WIRELESS VILLAGE: GROWTH OPPORTUNITY IN EMERGING MARKETS

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Abstract:

We currently face the challenge of providing affordable mobile connectivity for the set of users who, from an economic perspective, lie beyond the first 2 Billion people. Based on global income levels, this is the set of people have the possibility of spending about $2-$3 per month on telecommunication rather than almost US$9-US$10 average per month that the first 2 billion mobile users are expected to spend. Therefore the market for telecommunication with Total Cost of Ownership (TCO) of no more than $3 per month is expected to become critical after 2007 / 2008 as the growth of mobile telecommunication covers all users that are able and willing to pay the current minimum TCO. It is necessary to focus simultaneously on three dimensions in parallel for successfully providing mobile connectivity to this set of users: technological innovation for low cost solutions, business management innovation for the emerging markets and the synthesis of the value network for making the solution feasible. A business model utilizing kiosks in villages in conjunction with a franchisee between the kiosk owner and the operator has already emerged as viable in the context of Internet services for rural India. India is also a good first choice for low TCO mobile connectivity because of the availability of USO (Universal Service Obligation) funds that the government can deploy to foster rural communication. One can expect that the government to be open to programs for rural telecommunication, including helping catalyze the value network to some extent and provide financial impetus to some extent if a clear impact on rural upliftment is demonstrated. The central ideas of the proposal allowing for low cost mobile connectivity for sparsely populated rural communinities include the use of Internet Protocol (IP) to leverage multi-service infrastructure, thereby lowering/minimizing the cost of providing voice connectivity, moving call-control as close to the edge of the network as technically feasible, utilizing in-depth understanding of village characteristics and usage characteristics, thereby managing the deployed capacity necessary and reducing infrastructural costs, reducing operational costs by utilizing decentralized business management approach, and providing coverage primarily in populated areas via cell-size management, thereby conserving on power expenditure. The ability to localize the service offering based on lowest cost and possibly diverse backhaul, by utilizing existing IP infrastructure wherever feasible, with a roadmap towards lowest cost point to multipoint technologies that are available in different regions of the world aids the applicability and business feasibility of such a solution. In addition the “Grow as you go”

philosophy of this model, implies that a feasible business model exists for “small, regional” deployment, i.e., large scale infrastructural deployment is not required for a business model with positive margin. We show that a solution such as the above is technologically feasible and cost effectively possible. We also propose that vendors and operators can join forces to participate in this market as a demonstration of their global corporate social responsibility and for their shareholders to profit from this emerging business opportunity.