or public sector projects.

However, it is important also to look beyond the attempts to bridge the digital divide by replicating and extending existing hardware and software technologies. Digital capitalism presents more pressing issues. Robert Wade notes that “LDC governments should not take technological and international regimes as given... They need more representation in standard setting bodies and more support in the ICT domain for the principle that ‘simple is beautiful’” (2002: 444). What matters is to shift the discussion away from the assorted applications of information technology to the technologies themselves. The core problem that ICT4D poses is disembedding technology from capital. This is the real challenge of information-for-development, which brings us back to old questions of technology transfer and full technology transfer rather than pseudo or adaptive transfer.

During the Cold War years, South Korea and Taiwan could disaggregate products and obtain their embedded technologies through reverse engineering and, by redesigning them, bypass property rights and acquire intellectual property. The current regime of intellectual property rights in the WTO and the talks on the harmonization of patent laws seek to forestall and limit these options. China now follows a different avenue and uses its market power and bargaining clout to disaggregate foreign direct investment packages to obtain not just end-user capability but design technologies. But this route is not open to the smaller developing

countries.

Digital capitalism poses the problem of technology dependency anew in relation to both hardware and software. Efforts to develop appropriate hardware include developing a simple low-cost computer (simputer). Entrepreneurs in China, India and Brazil are developing low cost designs that may provide 'Southern high-tech alternatives'. Whether they compete in these efforts or will at some point converge, is at this stage not the most important question.

The second major frontier is software and the free and open software systems (FOSS) movement. This is of special importance because intellectual property rights are a major site of North-South negotiation and contestation. With advanced economies increasingly losing their edge in manufacturing, services and research & development to emerging economies due to offshoring and outsourcing, intellectual property rights are a major remaining advantage (leaving aside the ongoing international trade talks on agriculture and textiles).

In software development, many corporations have a stake in outflanking Microsoft monopolies and instead developing and fine-tuning the Linux operating system and other open source systems, because these allow reprogramming of core codes and may thus offer greater flexibility, stability and security. Governments such as Brazil increasingly use Linux in government administration also with a view to savings. Cyber activists are also active in this domain.

It would be a fantasy to think of a 'digital Bandung' or an 'IT Cancún' (similar to the walkout from the WTO talks in Cancún in November 2003 initiated by China, India, Brazil and South Africa and the Group of 21 developing countries). This assumes more policy cohesion than is now available. But there is room to strengthen this general approach and the convergence of interests of various stakeholders with a view, ultimately, to fashioning an alternative digital political economy. This brings us into the terrain of trade-offs, resource allocations and investment strategies, to the point of the adjustment of educational systems. It involves dialogues between governments, firms and NGOs on complex and technical issues including economies, alliances and realignments that are of a layered nature and ramify widely.

The emerging information economies of Brazil, India, China and East Asia make for a dramatic vortex of change. Couple this with the rise of FOSS in large corporations, SMES and governments such as Brazil and the South-South cooperation and commonality of interests in relation to intellectual property rights in the WTO and the patent law talks in the WIPO in Geneva. If there is a role for development cooperation, its best contribution may be to promote FOSS and to side with LDCs in IPR negotiations. In the Nordic countries and the 'middle powers' where development cooperation has a real meaning and where FOSS is actively being developed, there may be interest in cooperating with the global South on IPR and FOSS.

We are at a major cusp in globalization. It may well be that in the next round of globalization the winners of the previous round -the United States, Europe and Japan- will be placed second. The growing imbalances in production, consumption, trade deficits and financial deficits, particularly in the United States, have become unsustainable. To a considerable extent courtesy of ICT, the old winners of globalization have been losing their production advantages to newcomers who combine low wages with good infrastructure, capable workers and docile labor regimes, and now this also applies to information processing services. One edge they can hold on to is intellectual property rights. As long as the advanced countries, more precisely corporations in the advanced countries, can monopolize IPR and draw monopoly rents from IPR, they may be able to hold on to an advantage which in other respects is slipping away. This means that ICT is not only important in its own right; it is also an arena in which at this stage the shape of globalization is being decided. The major tipping points here are FOSS, TRIPS and patent laws. Here we find major corporations, governments in the global North and international institutions on one side, and most developing countries on the other. This is the real frontier of ICT4D.

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