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Report from Research Study:
M2M Service Enablement Services

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SECTION 1: INTRODUCTION

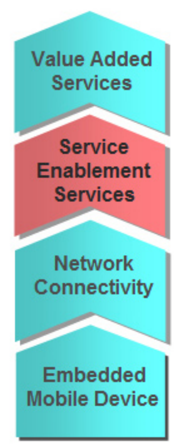
During 2011, Beecham Research conducted its second research study on M2M Service Enablement. This report provides the detailed findings from that research.

The 2011 study followed Beecham Research's first study conducted in late 2009 through mid-2010 and comparisons are drawn in this report between the findings of the two studies. These findings were highly complementary, so that in many ways this report picks up where the first study left off and explores recent developments in the market, the key trends and the impact of these on expected revenue generation.

1.1 SES Definition

Beecham Research defines Service Enablement Services (SES) as belonging to the layer above Network Connectivity, which includes mobile airtime, and the layer below Value Added Services, which includes end user services like fleet/freight management and security alarm services. Examples of services in the middle layer are:

- Remote enable/disable and auto-provisioning
- Managed update of remote devices with the latest application software
- Data warehousing of device data prior to processing by end user applications
- Integration with enterprise systems



Each of these is largely a horizontal service that can be used for many different end user applications using fixed line or wireless connectivity, or both.

One of the barriers that have slowed M2M market development is the current need to reinvent many of these services as new applications are designed. If instead they are provided as part of an SES platform, this can substantially speed market introduction of new end user services – resulting in faster revenue growth – and make the whole process more cost effective – resulting in cost reduction. By the same token, those who provide these services should attract more M2M connections business.

Why is this important now? The M2M business has reached a point where greater automation is required to manage the population of connected devices. As well as higher volume Business applications, the market is now seeing substantial Consumer M2M applications and these also require a high level of automation. An SES platform should provide this in a cost effective and scalable way. There is a lot of activity in the market at present at various levels in the value chain, with many parties considering providing these services, including:
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- System and Hardware Suppliers
- Network Infrastructure Suppliers
- Fixed and Mobile Network Operators
- Mobile Virtual Network Enablers/Operators (MVNEs and MVNOs)
- Solution Providers
- System Integrators
- Dedicated Software Suppliers

Some key advantages of M2M SES are:

- Reducing the need for re-inventing common elements
- Enabling Application Providers to focus on end user needs and reducing development time to market for new services
- Reducing installation and running costs for both new and existing applications
- Providing a market catalyst for M2M market development
  - ◊ Bringing order to a fragmented market
  - ◊ Adding flexibility to the provision of services: opportunity for multiple vendors to bring their own special contributions to a structure that is generic rather than application-specific
  - ◊ Accelerating the opportunities for competitive differentiation in business sectors

1.2 Study Outline

This study examines the market dynamics and impact on equipment, mobile network operator and value added service provider strategies in the emerging connected devices market.

The market for service enablement has extended very significantly since the first Beecham Research study and we now have near-term partnering arrangements

between mobile operators and M2M service enablement providers. This has helped mobile operators to reduce their time to market, capture market share, and learn more about new business processes in the M2M market. However, as M2M market volumes increase and as new types of devices and services are launched, mobile operators and service enablement providers will have to deal with several strategic questions.
For example:

- What new service enablement capabilities will be required, both operationally and technically?
- What will this service enablement market be worth?
- What capabilities do equipment and service provider companies need to factor into their strategic and product roadmaps?

This study assesses the competitive landscape, the SES functionality, and partnering challenges over the next 3-5 years, building on Beecham Research's 2010 SES study (SES1). The project approach was based on the following strands of research:

1. Market analysis based on in-house expertise and interviews with many industry experts, including many SES platform providers.
2. A web survey of 210 international companies committed to integrating mobility into their devices and services. These were adopter companies for SES, typically product manufacturers building service offerings alongside their products and service providers operating in key vertical sectors. These are players in the M2M value chain, rather than end user companies.
3. Telephone interviews with many adopters in key verticals, to supplement the web survey.
4. A revision to 2009-2010 SES revenue forecasts, drawing on latest web survey insights.

Throughout this study, there has been an emphasis on vertical segment characteristics through the web survey and industry sector interviews in seven key sectors:

a) Transportation
b) Energy
c) Security
d) POS/Retail
e) Healthcare
f) Industrial
g) Consumer Electronics

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