

Guest Editorial

PER HELMERSEN, HANNE CECILIE GEIRBO



Per Helmersen is Senior Research Psychologist in Telenor R&I



Hanne C. Geirbo is Social Anthropologist in Telenor R&I

With local and well-established telecom markets rapidly becoming saturated, major players in the telecom industry are increasingly turning their attention to the so-called emerging or growth markets in Asia, Africa and Latin America. Their strategies for doing so were initially based on models developed and tested in more familiar surroundings, and were for that reason inadequate in markets lacking infrastructure, with unfamiliar (and often unfriendly) regulatory environments and where the majority of prospective customers have a disposable income of USD 5 a day or less. A natural first step into such markets is to target consumer segments that share the lifestyles and attributes (economic and aspirational) of Western consumers: the urban upper and middle classes and the upwardly mobile in lower classes. It was soon recognized that the real challenge and profits are to be found elsewhere, however. Operators such as Telenor are currently exploring the untapped market potential at the “base of the pyramid” – the four billion prospective customers who constitute the largest and fastest growing segment of the world’s population. In doing so, we are forced to expose various tacit assumptions, re-examine conventional wisdom and to generate new understandings of who these four billion persons are and what they aspire to be. We are also required to ask ourselves if the standard services we are offering customers “back home” address genuine needs of rural and urban low income consumers in emerging markets, if they are affordable and inclusive. Recently, telecom operators such as Telenor have also been held accountable for the social and cultural impacts of their presence in these markets; issues related to corporate governance, ownership and working conditions for not only company employees, but also the employees of subcontractors have been in the media spotlight.

Criticizing “shallow thinkers” and articulating what could easily serve as a progressive telecom strategy for emerging markets – nearly three quarters of a century ahead of his time – President Franklin D. Roosevelt is usually credited with coining the term “bottom of the pyramid”:

“These unhappy times call for the building of plans that rest upon the forgotten, the unorganized but the indispensable units of economic power ... that build from the bottom up and not from the top down, that put their faith once more in the forgotten man at the bottom of the economic pyramid.”¹⁾

The men and women at the bottom of the economic pyramid are certainly not forgotten within our industry as witnessed by the burgeoning number of reports bearing titles such as “The Next Billion”, “Ring In the Next Billion Mobile Consumers”, and “The Next 4 Billion”²⁾. It was the research community centered around C.K. Prahalad at The University of Michigan and Stuart L. Hart at Cornell University, however, that first called attention to the *business potential* of low income consumers. Prior to the process that led up to the publication of “The Fortune at the Bottom of the Pyramid”³⁾ ICT initiatives targeting financially constrained segments and the so-called digital divide were generally classified under the headings “ICT4D”, “livelihood creation”, “poverty reduction” or simply “charity”. Putting their faith in “the forgotten man” and suggesting that multinational corporations (MNCs), including telecom operators, should “build from the bottom up and not from the top down”, these researchers presented convincing scenarios as well as a framework for thinking about profit generation in emerging markets. Their publications encouraged MNCs as well as international funding agencies to speak of poverty reduction/wealth creation, Millennium Development Goals and profit generation in the same sentence:

“What is needed is a better approach to help the poor, an approach that involves partnering with them to innovate and achieve sustainable win-win scenarios where the poor are actively engaged and, at the same time, the companies providing products and services to them are profitable.”⁴⁾

Prahalad recognizes that “old and tired solutions cannot create markets at the BOP” (op.cit., p. 6). A prerequisite for product as well as process innovation

1) From F.D.R.’s Radio Address, Albany, N.Y. April 7, 1932, The Forgotten Man. <http://newdeal.feri.org/speeches/1932c.htm>

2) “The Next Billion”, Portio Research, 2007. “Ring In the Next Billion Mobile Consumers”, The Boston Consulting Group, 2007. “The Next 4 Billion”, World Resources Institute, International Finance Corporation, 2007.

3) Prahalad, C K. 2005. The Fortune at the Bottom of the Pyramid. Upper Saddle River, NJ, Wharton School Publishing.

4) Op.cit. pp. 3-4.

is an intimate knowledge of consumers' lifestyles, habits, needs and aspirations as well as a basic understanding of their cultural and social setting. Simply repackaging technologies and solutions that address what we perceive to be "The Problem" based on our understanding and imbeddedness in our local culture will not do! There are no substitutes for fieldwork. Microsoft Research's Technology for Emerging Markets (TEM) group, certainly one of the most experienced and influential in this area, have summarized this "lesson learned" as follows:

"Perhaps the most critical factor is to spend time with potential users in those circumstances in which the innovation might take hold. Spend time early, spend time frequently, and spend a lot of time ... time spent with users 'in the field' is more valuable than just about anything else ... the communities we hope to impact are so different from those we were raised in that our first instincts are of little help; to turn our 'subjects' into collaborators or empowered potential users, it's imperative that we establish rapport."⁵⁾

We think that this issue of *Teletronikk* reflects all of these themes from different perspectives. We hope the reader will come away with an appreciation of the complexity of providing telecom services in emerging markets. Successful service offerings must at one and the same time be financially sustainable in the long run, technically feasible, inclusive and affordable, meet local regulatory requirements and, most importantly, address the real rather than imagined needs of the intended user community.

In the first article Anne Welle-Strand (page 4) discusses the role and outcomes of business-oriented aid, using Grameenphone and Telenor's activities in Bangladesh as a case. The effects of business-oriented aid are indicated by discussing the findings of the study from technical, political and financial perspectives. Welle-Strand finds that foreign ownership, local knowledge and competent management have been the most crucial factors for Grameenphone's business success.

Sein, Ahmad and Harindranath (page 16) call for evaluations of ICT for development initiatives. They propose four conditions necessary for the sustainability of such initiatives, and evaluate the Grameenphone Community Information Centres (CIC) against these. They argue that while it may not always be possible to discover linear cause-effect relationships vis-à-vis sustainability, ICT for development initia-

tives such as Grameenphone CICs can build in mutually reinforcing elements of sustainability based on the four conditions proposed here.

De Silva and Zainuddin (page 25) use data from five Asian countries to discuss the issue of universal access. Although they find low levels of ownership in these countries, near universal access has been achieved. However, they find that ownership of mobile devices gives benefits that non-owners with access missed out on. They conclude that there is a great potential for expanding ownership at the bottom of the pyramid, but this requires efforts on the part of multiple stakeholders.

Grace Roldan and Andrew Wong (page 39) identify issues and challenges concerning micro-enterprises in developing countries, with a focus on Bangladesh. They discuss how the mobile phone and community information centres can be used as tools for enhancing their capability and sustainability.

Saeed, Chowdhury, Alam, Raihan and Warendorph (page 44) ask whether telco operators in developing countries fund their expansion by using earnings from high-end subscribers to cross-subsidise new subscribers. They explore this issue by applying a method for allocating both costs and revenues on every subscription. They show how subscription-wise income statements are able to prove that in the current expansion in the emerging markets the operators enable high-end customers and early adopters to effectively help in closing the digital divide.

Denis Cote (page 53) and Ruralfone Inc. have taken Prahalad's recommendations seriously and developed a truly unique distribution model, successfully piloted in one of the poorest cities in the world, Quixadá, in the northeastern state of Ceará in Brazil. Cote argues that adapting existing telephony models is an inferior alternative for both the customers' user experience and the operators' bottom line. Cote maintains that three fundamental shifts are required to achieve sustainability in remote areas that share Quixadá's characteristics: (1) decentralized build-up and allocation of resources, (2) demographic-specific sales and customer care processes, and (3) a willingness to enter, manage and innovate within local, rural economies.

Leopoldina Fortunati et al. (page 57) provide us with insights into the appropriation and domestication of mobile phones in China, with nearly a half a billion handsets, the largest market for mobile technology in the world. Their focus is on the impact of the mobile

⁵⁾ Donner, J., Gandhi, R., Javid, P., Medhi, I., Ratan, A., Toyama, R. & Veeraraghavan, R. (2008). "Stages of Design in Technology for Global Development". *Computer*, June 2008, pp. 34-41.

phone on the social structure of interpersonal relationships, and what meaning users attribute to these devices as instruments of social mediation. Surprisingly, in spite of heavy migration within China, the authors document that the mobile is not primarily used to maintain relationships and stay connected with one's region of origin. Rather, it is a tool used to maintain social solidarity locally among peers. Furthermore, those who earn the least are most likely to stay in touch with friends and schoolmates via the mobile.

Shifting focus to a second Asian mobile hotspot, Raul Pertierra (page 68) invites us to examine the transformative effects of mobile communications on Philippine society. The author emphasizes the speed with which ICTs have been incorporated into Philippine life and the numerous unforeseen user services such as SMS have had. Gathering examples from kinship relations, romance and virtual intimacy, Pertierra predicts that new communication technologies will ultimately change personal identities, social relationships, political alliances and the global perspectives of Filipinos in the 21st century.

A second paper in this issue by Hanne Cecilie Geirbo and Per Helmersen (page 77) is also concerned with the unforeseen and highly complex behaviors that evolve through mobile communications in response to basic human needs. The practice of sending free-of-charge "missed calls" (a.k.a. beeping or flashing) is well documented in emerging telecom markets and generally considered to be associated with poverty and lack of funds. The authors present evidence from Bangladesh gathered in focus group discussions and based on analyses of several million charging data records (CDRs) indicating that missed calls are used for a variety of other purposes, ranging from social

control and relationship maintenance to entertainment. Rather than focusing on countermeasures to eliminate missed calls, however, they contend that in-depth studies of missed calls may provide the telecom industry with a much needed window into the socio-cultural life space of customers, and suggest new service offerings that better match their needs and circumstances.

Finally, Einar Flydal (page 84) argues that information and communication technologies (ICT), market mechanisms, development theory, eco-design and economic growth all lack the mechanisms necessary to cope with the challenge of climate change. Efficient as they may be for their purposes, and although they are generally recognized as key elements in the great and global Modernization project, they simply do not address the problem of mitigating the detrimental aggregate effects that now set the climate at stake. Instead, the author contends, they all contribute to increasing the negative impact, as they open up for, or even actively contribute to, increased energy use. The author's mission is not to suggest simple, realistic and ready-made solutions, but to expose the problems and to shed some light on what needs to be done to harvest the gains in ways that can contribute to environmental sustainability and to sustainable social development in emerging markets. Alternative strategies will need to take less conventional directions that will have substantial implications for business models and business strategies – in emerging and developed markets alike.



*Per Helmersen is Senior Research Psychologist in Telenor R&I, where he has been employed since 1992. He has also served as Senior Adviser to Ghana Telecom for two years (2005–2006) and represented Telenor in ETSI's Technical Committee on Human Factors, heading a Specialist Task Force on safety and security issues related to ICT use by children. Since joining Telenor most of his projects and research initiatives have focused on various marginalized user groups, e.g. the elderly, children and, since 2002, Telenor's financially constrained customers in Asia's emerging markets. Studies of technology adoption and domestication have taken him into urban settings and remote regions in Ghana, Malawi, Nepal, Bangladesh and Pakistan. Special interests include communication ecologies, telemedicine, e-learning, agricultural commodity trade, gender issues and participatory design strategies in growth markets.
email: per.helmersen@telenor.com*

*Hanne Cecilie Geirbo is a Social Anthropologist from the University of Oslo. She works in Telenor R&I researching ICT practice among various user groups in emerging and growth markets. Her main research interests are youth culture, ICT and development, and identification of access barriers. She has worked in the market research department of Grameenphone and as a researcher in BRAC, a Bangladeshi NGO. With BRAC she has done research on gender issues, poverty issues and administration of health institutions.
email: hanne-cecilie.geirbo@telenor.com*