# Beyond the First World: Opportunities and Challenges in Emerging Markets

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What was your experience the last time you ordered a communications service? If you live in a developed market such as North America or Western Europe, ordering a landline service was likely a relatively simple process, either online or via a call center, and your new service was turned on within a few days, at most. For a new mobile service, assuming you weren't buying a popular device such as the iPhone on the first day of its release, you probably only needed to walk into a wireless retailer, select a phone and your service was activated by the time you left the store.

> **"The average revenue per user (ARPU) in developing markets remains low."**

In an emerging market, the ordering process can be very different. Consumers in parts of Asia, Eastern Europe and Latin America have faced long wait times for landline connections—at one time, it took six years in some Latin American countries to get a wireline connection. As a result, when wireless phones became available and affordable, demand in these markets skyrocketed, leading to long lines outside stores, potential customers being turned away and long provisioning times.

Nor is this inability to meet demand the only challenge that these emerging regions are facing. Even as operators sign up tens and even hundreds of thousands of new customers each month, the average revenue per user (ARPU) in these developing

markets remains low, and in some regions is even on the decline. The average monthly ARPU is around $3 in India, $8 in China and $16 in Latin America – far lower than the ARPU of $50 in the U.S. At the same time, these regions have predominantly prepaid customer bases, making it far easier for subscribers to churn than in more postpaid-leaning markets with service contracts and termination fees.

Operators in emerging markets are responding by implementing innovative real-time charging and policy control solutions to improve loyalty and encourage customers to increase their spending—for example, a program in which subscribers who use certain services can earn points that can be redeemed for top-up credits or discounts at certain retailers. Other operators are introducing more flexible payment plans, such as postpaid accounts with credit limits that allow the subscriber to top up on a prepaid basis as needed.

This level of innovation is also allowing incumbents to counter another significant challenge—the influx of new competitors attracted by the pent-up demand in emerging markets. Frequently backed by European incumbents with deep pockets, these greenfield operators are typically competing on price, including per-second billing and per-character SMS. Incumbents are responding by introducing value-added capabilities such as variable charging based on location and mobile advertising services, as well as developing more targeted services based on predictive analytics, as Bharti is doing in India.

### Urban hubs and mobile villages

Yet the most pervasive challenge that these operators face may well be the diversity of their customer base. While subscribers in urban areas are increasingly demanding the multimedia applications and data services that subscribers in more developed markets have enjoyed for some time, those subscribers represent less than half of the population in most 'developing' regions. Rural-to-urban migration

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is causing an incremental annual rise in urban populations, but most developing countries remain predominantly rural and agrarian.

As mobile service has become more ubiquitous and prices have come down, mobile in emerging markets has moved beyond the urban epicenters and into the countryside—yet these subscribers are dramatically different from their urban counterparts. Customers in more rural areas are less interested in bells and whistles on their devices and more likely to use their phones to support more basic needs such as communicating with family and friends, arranging for transportation and keeping up to date on the going rate for crops and livestock.

Both operators and device manufacturers have begun to adapt to the unique needs of these rural subscribers by evolving their product and service offerings. Handset vendors are developing more rugged devices able to withstand harsher conditions, as well as lower-cost devices, while operators have introduced applications and services developed to make life easier for rural subscribers. For example, in regions that lack the financial infrastructure of urban areas, operators such as Oi Brazil and Safaricom in Kenya have developed systems that allow subscribers to use their cell phones to make payments or transfer funds. China Mobile has developed a rural "information service platform" that provides up-to-date information on agriculture, healthcare and education to subscribers via mobile phone. In countries such as China and India, where the cities are filled with migrant workers from rural areas, operators have introduced roaming plans that provide those subscribers with a cost-effective way to call home.

## Managing the urban/rural balancing act with a single platform

As a result, operators in developing markets need to implement solutions that allow them to support this wildly diverse customer base. Their operational infrastructure must be able to handle not just the low ARPU, high churn and pent-up demand for advanced services in urban markets, but also the even lower ARPU of rural regions, as well as an often uneducated and illiterate customer base that lacks access to information, financial and transportation services.

Many operators have addressed this issue by

> **"Lifecycle management" solutions address the entire service lifecycle."**

adopting point solutions that target a specific issue, such as real-time charging to enable mobile money services in rural markets or policy control to better manage bandwidth consumption in high-traffic urban regions. While these solutions are often cost-effective and quickly implemented, they regularly create silos that increase the operators' costs, require more manual intervention and frequently lack the ability to scale as the customer base grows – no small consideration given the growth that has yet to occur in these markets.

A far better solution is an end-to-end solution that provides the tools for an operator to support all segments of its customer base. These "lifecycle management" solutions address the entire service lifecycle, from concept-to-product and order-to-customer care, and include the following capabilities:

- An end-to-end service fulfillment system that enables agile service creation and provisioning, allowing the operator to quickly roll out new

services in response to events and/or customer demand. By taking this approach, an operator could use the same system to deliver the latest hot content services for urban consumers while simultaneously deploying a mobile money service for rural subscribers without incurring the operational costs of maintaining multiple systems.

- A single virtualized product catalog that provides a basis for building multiple service offerings targeted at different customer segments

- A common interface to back-office systems that allows the operator to bridge its back end systems and provides a common interface to all systems.

- Self-service capabilities that support over-the-air provisioning and service changes, which helps urban subscribers avoid long lines at wireless stores and kiosks while making life easier for rural customers who often have no way to get to their operator's closest service facility.

- Customer information management (CIM) capabilities that allow the operator to better understand its subscribers and target offers accordingly. As rural residents increasingly migrate to cities in search of a better quality of life, this capability becomes increasingly important, as it allows the operator to track the customer across his entire lifecycle, as well as potentially track his relationships and offer "family plans" or other service bundles. CIM can also allow the operator to do granular segmentations of its urban customer base and offer highly targeted products and services to those subscribers as a way to boost their ARPU.

As operators increasingly "outgrow" the point solutions they have implemented to manage specific pain points, it's important that they address the unique needs of these emerging regions. They must be able to handle the challenges common to their entire customer base—namely low ARPU, rapid

subscriber growth and high churn—but also balance the more basic needs of their rural subscribers with the demand from their urban subscribers for more advanced services. A back office environment based on lifecycle management allows them to handle customer, service and product management from a single platform and better address those challenges that threaten to derail their success in these dynamic markets.

**About ConceptWave:**

ConceptWave Software Inc. was founded in 2000 and is exclusively focused on developing leading-edge software products and solutions for the Communication Service Provider (CSP) market.  With dozens of tier-1 deployments, ConceptWave's unique offer is to provide a catalog-driven comprehensive suite of order fulfillment automation software.  CSPs can rapidly introduce new market offers, re-tune or change existing offers to meet competitive needs and simplify the management of service orders found across wireless, broadband data, wireline, cable, voice and unified networks.

Employing the Company's long standing vision of providing turnkey lifecycle solutions for CSPs, ConceptWave today is a market leader in delivering applications that span and manage the Customer, Product, and Order lifecycles for CSPs.   We have helped our customers successfully transform their businesses and ensure agile order fulfillment and orchestration through our award-winning Product Lifecycle Management and Order Lifecycle Management solutions.

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