

## Monetizing New Mobile Opportunities

By Jesse Cryderman

Mobile communications has changed the world nearly as much as the Internet itself. There is no underestimating its impact. In "[Mobile 4th Wave: Evolution of the Next Trillion Dollars](#)," researcher and analyst Chetan Sharma writes, "Mobile is the most critical tool to enhance productivity and drive human ingenuity and technological growth." Few would dispute this claim.

Every industry has been impacted by mobile. Facebook, for example, made a whopping zero dollars from mobile ad revenue in at the start of 2012. Based on its [Q3 2013 earnings](#), the company recently pulled in nearly \$900 million in mobile ad revenue. That's a remarkable growth curve.

Mobile has injected countless billions into the businesses of communications service providers (CSPs) and made many fortunes. But the game is rapidly changing; traditional revenue streams are drying up and pressure from agile web-based over the top (OTT) competitors is intense. Voice and messaging revenues, once the bread and butter of the telecoms business, are about to be surpassed by [mobile data revenues](#). Luckily, the mobile landscape is ripe with opportunity, and nearly every business and device on the planet is being impacted by mobility, creating a myriad of new application areas and business cases.

That said, not all trends are paying off; some mobile opportunities that were big buzz in the past year are turning out to be duds. What are the best mobile opportunities in 2014, which prospects have failed to deliver, and where should CSPs tread lightly?

### Empower LTE

There's a reason why global mobile network operators (MNOs) have been scrambling to light up 4G LTE: users of LTE-enabled smartphones consume [more mobile data](#) and contribute a higher average revenue per user (ARPU). They're also more likely to [spend more money](#) to receive premium service and less likely to churn. First and foremost, continuing investment into LTE and the underlying support technologies, like LTE service assurance, is a solid bet.

"In developing economies, operators have noted that LTE users can generate ARPU seven to 20 times greater than non-LTE users. In developed markets, operators have found



that LTE can generate an ARPU uplift ranging from 10 per cent to 40 per cent"

--[GSMA Intelligence](#), 11/26/2013

In some regions, HSPA+, or Evolved High-Speed Packet Access, may still deliver faster speeds than LTE, but this network technology has a limited lifespan. Spectrum is scarce, and LTE is up to three times [more spectrum efficient](#) than HSPA+. Further, LTE offers a roadmap to the 5G future with LTE-Advanced. However, network investments into HSPA+ technology are beginning to make less sense.

### Small cells

Service providers are purchasing [greater numbers of small cells](#) and the technology is becoming [more advanced](#). This is a smart move, and will continue to offer benefits like improved service agility and network availability as MNO's HetNet strategies come online. The latest small cells to hit the market can support up to 64 simultaneous users and feature 3G, 4G LTE, and carrier-grade Wi-Fi connectivity. Indoor small cells are also a wise investment, particularly for the [enterprise market](#), which has expressed a willingness to pay more for better indoor coverage.

Small cells also offer an entry point into the rural market. Solutions like Verizon's [HomeFusion Broadband](#) and forthcoming [fixed wireless service](#) from Sprint and Dish Network enable service providers to connect with customers where construction of a traditional macro cell is cost prohibitive or physically impossible.

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Squeezing the maximum return on investment (ROI) from small cells requires unique solutions, and there are many in the market. InfoVista, for example, offers [network planning and design](#) software that can help service providers get the most from their diminutive network nodes. Amdocs recently announced a [small cell planning and rollout](#) solution that it says can reduce rollout costs and timelines by up to 25 percent. Alcatel-Lucent has launched a new [Site Certification Program](#) that it claims can speed time to market with small- and metro-cell deployments by up to 40 percent. Nokia Solutions and Networks (NSN) markets a full [small cell suite](#) that accommodates nearly every use case and allows operators to [evolve and maximize](#) their initial small cell assets.

## Messaging

As Forbes BrandVoice writer Eric Lai [acutely opined](#) in September, 2012, “The tech industry attracts the worst kind of futurists...who behold shifting paradigms, looming inflection points.”

This leads industry pundits to proclaim the death of technologies that are far from the grave. An excellent example is SMS, or short message service, and its oft-predicted funeral. Although [research firms](#) have argued otherwise, SMS use is still growing and delivering more revenue each year.

“It may be true that SMS revenues are levelling off and that OTT is on the rise, but SMS is still generating revenues of \$15.3m per hour, 24/7, that’s a massive \$133.8bn in 2013,” said Karl Whitfield, managing director, Portio Research, [in a press release last July](#). “Worldwide SMS revenue has gone up year on year since the early 1990s and will continue to be above 2010 levels until 2017. SMS was levelling off before OTT apps came along, and now MNOs are gaining revenue from increased data usage instead. The MNO community has not really ‘lost’ very much at all, but there is much to play for going forward.”

Mobile messaging is worth [\\$230 billion](#), and this figure will only increase. The service mix may change, as customers choose to use different messaging services at different times based on a variety of factors; but messaging isn’t going anywhere. In many ways, OTT messaging functions as a complementary service to SMS

and MMS (multimedia messaging service), similar to the way that Netflix functions as a complimentary service for cable subscribers, [not a replacement](#).

CSPs must refine and integrate their messaging services. Direct competition with OTT is unlikely to be a winning strategy. The industry’s attempt to out-compete the likes of WhatsApp and Skype with [joyn](#), a branded iteration of Rich Communications Services (RCS), is [losing support](#) from its own membership. A better strategy is to create a messaging ecosystem that delivers the functionality that users desire and partner with OTT messaging services to offer unified identity management and single login functionality. Further, OTT services actually create opportunities for service providers to better [monetize mobile data](#). In 2013, for example, Deutsche Telekom (DT) partnered with the popular social networking and messaging service [Path](#), as well as [Twitter](#) and [Evernote](#).

## Security

As *Pipeline* predicted in 2013, the ongoing NSA wiretapping and digital espionage scandal is creating a market opportunity for advanced security and encryption services. High-profile hacks of customer data repositories have

similarly ratcheted up the focus on cyber security. In 2013, super secure communication solutions were announced by [Telefónica](#), [Verizon](#), and [DT Orange](#) followed suit in early 2014. This trend is likely to continue. Although there are clearly regulatory hurdles—the laws regarding privacy are quite different in the US than they are in Europe—designing premium encrypted and secure communications services is a wise plan for 2014.

## VoLTE

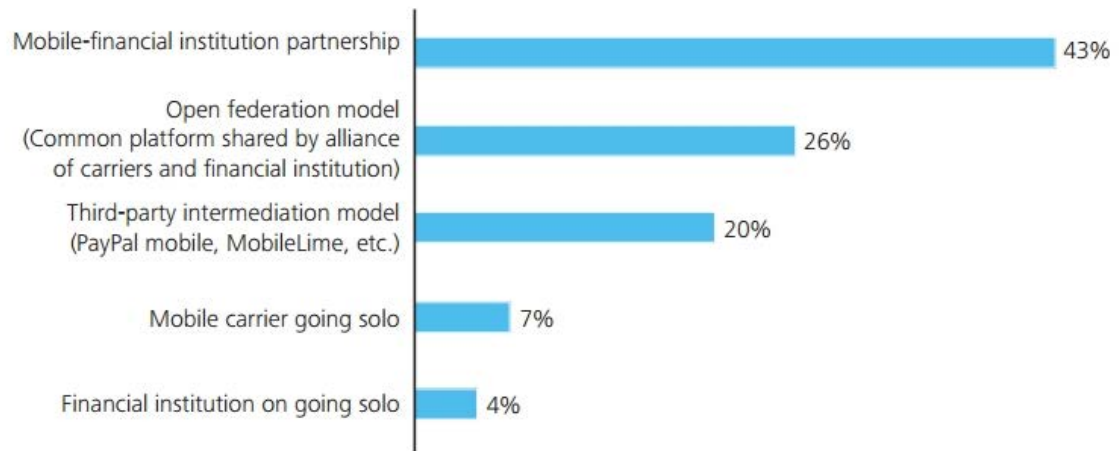
Voice over LTE (VoLTE) was heralded as the bees knees; but as 2014 begins, [only a handful](#) of global operators have deployed the technology, and it appears unlikely that VoLTE will make a significant improvement to operator profits in the near-term. There are several reasons. First, a significant LTE network footprint is required to support the technology. VoLTE is not backwards compatible to CDMA ([sorry Verizon](#)), so VoLTE calls will drop rather than fall back to legacy CDMA in the event of LTE service interruption. Secondly, LTE in high bandwidths performs poorly in terms

of in-building penetration, which means calls in the garage or basement are likely to be of lower quality compared to 3G calls. There are also reports that VoLTE rapidly drains batteries, and the little dilemma that few VoLTE capable devices are on the market. The bottom line is that no wants to roll out a next-gen service that features dropped calls, flubbed fallback and dead batteries. Commercialization of VoLTE is unlikely until next-generation network development plans, such as AT&T's [Project Velocity IP](#), are further along.

### Mobile payments and near-field communication (NFC)

Mobile payment services are growing and increasingly mainstream, but who's best positioned for the future? According to Deloitte research, service providers on their own don't have the best case to win in the mobile payment, as you can see in the figure below.

**Figure 4. Most viable business model**



Source: Deloitte Future of Mobile Payment Survey

As is the case with OTT services, CSPs should focus their efforts on enabling the mobile payment ecosystem and seek partnerships with trusted financial institutions and OTT payment platforms with a significant revenue and user base, like PayPal.

In the US, MNOs joined up to form their own NFC-based mobile payments and mobile wallet service: Isis. Unfortunately Isis has languished in two test markets and failed to gain momentum. Capital One [withdrew its support](#) for the platform in September, after deciding that the Isis road was a dead-end.

Perhaps part of the problem is the focus on NFC. The technology has enjoyed some limited success in emerging markets and APAC (Asia-Pacific); but, overall, it really has not lived up to the hype. According to a [Gartner report](#) published in May, 2013, NFC accounted for just 2 percent of mobile transactions in 2013, a figure Gartner predicts will only grow to 5 percent by 2017. "Whatever potential NFC had as a financial transaction tool is dwindling quickly because of this war between industry heavyweights," wrote Kevin Fitchard in [Gigaom](#) in September.

### New mobile opportunities require new strategies

For CSPs, all of the mobile opportunities in 2014 possess one commonality: monetizing mobile for the long haul requires a perceptual shift. The skill sets that served CSPs in the past won't cut it in the future. Telcos must become digital service retailers and compete with a much

wider field that includes not just other operators, but also internet players, insurance companies, banks, and more. This requires new strategies, new staff, and new support systems. For instance, as networks evolved to support software defined networking (SDN) and network functions virtualization (NFV), programmers with experience in these technologies must be hired. Real-time convergent billing and charging systems must be implemented to afford the kind of agility the market requires.

Strategically, service providers must examine each opportunity and weigh it against their assets and expertise to determine whether partnering, ecosystem development,

or unilateral service and development commercialization makes the most sense. In the Deutsche Telekom examples cited above, partnering with popular mobile apps was DT's strategy for OTT competition; but when it came to advanced mobile encryption, DT chose to go it alone. Some industry-led partnerships, like joyn and Isis, have failed to deliver, while others, like the [M2M World Alliance](#), are rolling out real solutions. In other cases, like mHealth or connected car, curating an ecosystem may be the best path.

There are many paths forward for mobile opportunities that lead to short- and long-term success, but one thing is for certain: mobile has changed the face of life on Earth and will be a component of nearly every tech success in the foreseeable future. As the purveyors of mobile ubiquity, CSPs that retool their businesses to become mobile lifestyle providers will undoubtedly succeed.