Operators wanting to increase business in developing markets should recognise a number of key factors that can help to drive up penetration and usage among poor people, write Jean-Paul Evrard and Ronan Moaligou

Driving mobile penetration and usage in developing markets

Affordability is not the only barrier to penetration and usage. Operators need to take into account factors such as attitudes towards female empowerment

There is a lot of focus on the mobile telecommunications industry about the "opportunities" for serving low-income consumers in developing markets.

There are at least 2.7 billion consumers at the very base of the economic pyramid, with per capita incomes of less than $1,500. Of those, more than a billion people — roughly one-sixth of the world's population — have a per capita income of less than $1 a day, and very few have a mobile phone at present.

There is also a lot of talk about the social and economic benefits that an increase in mobile penetration can bring to the poorest countries. A recent study by London Business School found that in a typical developing country, a rise of 10 mobile phones per 100 people boosts GDP growth by 0.6 percentage points.

But the evolution of mobile penetration and usage by low-income consumers in the developing world is not a linear process, and there are a number of key variables for operators to understand when developing strategies drive penetration and usage among the poor.

Start-up affordability

The first of these variables is what we term start-up affordability, which typically includes the cost of an entry-level or second-hand mobile handset, and an initial prepaid SIM pack and all activation charges.

The second variable is what we call recurring affordability, which includes two key dimensions: the cost per minute for mobile voice communication and the minimum prepaid recharge amount — either electronic or voucher.

Taking these two key variables into consideration, our research has identified four distinct market types and each of these market types requires specific strategies for operators:

1: Low start-up affordability and low recurring cost affordability

In this scenario, the costs of mobile handsets are still beyond the means of very low income consumers, and high recurring costs also discourage ownership and usage of mobile phones.

In this market scenario operators typically rely on variants of the public call outlet, as is the case with the almost pervasive availability of coin-operated GSM pay phones in rural India or the "umbrella man" in Nigeria who typically has three or four phones from different operators and offer services to passing consumers.

For more isolated areas, some operators use "village phone" concepts as originally pioneered by Grameen Telecom in Bangladesh, whereby micro-finance is provided to a franchisee who then offers shared-phone services to the local village community.

To capture the maximum market-share of this segment it is important that telecom operators treat these outlets as businesses and develop tailor-made offers for them.

We recently witnessed an operator in Africa increase revenues by almost $3 million over a three-month period by encouraging public-call owners to use only their network instead of having a handset for each operator.

Clear communication, bonuses at the end of the month linked to revenue, and good field execution were the key success factors for achieving such outstanding results.

Commercial shared-use models remain important in many markets, but our research reveals that as entry-level handsets continue to decrease in price — currently less than $20 before taxes in many developing markets — and innovations related to electronic or "over-the-air" low-denomination recharge become more pervasive, this market scenario will become increasingly rare in all but the poorest demographic segments of developing countries.

2: Low start-up affordability and high recurring cost affordability

In this scenario, the costs of mobile handsets are still beyond the means of very low income consumers, but recurring charges are not beyond the means of the poor.

This is typically achieved due to low per-minute costs driven by competition and/or innovative low-denomination recharge models that replicate the "sachet" pricing concepts used successfully by the fast moving consumer goods industry. These recharges can be delivered electronically or via vouchers, allowing consumers to recharge for the equivalent of $0.10 or less in many developing markets.

In a market scenario of this nature operators should encourage family phone ownership, or other models in which a collective group of people pool their funds to purchase a handset which is then owned and used by the group.

Minutes of use can be quite high in this model as several individuals from the same family group will use a handset.

Operators can support such practices by offering multi-number SIM cards that allow different users to access their own SMS messages or voicemail. At the same time, not all individuals will have a handset so ▶

the operator will also need to encourage and maintain public call outlets or other commercial — non-family — shared phone access.

This is very much the situation in the poorer states of rural India today, such as Bihar or Assam, where mobile handset ownership is still expensive for most individuals, but collective ownership by even the poorest households is growing rapidly. In these markets there is still strong demand for public call outlets due to the fact that not every individual has easy access to a phone at all times of the day.

For example, our research reveals high public call outlet usage by rural women in India in the evenings, even by women from households that own a mobile phone.

Why this pattern? Because in the evenings women want to call family members or friends, but their own handset is with their husband who might be with the men or travelling to another village for work.

"Our research in parts of India, Nigeria and Pakistan has revealed that it is social rather than economic barriers that are now slowing wider adoption of mobile handsets, especially by women."

3: High start-up affordability and low recurring cost affordability

In this scenario, low-cost handsets are becoming available to even the poorest families, but per-minute charges and/or minimum recharge amounts are still high.

This is a typical scenario for developing markets that have limited competition between operators, such as many countries in Africa and central and South America, resulting in high prices and/or a lack of innovation around low-denomination recharge concepts.

In this market scenario, mobile handset ownership might well reach very high levels, but the usage of mobile phones by the poor is constrained by high recurring costs. Furthermore, because low-denomination recharge is not readily available, or calling from a public call outlet or other commercially shared phone is cheaper than using an owned mobile phone, low-income consumers still use a pay-phone for many of their outgoing calls.

We have observed such dual-usage practices in markets such as Nigeria and the Democratic Republic of Congo, and the slums and poorer regions of the Philippines, Mexico and Brazil.

In Kinshasa in the DR Congo more than 90% of handset owners still continue to use public call outlets to make calls.

In such markets, it is not unusual to see a consumer approach a public call outlet with their own mobile phone in hand, search a number from their mobile phone's address book, and then dial the number on the payphone.

In this scenario, operators have to carefully plan and balance tariff structures and route to market approaches or risk expensive cannibalisation of subscriber revenues by encouraging the use of often lower-margin public call outlet usage — which we have seen being as high as 40-60% of total minutes in some markets in Sub-Saharan Africa.

Product innovation is the key for operators to avoid high levels of cannibalization by public call outlet vendors. A good example is an operator in Africa that developed a specific "sachet" product to respond to consumer behaviour in using public call outlets for very short calls, instead of paying for a higher denomination recharge.

By offering low-denomination recharges of 30-second or one-minute calls at the same price of public call outlets, the operator encouraged consumers to make these shorter calls on their own handset.

Confidentiality and ease of use were the main factors for consumers to use their own handsets instead of turning to public call outlets for short outbound calls.

The objective of the operator was to drive both subscriber penetration and usage of owned-phones, and this was largely achieved.

4: High start-up affordability and high recurring cost affordability

In this market scenario mobile handset ownership and usage is growing rapidly, driven by widespread availability of entry-level handsets, and low recurring costs typically driven by competition.

The scenario describes many middle-income states of rural India, and it is no surprise that the Indian market is now growing at a rate of approximately eight million new subscribers a month.

In this market scenario it is critical for operators to develop effective route-to-market approaches that ensure the widespread availability of low-cost handsets and low-denomination recharges — either electronic or voucher — and to make sure that the increasing affordability of mobile telecommunications is clearly communicated to consumers who might still have perceptions of high prices.

Barriers to penetration

Operators should also recognise that even in the presence of growing affordability, some other barriers to penetration might still remain.

Our research in parts of India, Nigeria and Pakistan has revealed that it is social rather than economic barriers that are now slowing wider adoption of mobile handsets, especially by women.

Our research has revealed that there are real opportunities for mobile network operators to serve the poor in the world's developing markets. But operators need to understand the level of maturity of the local market, and the reality of start-up and recurring affordability of mobile telecommunications for different segments of society.

Based on the market scenarios of different countries, and even the affordability of mobile telecommunications for different demographic segments within a country, operators need to adapt their route to market approaches accordingly.

They should also recognise that affordability is a dynamic process, and that a route to market approach that might have been appropriate at a certain stage of a market's development will need to be adapted as penetration and usage practices of consumers continue to evolve.

Witness the decline of the village phone model in Bangladesh as lower handset costs and price competition reduced demand for shared-phone use, or the continued discounting of public call outlet tariffs in the DR Congo that eventually contributed to the cannibalisation of revenues from owned phones.

Finally, it should also be recognised that affordability will not be the only barrier to pervasive penetration and usage of mobile telephony in the long-term.

Socio-cultural factors such as attitudes towards female empowerment will also need to be recognised by operators in their marketing and communication strategies. This will be the next frontier of driving mobile adoption in the developing world. ■

Jean-Paul Evrard and Ronan Moaligou are with the Globalpraxis Group