Policy

Openness: The Central Issue in Telecom Policy Reform and ICT Development

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The Cardinal Principle of Reform

Central to almost all issues of policy and regulation relating to telecom reform, ICT convergence, and Internet development over the last quarter century has been the extent to which a formerly monopolized and closed telecom network will be opened to the participation of those previously excluded. The extent of openness and the terms of participation in the telecom reform process have been critical to the successful implementation of virtually all reform policies.

It is often assumed that the policy path is a continuous evolution toward more openness and participation, as old barriers are knocked down by new policies. But this has not been the case, as policy reform sometimes stalls and even retrenches on some policy issues, and as experience has varied among regions and countries. This short essay provides a general reassessment of basic trends toward openness in telecom reform policies based on experience and future opportunities.

Market Openings

With respect to market participation, openness in telecom reform is typically seen as a gradually opening door, where changes in policy and regulation have been selectively "liberalizing" restricted market access opportunities for new groups of players against the resistance of established players, led by incumbent national operators. As more players have been let into markets, they have increased the resistance to further liberalization, testing the commitment and strength of policy and regulation to open the access door further.

We have now reached a point where the forces of resistance in many developed and developing countries may be getting stronger than the forces pushing for an expansion of openness. In many countries, the market shares of dominant operators (fixed and mobile) have begun to increase after a long period of decline, and they continue to reflect significant market power. In some countries, the dominant operators even resist openness policies for the expenditure of universal access funds to extend networks to areas they don't serve.[1] The extent and direction of further openness in the provision of fixed and mobile infrastructure networks is very much an "open" question.

Participation in the Telecom Reform Process

A separate level of openness relates to the opportunities for participation in the policy reform process by stakeholders other than those government

1. Initially, the United States provided a recent example with President Barack Obama's broadband infrastructure subsidy program. The major telecom operators argued against the subsidy program and chose not to participate in it.

and industry players with powerful vested interests. A major thrust of LIRNE.NET research and training activity over the last decade on telecom reform, including its World Dialogue on Regulation Project (WDR), has been directed toward opening key policy and regulatory issues to informed public discourse with participation by consumer and public interest groups, as well as other nongovernmental organizations (see, for example, Mahan & Melody, 2007). In most developing countries, openness at this level is at a very early stage and in great need of strengthening in all its dimensions—not only legal and procedural rights, but also capabilities and expertise, as well as access to information and resources. In many countries, progress is extremely slow, and it must counter strong resistance to opening the policy process to greater participation and transparency.

Innovation "For, With, and By" the Poor

The vast majority of the substantial innovations that have characterized the opening of telecom markets have come from outside the industry. The primary, if not quite exclusive, focus has been on technological innovation directed to serve developed country markets that have then been taken to developing country markets. In more recent years, some technological adaptations have been designed to fit the particular circumstances of the poor in developing countries, suggesting that there may be greater technological responsiveness to the needs of the poor in developing countries in the future (O Siochrú & Girard, 2005).

This is being driven significantly by innovation in business models associated with market liberalization in the mobile sector and the discovery of the possibility of viable markets at the bottom of the pyramid (BoP). But the greatest impact by far in stimulating mobile growth among the poor has come from innovation made possible by the openness provided to the users to shape the services to their needs and circumstances. Prepaid mobile was made possible by modest technological development and a permissive business model. But the unanticipated explosion in growth in developing countries has been driven by the innovation of the users adapting this service option to their poor circumstances.

This contrasts with the dominant extant model for stimulating ICT development in poor regions, which has focused on technological injections supported by short-term financing from donors. Without a sustainable business model, and with little or no openness to supporting user participation in shaping service flexibility, applications, payment arrangements, or user options, most projects have been terminated when donor funding has stopped, as the telecenter experience has demonstrated.

Universal Access and Universal Service Funds

The drive toward universal access has been a centrally driven, top-down process expanding national networks to cover larger geographic areas and provide a basic service to more people. With a few exceptions, incumbent national monopolies have not pushed network development very far in any country. Where fixed networks have been extended, it has been by other operators, often local co-ops or public-private partnerships. More recently, mobile operators have extended coverage far beyond fixed networks, and with continued improvements in technology and experimental business models, this will continue. Additional investment provided by universal service funds and other sources can help provide even greater coverage.

However, these initiatives cannot come close to reaching the billion-plus people at the BOP, as this centralized model of development is highly constrained, restricting opportunities to participate in adapting policies, technologies, business models, and usage design. Innovations in locally oriented technologies, such as Wi-Fi networks using unlicensed common spectrum, provided by technically assisted local entrepreneurs employing micro finance and permitting user-shaped services and applications, are excluded from the conventional model by policy and practice at almost every level. Success will require greater openness for greater participation at the local level in implementing universal access and universal service funds allocation programs (Mahan & Melody, 2009).

Toward an Action Agenda

A coherent and comprehensive action agenda can be fashioned around a renewed focus on the principle of openness in each of the areas summarized above, where the participation door is now partially open, but still subject to major barriers to further opening and significant pressures to retreat on some issues. An important part of the agenda should be a critical performance review of the experience to date as a foundation for expanding openness opportunities. For the future, universal access opportunities will not be limited to mobile voice, but will include both Internet-enhanced mobile networks attempting to reach down to the BoP and local Internet-led networks reaching out from the BoP (some with VoIP). Significant factors helping to drive development will be the availability of new service applications, the role of anchor tenants in enabling sustainable BoP connections, and the potential benefits of the Internet of Things at the BoP. ■

References

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