

New business models for Connected Living

Connected wireless devices are set to surpass the number of mobile handsets over the coming decade and create significant new business opportunities for mobile network operators. Innovative connected devices and services will be deployed in a variety of vertical sectors – including automotive, consumer electronics, healthcare, smart cities and utilities – as well as cross-sector applications. GSMA's all-inclusive term for this market is M2M and Connected Experiences.





Mobile network operators have a huge \$1.2 trillion addressable market opportunity¹ by 2020 to generate value beyond basic connectivity through managed connectivity, stewardship services (e.g., aggregated services tailored to the consumer) and platform innovation (e.g., multiple device management for new services).

Opportunities have been constrained in the past because connected device applications have been complex and costly to implement. Moreover, their revenue contribution, from mainly small scale, low data-rate machine-to-machine (M2M) and telematics applications, has been modest when compared with mainstream mobile handsets. These are the primary reasons why M2M has until now been a niche within the wider mobile industry.

Mobile network operators – and the ecosystem of hardware and software vendors of all sectors that depend on mobile connectivity – are discovering that for M2M and Connected Experiences to become mainstream, an opportunity oriented approach has to be applied to traditional M2M economics. In particular, new scalable business models will be a critical enabler for realising the full promise of connected products and services. GSMA has conducted research to determine:

- How mobile network operators are targeting the M2M and Connected Experiences market
- Whether there is evidence of business model innovation
- What implementation lessons other companies can learn from industry experiences to date.

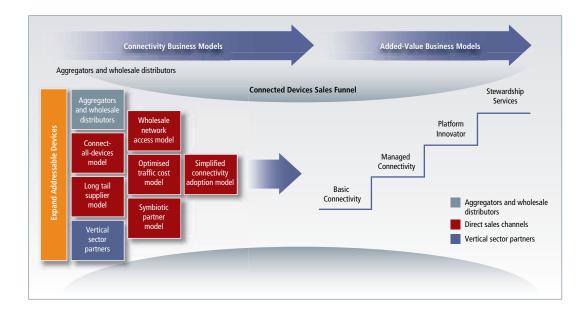
The research provides clear evidence that:

- Mobile network operators are creating dedicated business units and teams to address emerging M2M and Connected Experiences opportunities
- Operators are partnering with other operators, hardware vendors, device suppliers, application developers, communication service providers and systems integrators
- Against the backdrop of a rapidly developing M2M and Connected Experiences market, the initial focus of mobile operators has been to build scale by growing their base of connected devices
- As basic connectivity becomes commoditised, mobile operators have moved to provide managed connectivity services, often in partnership with specialist service-enablement platform providers

There remain other, higher-value market opportunities that operators are beginning to address. Some are specifically positioning themselves to address the multiple service needs of consumers through a stewardship services model. Others are deploying platforms to use connected device and sensor data to serve the different needs of multiple user groups simultaneously.

An analysis of mobile operators engaged in the M2M and Connected Experiences market has identified ten different business models. There is no one winning model; in all cases, operators are using multiple approaches, each one tailored to the characteristics of different market segments.

The approaches listed in the graphic below show that there is a concentration of efforts under basic connectivity. These aim to capitalise on the adoption of mobile connectivity in devices from non-mobile industry and consumer electronics verticals. At the same time, there is a progression towards higher value service opportunities, commencing with managed connectivity and gradually leading into stewardship services and platform innovator scenarios.



The key findings of the GSMA analysis can be summarised as follows:

- Operator business models have three objectives: foster mobile connectivity, simplify connectivity implementation and provide higher-value services
- Several models are used to foster mobile connectivity
 - Large operators are taking a broad approach across multiple verticals and geographies in which technology vendors wish to add connectivity to their devices
 - Other operators are taking a selective approach, addressing low device-volume niches, low data-rate applications and long-tail applications using standard connectivity
 - Many operators provide connectivity on a wholesale basis, leaving design and customer management in the hands of aggregators
 - There are some instances of symbiotic business models, in which a mobile operator partners with a connected device or service provider to offer a new service on a shared risk-reward basis
 - With the business models intended to simplify the implementation of connectivity, operators are offering
 Support for business planning and technology design
 - Formal supply-chain coordination through managed partner programs, sometimes including an "approved supplier" marketplace
- Higher value business models are involving acquisitions, structured and less formal partnering with other service providers to offer:
 - Managed connectivity services
 - "Stewardship" services for consumers (e.g. the monitors, sensors, software, handset and connectivity for managing your chronic disease all available from your operator)
 - Platform innovator solutions (e.g. analysis of data from personal health monitoring devices for the benefit of individual users and their health care providers)





Mobile operators are not the only entities in the mobile ecosystem to adapt their business models. Recent analysis² of more than 150 corporate announcements since 2008 in the M2M and Connected Experiences market reveals a high level of partnering activity amongst device and technology vendors in the upstream value chain.

Companies from outside the mobile industry should be encouraged that operators are adapting their business models. This increases the likelihood of commercialising new opportunities. Openness to risk-reward sharing also provides positive grounds for long term commercial viability.

Resources

The GSMA Connected Living Programme has established initiatives for supporting the growth of various vertical segments (e.g., mAutomotive, mHealth, mUtilities) as well as cross-segment initiatives (e.g., Smart Cities, Embedded SIM). In addition to a wealth of research reports, the programme offers opportunities for direct involvement in how the market develops, through events such as the Connected Living European Summit and the GSMA Connected Car Forum. The programme also supplies a toolbox for companies in the Connected Living Market that contains such resources as the mHealth Tracker, which details global mHealth deployments, and the mHealth Device Listing, which is updated fortnightly.

To get involved, visit www.gsma.com/connectedliving/.



GSMA Head Office Seventh Floor, 5 New Street Square, New Fetter Lane, London EC4A 3BF UK Tel: +44 (0)207 356 0600

connectedliving@gsm.org www.gsma.com

2 Ventura Research

©GSMA October 2012 v1

October 2012