

Telecommunications, Media, and Technology

Monetizing mobile: Making data pay

By: David Arcelus // Miguel Fonseca // Joao Leonardo //
José Miguel Novo // Pierre Pont



Mobile data usage is booming, but revenues from digital traffic are not. Operators can capture more of data's full value by giving customers what they really want.

Mobile data's strong growth continues to be impressive, but the revenues generated by this tidal wave of digital traffic are less inspiring. While global mobile data traffic increased 40 times from 2008 to 2013, the revenues associated with it barely tripled (Exhibit 1). Mobile data nevertheless represents the strongest revenue growth opportunity for operators, especially since the mobile voice business continues to decline as operators move toward flat-rate pricing and are disintermediated by over-the-top (OTT) attackers.

One trend supporting mobile data's growth involves the increase in multi-device ownership, which is causing the mobility needs of consumers to expand into OTT, video, social networking, transactions, news, and other applications. On

Less than 70% of SIM cards in Germany are used in smartphones with data plans

top of this, many operators have yet to tap into the digital market's full potential. One analysis of the German market shows that, out of a total SIM card base that equals 100 percent, customers use less than 70 percent of them in Internet-enabled handsets with data plans. Only half of these saw monthly traffic that exceeded 0.1 gigabyte (GB) and just a third had traffic greater than 0.5 GB.

Consequently, operators need to understand in detail how to boost their data monetization efforts, achieve greater profitability and accelerate growth. To this end, McKinsey initiated a global conjoint analysis to determine what customers really want (and are willing to pay for) when it comes to data. This research draws heavily on McKinsey's extensive experience in conducting pricing and portfolio reviews. The objective was to chart the similarities

across markets, with an eye toward identifying specific shareable approaches and techniques other industry players can use to get more out of their mobile digital investments.

Understanding data's importance by market

McKinsey research suggests that after price, data has become the customer's most important buying consideration. In fact, if we remove price from the equation, data volume and speed contribute about 40 percent of the remaining weight in a consumer's purchasing decision. This data preference exists across both developed and emerging markets. Of the two attributes, volume plays the most significant role by far, with the impact of speed being quite limited (i.e., volume is more than five times as important as speed). The third most sought-after attribute – an operator's brand – is the customer's perception of an operator's network quality and the network effect, which itself relates quite closely to the data experience.

To understand market differences better, McKinsey has developed three distinct market segments (Exhibit 2).

Heavy data markets. Data volume is the main decision driver for customers – and they are ready to pay for it. Telcos operating in these markets should offer increasingly more to their customers in the way of data-centric plans. Add-ons and exceptional service will enhance their mobility experience and help ensure that ARPU is maintained or perhaps even increased.

Mature/commoditized data markets. Data pricing has become the most relevant factor for subscrib-

Data revenues are not keeping pace with traffic

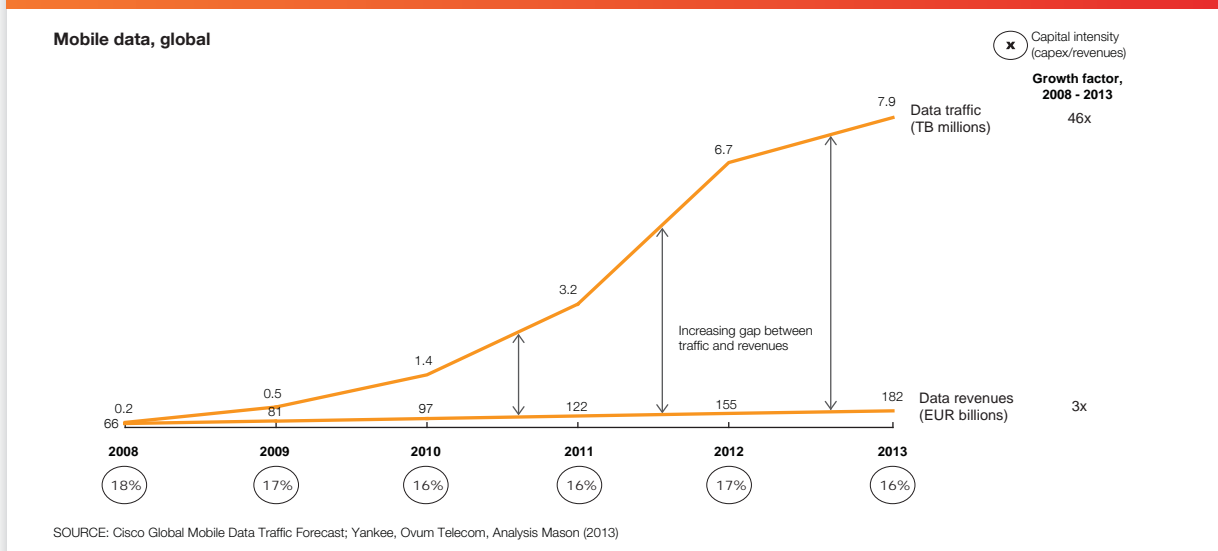


Exhibit 1

ers, with data having lost most of its perceived value since operators offer similar, quasi-unlimited data bundles across the board. Typically, operators are now only competing on price, continuously overbidding each other on how much data capacity they provide for similar or lower prices. In these markets, operators need to implement a “market repair” (i.e., raise prices to more accurately reflect data’s value) and/or reinvent the data experience, push new plans that will increase penetration, and increase usage beyond current caps. Promoting multi-device and family offers is a typical first step.

Emerging data markets. Data usage is still relatively low in these markets – typically with limited smartphone and/or data plan penetration. An operator’s brand is the main customer decision factor due to on- versus off-network prices and network quality differences. Consequently, a company’s best data strategy is to pursue pay-per-usage and low-capacity bundling to encourage consumer trial usage.

Countries usually start their digital journeys with limited overall data capacity and minimal traffic. As

the smartphone base increases, network quality improves, and mobile usage becomes more pervasive, subscribers increasingly see the value of data. From here, these countries typically evolve into heavy data markets. Unfortunately, as competition increases and data becomes the key swing factor in customer decision making, competitive dynamics start playing out and attackers start “dumping” prices in order to regain market share and load their networks.

A market’s location plays an essential role when it comes to understanding how to monetize data

The region determines whether brand-, access-, or price-conscious consumers drive the mobile data market

and approach customers. For instance, an operator’s brand strength strongly drives consumer data choice in some emerging markets such as Brazil, Chile, Mexico, and Russia. McKinsey’s research reveals that a consumer’s brand preference in these markets takes

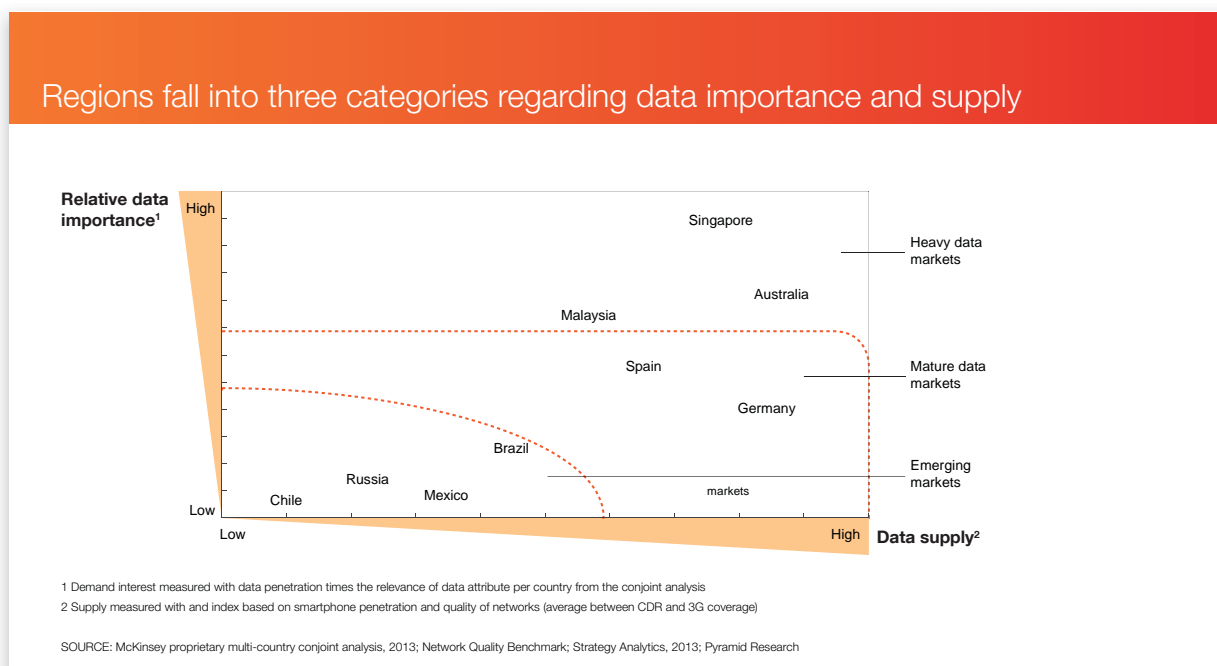


Exhibit 2

into account his or her price sensitivity due to the high cost of off-network calls and the pronounced quality differences among carriers. In the Malaysian and Singaporean markets, in contrast, customers who value data above all else seek access rather than brands and are the most important segment, comprising roughly 20 percent of the population. Here, companies should offer data-centered plans with add-ons that improve the mobile data experience. Finally, in mature data markets like Germany, Spain, and Australia, price plays the major differentiating role among consumers due to the small differences in network quality across operators and the wide availability of data plans. To succeed in these markets, operators need to optimize their pricing and bundling strategies to match customer preferences.

More generally, experience suggests that players can escape the highly commoditized mature market archetype by implementing a mix of actions such as introducing new value propositions and innovative pricing plans. Operators seeking to elevate their competitive game to this level and maximize customer value with data need to answer

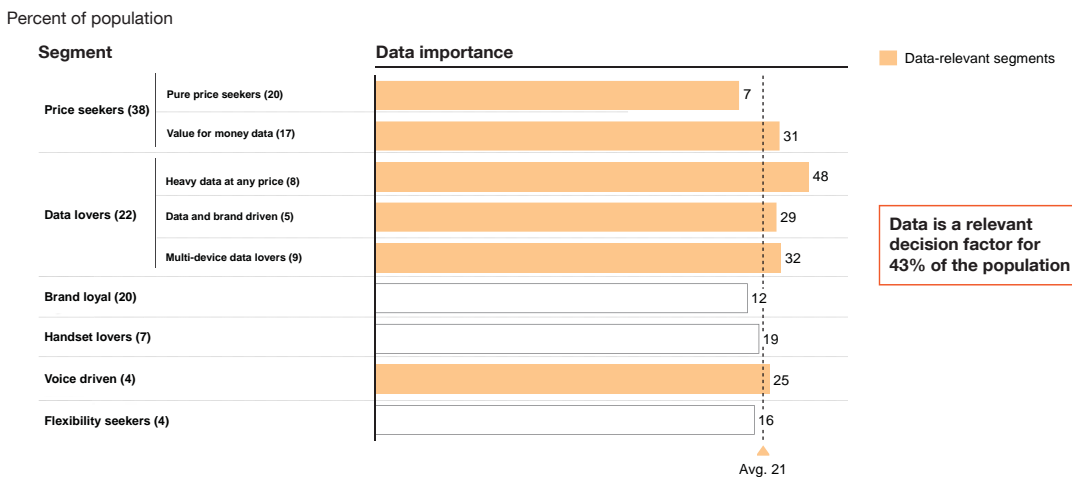
three specific questions: How important is data versus other attributes at a granular, segment-by-segment level? How can digital play elements be tailored to create a unique value proposition? And how can that value proposition be promoted across key building blocks such as voice, handset, and data allowance to optimize customer value while not falling into the mature market trap?

Profiles of the data consumer

McKinsey's analysis of data pricing and portfolios and customer insights has revealed six primary consumer segments.

- *Price seekers* make up 38 percent of the population and include "pure price seekers" (20 percent) and "value for money" data seekers (17 percent).
- *Data lovers* (22 percent) include "heavy data at any price" consumers (8 percent), "data- and brand-driven" customers (5 percent), and "multi-device data lovers" (9 percent).

More than 40% of the population considers data a key factor in the buying decision



SOURCE: McKinsey proprietary multi-country conjoint analysis, 2013

Exhibit 3

- *Brand-loyal* consumers – who make up 20 percent of the population – value specific operator brands.
- *Handset lovers*, at 7 percent of the population, will lock in service in order to obtain a specific brand of smartphone.
- *Voice-driven consumers* are 4 percent of the total and tend to seek a combination of voice and data services.
- *Flexibility seekers* make up 4 percent of the consumer market and those in this segment prefer to avoid any commitments.

Five of these subsegments view data as their first or second decision factor, accounting for 43 percent of the population (Exhibit 3). They include three clusters that collectively represent the data lover segment – multi-device lovers, heavy data at any price, and data and brand driven. The two other data-focused segments are value-for-money and voice-driven data users. The approach to reach each will be slightly different.

Money-making mobile offers

If the objective of mobile leaders is to replicate the success of players in heavy data markets or to avoid the value-destroying environment seen in mature data markets, they need to find ways to offer customers more of the value they seek at the right price. Doing so requires them to adopt a data-centric value proposition strategically combined with other elements of the mobile plan. The ideal offering will involve an optimum mix of voice and data allowances as well as data speed and handset strategies. All of these elements will depend on the market situation.

Voice. With voice service fully commoditized in many markets, research shows that offering unlimited minutes adds little incremental value. In general, people do not want to pay for voice or for unlimited service. Only the niche voice-driven cus-

Data-centric plans that include tailored voice and device offerings is a revenue-boosting recipe

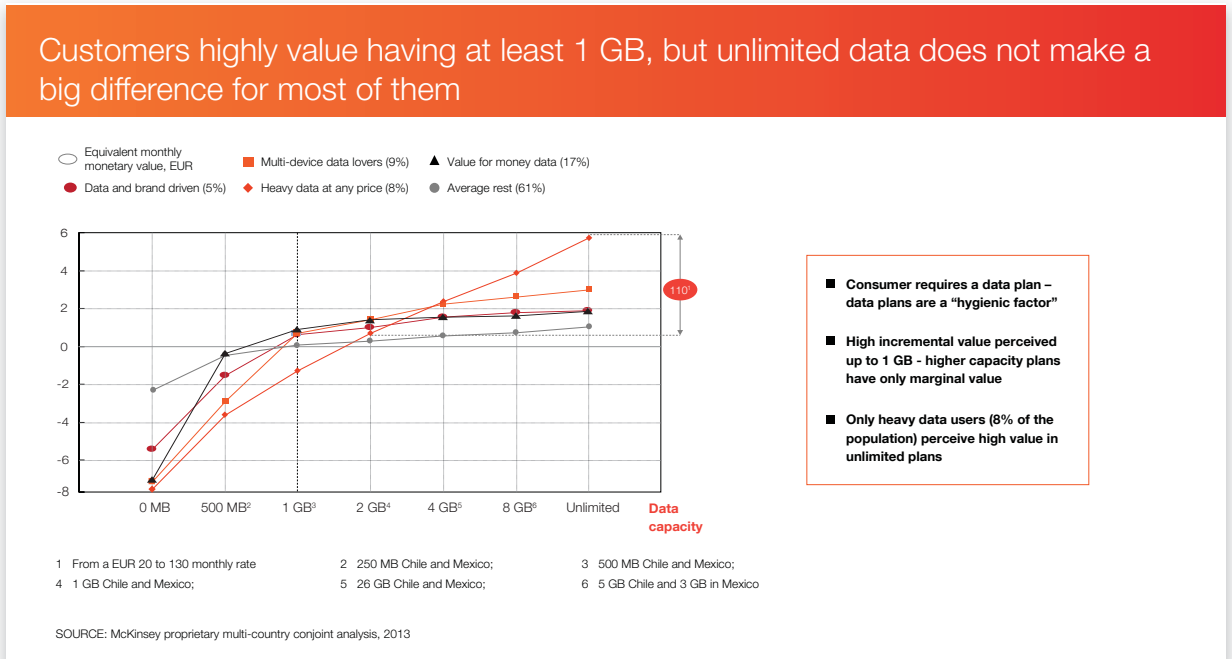


Exhibit 4

tomers segment (4 percent of total users) are willing to pay a premium for unlimited service.

Given these realities, operators have two basic choices depending on their competitive position and market situation. First, they can offer unlimited voice to everyone. For this move, an operator would need to believe that without it, voice-driven customers will switch to competitors and that customers in general will not increase the minutes they use significantly. This strategy will leave money on the table for voice-driven customers who would likely pay more for unlimited voice. Second, an operator could offer unlimited voice as a premium service. For this strategy to succeed, operators need to compete in markets with commoditized voice service where most customers seek no more than a thousand minutes of service per month. Also, the voice-driven segment should be willing to pay extra for unlimited minutes.

To identify which strategic choice makes the most sense, operators need to understand their competitors’ offers and their own relative strengths and weaknesses in this area.

Data size. While conventional wisdom assumes consumers want unlimited data allowances, research shows that most of the people in all of the countries studied were satisfied with plans that offered no more than 1 GB of data a month (Exhibit 4). Knowing this, operators can aggressively price unlimited data plans for heavy data users (about 8 percent of the population) who are willing to pay for them.

When designing data-centered plans, operators should take into account three main guidelines. The first is to offer low-cost bundles. These work well in markets where the lack of a data offering can deter customers, where price-sensitive buyers willingly trade-off some data for other benefits, and where operators can charge a data activation rate for new customers. Typical offers should provide about 500 megabytes (MB) of data. Next, operators will want to focus on mass-market offerings. All customers, except heavy data users, view 1 GB data plans as being sufficient to meet their needs. Plans ranging from 500 MB to 1.5 GB typically offer the right range of trade-offs for mass-market and value-for-money data cus-

Value “add-on” service: Mobile data’s VAS

Data-centered value propositions combine market- and segment-specific offerings in the categories of data volume and speed, voice, handsets, and multiple devices. To add a boost toward achieving their growth targets, operators can promote a variety of “add-ons” or bonus features to their offerings based on customer interest and willingness to pay.

Data sharing gives multiple users on a single account access to one data allowance. McKinsey’s research shows that there is high interest in and willingness to pay for this add-on across most countries. More than 60 percent of survey respondents indicated a willingness to pay for plans that share data across friends and/or family members. High-value options involve offering it as a VAS available with regular plans or selling packaged data plans that customers can share with friends and family.

Data volume limits are removed for the two apps the customer chooses, while maintaining regular plan restrictions on other apps and Web browsing.

Speed boost can make sense even though most consumers do not value data speed as highly as volume. McKinsey’s research shows that consumers do at times value the opportunity to secure guaranteed minimum speeds. This has broader implications for operators offering currently unlimited data but with a speed step-down (i.e., the speed throttles down beyond a certain usage) to create virtual upsell paths.

Additional data capacity gives users an “insurance package” for when they run up against their data volume allowance. It may also provide a guaranteed minimum percentage of a user’s contracted speed at all times (e.g., 25 percent).

Content and applications are also add-ons that telecoms players might consider, although options such as music streaming tend to generate low interest levels and low willingness to pay among consumers.

tomers in terms of price and data volume. Finally, they will need to provide premium plans. These deals offer 4 to 8 GB of data, which only heavy data users perceive as providing high levels of incremental value. The heavy data users segment will pay “as much as it takes” to receive large or unlimited data allowances. This segment’s willingness to pay for unlimited data is 14 times greater than the average user’s.

Data speed. Speed does not play a major role in customer purchasing decisions and the advent of 4G has not changed this fact. As a result, most customers will not willingly pay extra for higher speeds, making it a premium product only for

heavy data lovers. Even these users, however, say speed plays only a moderately important role in their purchasing decisions. Therefore, operators have two ways to take advantage of speed. First, they can go after the “heavy data at any price” and “multi-device data lovers” segments. Representing about 17 percent of the population, these segments are willing to pay a little bit more to guarantee high speed and greatly value having access to the fastest possible connections either all the time or on an ad hoc basis via “speed boosters” (see text box “Value ‘add-on’ service: Mobile data’s VAS”). Second, they may decide to “milk” the mass market. This remaining 78 percent of the market currently hesitates to pay for speed, but

operators could entice them by offering exclusive services such as video streaming.

Multi-device. In many markets, customers increasingly seek more than one SIM card. Consequently, the multi-device data lovers segment, at 9 percent of total users, has become a sizeable cluster. In fact, in some markets such as Brazil and Mexico, it represents almost 15 percent of total mobile Internet users. McKinsey's research shows that mass-market consumers will pay up to EUR 4.20 a month for an additional SIM, while those in the multi-device data lovers segment would willingly pay up to EUR 10 a month for two additional SIM cards. Because virtually everyone is willing to pay for one extra SIM card, operators should consider bundling this feature in basic plans. For multi-device data lovers seeking at least two additional SIM cards, operators could consider pricing the third SIM at a premium as a value-added service (VAS).

The multi-SIM approach gives operators a good way to escape the commoditized middle ground inhabited by the mature data countries. By offering customers more than one SIM, operators can entice them to increase their digital consumption, causing more users to exhaust their data allowances each month and request additional capacity. Alternatively, telecoms players can choose to penetrate households, keeping data capacity limits high and charging extra access fees for each additional SIM.

Handsets. As handsets have grown more sophisticated and expensive, some customers have begun to look for "SIM-only" contracts. As a result, two types of plays have potential. Telecoms players may decide to focus on the "handset lovers" segment and finance high-end smartphones bundled with rate plans that are more expensive but not necessarily linked to large data allowances. There is also a mass-market option in which operators create SIM-only offers in exchange for

other benefits such as a 25-percent discount for the first six months and provide the option of having a preferred handset either sold separately or bundled with a higher rate plan.

Simply receiving a new handset can cause consumers to boost their data usage. In the UK, for example, data use jumped nearly 55 percent among customers who upgraded from one generation of a specific smartphone to the next. The benefits of putting newer smartphones in the hands of customers have prompted some operators to offer earlier upgrades, moving from a 24-month cycle to 12 or even 5 months.

In line with this strategy, a number of industry players have introduced new smartphone financing to offset rising handset prices and reduce subsidies. Ideas such as leasing smartphones, splitting contracts, and offering front- or back-end bank financing offer operators ways to limit subscriber acquisition and retention costs.

In important parts of the mobile market, data has become a key reason for choosing one operator over another. Consequently, leaders need to recalibrate their strategies to accommodate this important market shift, and tailor the elements of their data go-to-market plans to create a uniquely attractive value proposition.



The last six years have seen a dramatic rise in the amount of data traffic, but this growth has been accompanied by a relatively tiny increase in revenues. Operators still have the opportunity to capture bigger revenue rewards from the mobile data revolution. With a granular understanding of market differences as well as consumer preferences and priorities regarding data, operators can give their customers exactly what they want and at a price that reflects data's real value.



David Arcelus

is an Associate Principal in McKinsey's Kuala Lumpur office.

david_arcelus@mckinsey.com



Miguel Fonseca

is a Principal in McKinsey's Lisbon office.

miguel_fonseca@mckinsey.com



Joao Leonardo

is an Associate Principal in McKinsey's Lisbon office.

joao_leonardo@mckinsey.com



José Miguel Novo

is a Senior Associate in McKinsey's Madrid office.

jose_miguel_novo@mckinsey.com



Pierre Pont

is an Associate Principal in McKinsey's London office.

pierre_pont@mckinsey.com