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White Paper

Managing Mobile Data Services: The New Business Model

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ABOUT MOTRICITY

Motricity empowers mobile operators, brands and advertising agencies to maximize the reach and economic potential of the mobile ecosystem through the delivery of **relevance-driven merchandising, marketing and advertising solutions**. Motricity leverages advanced predictive analytics capabilities to deliver the right stuff, to the right person at the right time. Motricity provides their entire suite of mobile data service solutions through one, integrated, highly scalable managed service platform.

Motricity's solutions provide the following key points of value:

- Drive engagement through the delivery of highly relevant offerings
- Deliver business results through the effective merchandising of value-added content, apps, goods and services and the placement of targeted mobile advertising campaigns
- Provide service convenience through the delivery of a complete, integrated solution set
- Enable service agility through our cloud-based infrastructure

Motricity's unique combination of technology, expertise and go-to-market approach deliver definitive return-on-investment for its mobile operator, brand and advertising agency customers.

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Summary

This paper focuses on managed services for mobile data and examines the implications for operators, both in terms of market trends, opportunities, and the challenges faced in maximizing returns from mobile data revenues.

With thousands of new devices and dozens of value-added services set to hit the market, both opportunity and complexity in service delivery will increase drastically, while competition for high-value customers will intensify. In this environment, operators are looking to prioritize the following:

- Speed to market of key services (such as mobile Internet and social networking).
- Flexibility and relevance in the service portfolio mix (content diversity, monetization schemes, new revenue sources, etc.).
- Assurance of smooth execution for billing and payment settlements (ecosystem growth).
- Minimizing development costs of new products (ROI and margins).
- Managing the increasing complexity required by tighter device and service integration.

Managed service offerings for mobile data address these priorities. In the near future, outsourcing in this area will be a natural extension to traditional managed network services already popular with many operators. Operators looking to maximize the potential of this space need to look to an experienced, end-to-end provider that brings both the technical capabilities and professional skills necessary to grow this business now and into the future.

Nowhere is this truth more evident than in the emerging markets of Southeast Asia. With the rapid rate of growth in this part of the world and the central role MNOs intend to play in the mobile internet, operators need to source solutions from a provider that brings holistic and integrated solutions to this category and delivers holistic services to manage and grow these emerging businesses. A comprehensive managed services approach ensures not only speed to market and agility in innovation, but also delivers reduced costs and maximized revenue realization.

The diverse nature of the mobile data business offers several challenges for MNOs. The services that are in demand in this space vary widely and change rapidly. Services that are pertinent now, such as messaging and email will shift to more relevant offerings such as Social Networking, Apps Distribution, and Mobile Advertising. MNOs who seek to establish strategic footholds by delivering differentiated service offerings to their customers need to source partners who not only deliver the content and experiences that are relevant today, but also have the capabilities, vision, and flexibility to deliver the differentiated services of tomorrow.

This paper evaluates both the services that are in demand now and will be in demand in the future. It also addresses the managed service models that will enable success in this complicated space, and the service offerings that will help these businesses grow.

Section 1 of this paper reviews global market trends and looks at the case for managed data services, particularly focusing on the emergence of mobile data as a market driver.

The sharp slowdown in operator revenues in recent years has driven the need to manage capex and opex, but also to develop new market sectors and optimize performance of current and emerging sectors. Over the next few years, mobile data represents a clear market opportunity for revenue growth, representing a forecast 40% of the US$1.1 trillion mobile telecoms service revenues globally by 2015. In seeking to maximize this opportunity, operators will need to explore new business models, address a growing number of customer segments, understand how to leverage an ever increasing mass of customer data, and harness new market drivers such as social networking, mobile payments and mobile advertising.

Within this context, a strong case can be made for a managed service approach to delivery. The risk associated with launching a new product can be reduced, faster deployment times can be achieved and professional services offered to manage a broad range of devices and access technologies.

Section 2 of this paper features the results of a specially-commissioned online survey which analyses the market trends and operator requirements for managed services, both at a global level and also for one of the strongest-growing mobile data markets – the emerging markets of Asia Pacific.

Section 3 looks in detail at a number of Asia Pacific's key emerging markets, including India, Indonesia, Malaysia, Thailand, Vietnam, Laos and Bangladesh. Operators in these markets have been particularly innovative in their deployment of new data services, such as mobile advertising, mobile social networking and mobile payments.

1 Market overview

The rise of data revenues – seizing the opportunity

Until recently, mobile operators believed that 3G networks would allow them to develop online services to be sold exclusively for their mobile subscribers. In turn, generic Internet services and third-party content would be kept away from customers and access would be largely blocked.

Today, mobile operator attitudes have changed. Increasingly, the mature mobile markets have started to overlook some of the metrics that used to indicate success. Subscription base growth – measured in terms of number of connections – and ARPU have lost some of their significance, while revenue growth and profitability, measured in terms of EBITDA, have assumed more importance when assessing future opportunities. Growth in the subscription base, which featured in most mobile operators' targets over the past decade, is rarely mentioned by those operating in more mature economies. Although operators in emerging markets still rate the importance of subscription growth, these operators are also expected to start focusing on different metrics such as data revenues and profitability.

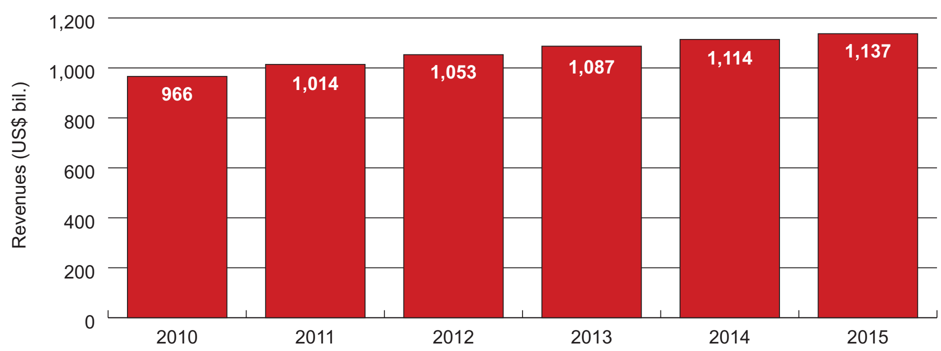
Following the demise of flagship services like Vodafone's in-house portal, Vodafone Live, and the business slowdown during the recent economic downturn, there has been a rethink of the kinds of mobile services and products that will provide sustainable returns for mobile network operators. Many operators have re-positioned themselves as access providers, recognizing that their previous drive to become full-service content providers had in fact hindered their progress in selling data access services. It is the introduction of the open Internet, combined with flat-rate prices, which has now enabled operators to sell mobile data plans to their customers with open platforms for Smartphones playing a critical role. However, this same shift to the open internet has opened the door to peripheral players in the OS, handset, and content markets to their customer bases, marginalizing the operator to pure transport providers. This transition further commoditizes their business and erodes their brand perception amongst their users, as strong brands like Apple and Google take over the user experience.

Some operators are consciously giving up their central position in this space and are becoming "dumb pipes"—pure transport players. This will ultimately limit their profit potential and transfer most of the opportunities for pure topline revenue growth to the rest of the ecosystem. For operators who wish to position themselves as central to the mobile data ecosystem, shifting towards new business models that takes advantage of their core capabilities like network excellence, customer insight and customer experience management being their distinctive assets represent the clearest opportunity to maintain brand position and revenue potential.

Largely because the Asia Pacific region bridges some of the world's most and least mature economies and because of the extent of new growth still available, this paper provides a specific focus on this region in Section 3.

Against a background of sharply slowing revenue growth (down from double-digit increases between 2005 and 2008 to 1% in 2010), Informa Telecoms & Media forecasts that the revenues generated by the global mobile industry will grow at a modest CAGR 3.3% between 2010 and 2015 (see fig. 1). It follows that, in the current tough global economic climate, companies must take hard decisions on how to invest their resources most effectively and capture additional revenues.

Fig. 1: Global mobile service revenues 2010-2015

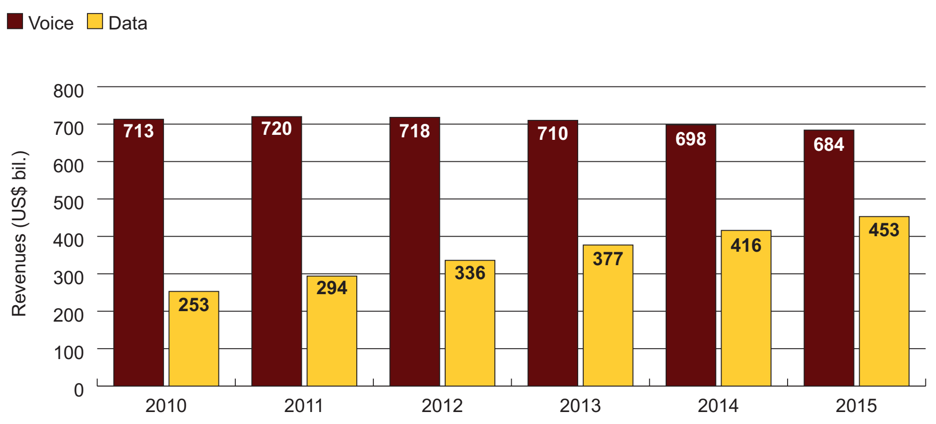


Source: Informa Telecoms & Media

The need for wireless operators to explore and adopt new business models emerges from some key considerations:

- Overall, no single region or country is expected to show double-digit growth in terms of service revenues in either mature or major emerging economies. Global voice revenue growth actually slowed in 2009.
- Data revenues represent a clear opportunity for top-line revenue growth. Although they will compensate for the decline of voice revenues – with a CAGR forecast at 12.3% over the next five years – the result will be low single-digit top-line growth in overall service revenues (see fig. 2).

Fig. 2: Global, voice and data service revenues, 2010-2015



Source: Informa Telecoms & Media

- Incumbent mobile operators will increasingly focus their efforts on retaining and extracting more revenues from their existing high-value customers using a number of lock-in strategies like bundling fixed and mobile services. Meanwhile, the "challengers" believe that they can grow by acquiring additional market share through providing compelling and differentiated experiences and offers.
- Growth opportunities will emerge in those ecosystems that are either complementary – fixed mobile integration – or at the periphery of, if not outside, the mobile operator's traditional domain – like Internet services, such as mobile commerce, and marketing and vertical industry sectors like fleet management and mobile healthcare.

Comparing regional trends

While very strong growth in data revenues is expected in virtually every market, in contrast voice revenues will decline in the majority of mature economies and only show very modest rates of growth in developing markets.

Asia Pacific, Western Europe and North America will continue to provide the majority of mobile revenues accounting for over 70% of total mobile revenues throughout Informa's five-year forecast period (end-2010 to end-2015). However, the contribution of revenues provided by emerging markets will gradually grow, most notably Africa, Latin America, and the developing Asian countries.

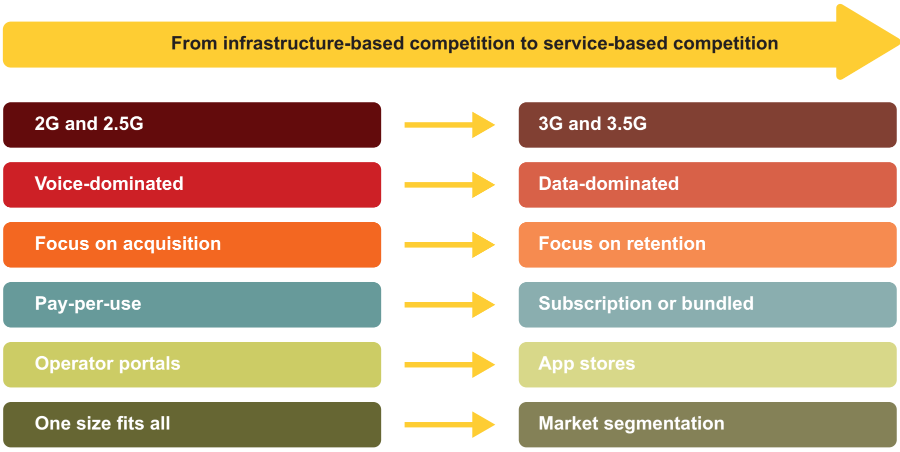
Mobile operators in many developed economies will struggle to maintain revenue growth as their voice revenues fall, and they face increasingly intense competition and stagnating subscriber growth. Meanwhile, in the developing economies, growth is rapid but less profitable given the tariff policies put in place to expand the customer base and encourage usage.

In contrast to the picture for voice revenues, however, the trend for mobile data is strongly positive. Informa forecasts show that very strong growth in data revenues is expected in virtually every region, so that data will account for 40% of total revenues globally by 2015, compared with 26% in 2010.

Much of the impetus behind data revenue growth comes from the emergence of the mobile Internet as a mass-market phenomenon, alongside related tends such as mobile social networking and personalized search and discovery. Major Web-based social networking players are extending their reach into the mobile space through mobile browsers and downloadable applications. This functionality is being combined with mobile-specific features such as location-based capability and augmented reality. In mature markets, such as Japan and South Korea, this has already achieved massive adoption among consumers, while the developing markets of Southeast Asia are among the leading examples of future potential for these new types of mobile services which combine elements of user-generated content with network-based enhancements.

Against this backdrop, the challenge for operators is to develop and deliver new value-added services (VAS) that will help them differentiate their brands and maintain revenue growth, at a time when they are also being forced to find new ways of cutting costs. Differentiation based on VAS and proper margin management of these services will offer operators the ability to get ahead of the depressed revenue curve and realize cost advantages as the sector grows (see fig. 3). This will alleviate the pressure on margins which will follow the emergence of the mobile data sector in the next few years.

Fig. 3: Mobile VAS market development



Source: Informa Telecoms & Media

Key marketing goals which emerge from this need for differentiation include:

- Maintaining a central position in the emerging complexity of the mobile ecosystem.
- Maintaining brand relevance in such an environment.
- Finding new ways to monetize the customer base and augment top-line revenue.
- Find ways to avoid becoming a "utility company", acting as a pure transport, commoditized player.

As a result, a trend has been established towards managed network operations in order to enable operators to focus their resources on core activities and develop new business models. Now, by rethinking key aspects of service delivery, such as portal and device management, operators are able to address their goals of competitive differentiation and revenue growth while also managing capex and opex in mobile data services.

The case for managed data services

For most operators, the main advantages of managed data services are that they help to manage risk and enable the operator to focus on the core business of the company. For example, a hosted data service can help lower the entry barriers to new markets by limiting the upfront investment in infrastructure and skilled resources to operate and maintain it, as well as developing or acquiring the appropriate content and managing suppliers.

Choosing to host a service with a third party rather than purchase the services platform outright also lowers the revenue target for breakeven and reduces the pay-back period. For example, pay-back for a typical hosted solution may be just three months compared with nine months or more for an in-house solution.

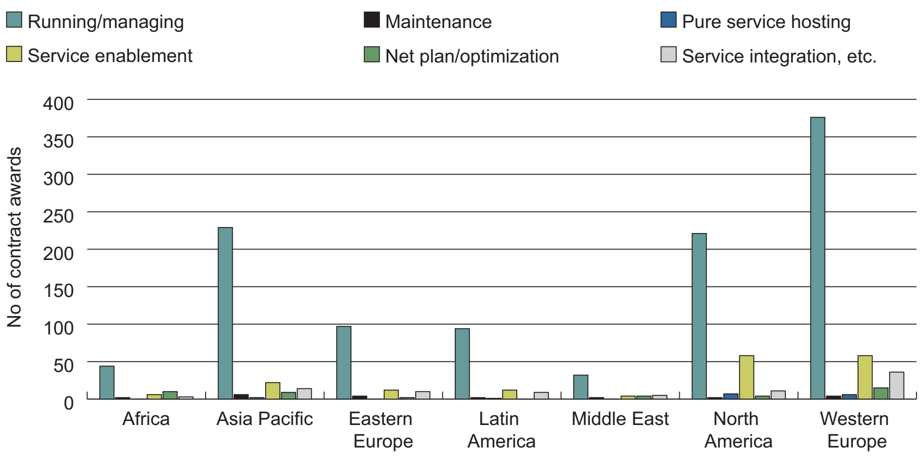
Sourcing specialist capabilities from a services provider also enables an operator to launch services far more quickly than it could by simply following the conventional procurement/deployment/integration route.

This is made possible by the use of "off-the-shelf" or standard products and taking advantage of a service provider's expertise. After all, the core competence and business of service providers are the development, delivery and management of service and applications. In addition, the time taken for systems integration and preparation for launch can be significantly improved by the implementation of "best practices" based on a service provider's experienced, dedicated specialists, plus the exploitation of synergies across the provider's other services and facilities.

Outsourcing the development and operations of value-added data services, especially content-based services, significantly reduces integration and operational complexities. As when outsourcing network operations, it gives an operator's management time to focus on customer-facing activities such as packaging, marketing and promoting the new services to the customer base, while simultaneously freeing the subject-matter experts from the service fields to focus on driving the areas of their expertise and mutual business interests.

It is therefore not surprising to note that, while the simpler network-oriented managed service contract may still dominate, there are a growing number of service-related and consultancy/advisory managed contracts being implemented, particularly in North America, Europe and Asia Pacific (see fig. 4).

Fig. 4: Global, major managed service contract awards, by sub-category and region, 2009



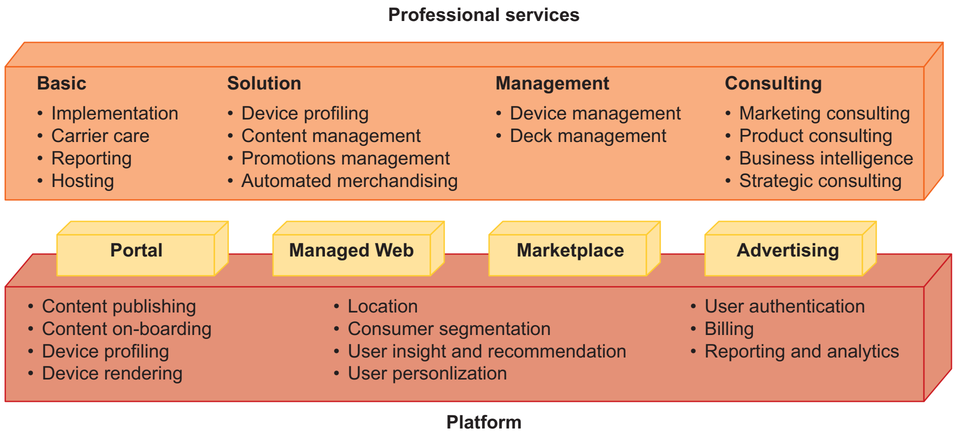
Source: Informa Telecoms & Media

Content delivery and commerce platforms are offered as a managed service to two groups of customers: fixed/mobile operators and MVNOs; and media and entertainment brands. In some cases, the content delivery service is managed in partnership with distributors and aggregators acting as wholesalers for application and content developers, which would not otherwise be able to sell direct to industry customers. In other cases, the service delivery provider will also be involved in marketing to the end user, either on its own account, or as a service to third parties. This service can cover push messaging, mobile advertising or more sophisticated campaigns that are integrated with other media.

Mobile managed data services (see fig. 5) can include some or all of the following elements:

- **Content catalog:** Aggregated content from a number of application providers, offering access to news, information and entertainment in a variety of formats including basic messaging and Web content.
- **Reporting and analysis:** These tools allow operators or brand owners to monitor the progress of marketing campaigns; for example, using graphic interfaces for ease of access.
- **Commerce and payments:** A facility for enabling end users to pay online for content as well as making settlements with partners in the value chain.
- **Device management:** The ability to adapt a service to suit a variety of devices, such as mobile phones, PCs or TVs.
- **Search and discovery:** A user-friendly front-end, which can be either Web-based or resident on the mobile device, allowing end users to locate and access content quickly.
- Publishing and content management: Operator support in managing and merchandizing relevant content for consumers.
- **Marketing and advertising:** The design and execution of compelling mobile solutions which help deliver marketing campaigns that drive data businesses.
- **Professional services:** Including product, marketing and strategic consulting.

Fig. 5: Mobile data managed services overview



Source: Informa Telecoms & Media

Each of these services, when combined with the platform and application-level solutions, enables operators to free themselves from the complexity of managing these solutions and allows them to focus on core marketing and base management activities. In an outsourced model, the operator is encouraged to manage the managed service provider to the overall revenue and top-line growth needs of the business, as opposed to operational and functional level concerns that tend to drive cost and hinder resource allocations within the operator.

This section presents the results of a specially-commissioned online survey carried out by Informa Telecoms & Media during January 2011. Potential respondents among mobile and fixed-line operators and MVNOs were invited to participate via e-mail, and just over 130 C-level and business development industry professionals from around the world took part in the survey.

2 Mobile as a service: Global research insights

Mobile content trends

In order to gauge opinions about the main trends on mobile content, respondents were asked to rate a number of areas from 1 to 5 in terms of their importance to operators' revenues, with 5 being the most important. The results indicated that messaging is currently seen as the key driver of mobile revenues globally, with a group of other services, including mobile Internet and operator services, behind.

As a follow-up, they were then asked what would be the most important areas in two years' time. In this case, the respondents expected there to be far less dependence on a single revenue stream, with mobile Internet, social networking, messaging, and mobile e-mail all scoring at relative parity with one another (see fig. 6).

Fig. 6: Global, main trends in mobile content

Current		Future	
Messaging	35%	Mobile Internet	29%
Mobile Internet	17%	Social networking	28%
Operator services	14%	Messaging	26%
Music	14%	Mobile e-mail	26%
Apps distribution	9%	Apps distribution	19%

Source: Mobile Managed Services Survey 2011

Analyzing the same question that was asked of respondents specifically about the Asia Pacific region gives a different picture and also a different trend over time. Mobile marketing and messaging are currently the main drivers, while social networking and apps distribution emerge as main drivers in the future alongside messaging and mobile Internet (see fig. 7). There were also indications that mobile payments (both NFC and remittances) were seen as potentially significant future drivers for mobile data adoption. This trend is highlighted in the qualitative interviews with Southeast Asian operators in section 3 of this paper, which show evidence of considerable activity in these emerging VAS sectors.

Fig. 7: Asia Pacific, main trends in mobile content

Current		Future	
Messaging	19%	Social networking	29%
Mobile marketing	19%	Apps distribution	29%
Mobile e-mail	10%	Messaging	24%
Apps distribution	10%	Mobile Internet	24%
Mobile advertising	10%	Mobile advertising	19%

Source: Mobile Managed Services Survey 2011

The leveling of the demand for these services, as well as the significant difference in regional perceptions of their relative importance, speaks to the complexity and variability of this complicated space and further validates the need for a managed service offering that covers a wide range of ecosystem components.

Understanding how these technologies, services, and participants interconnect to create a cohesive and compelling end-user experience is a critical component to delivering differentiated value in this emerging category.

Priorities for mobile managed data services

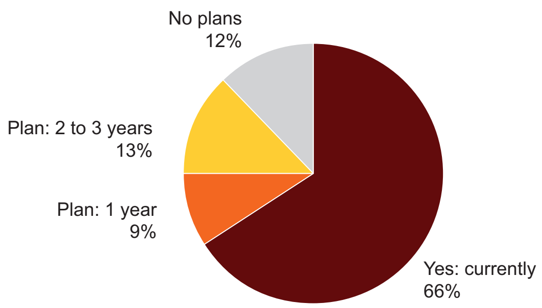
Then asked about their main priorities for managed services in mobile data, operators believe that strategic and key management functions should be kept in-house, with areas such as product planning and go-to market planning seen as essential to maintain a competitive advantage. The top priorities for managed services, on the other hand, included specialist areas, especially:

- Web discovery
- Advertising/promotional management
- Content management
- Hosting/data-center management.

Plans for mobile managed data services

Most of the operators that responded to the survey (66%) said they were currently using managed service providers for some of their data service operations. Just below 10% said they planned to do so within the next year, while a further 13% said they planned to use managed services in the next two to three years (see fig. 8).

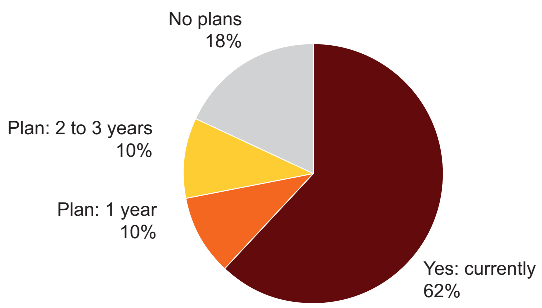
Fig. 8: Global, plans for managed services



Source: Mobile Managed Services Survey 2011

The results for operators in the Asia Pacific region were broadly similar, with 62% of respondents saying they already used managed services providers for their data service operations (see fig. 9).

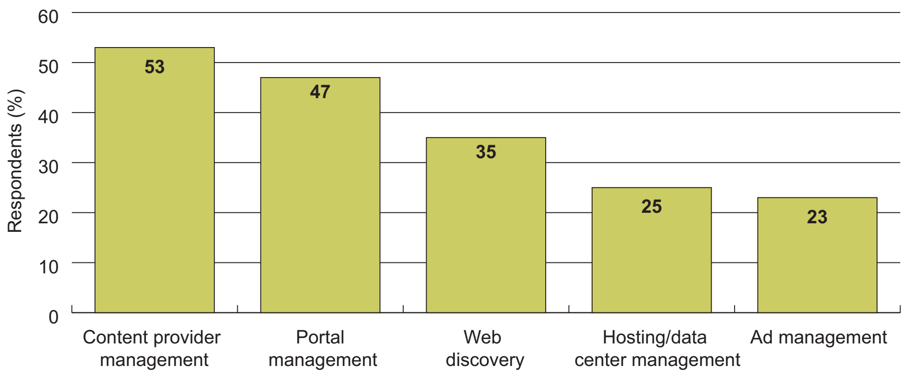
Fig. 9: Asia Pacific, plans for managed services



Source: Mobile Managed Services Survey 2011

The main areas that are already supported by managed services on a global basis are content provider management, followed by portal management, with Web discovery as the third most important area (see fig. 10). This is line with the comments in the previous section which show that mobile operators are increasingly favouring third-party portal management rather than maintaining in-house capabilities for this type of function. Services which are particularly in demand are support for device and content management and help with billing and settlements.

Fig. 10: Global, main areas that are already supported by managed services

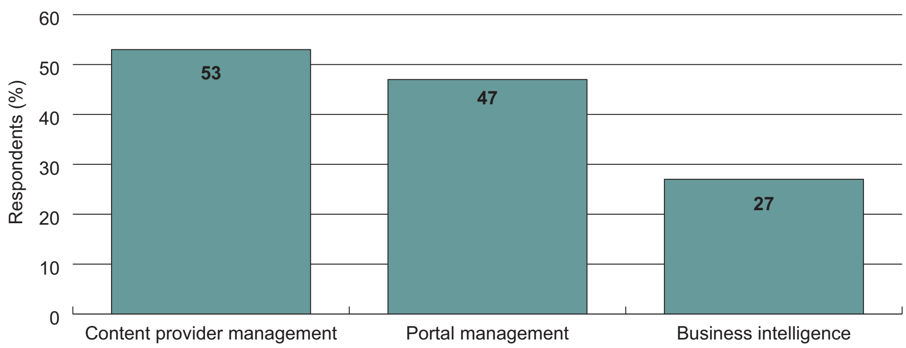


Source: Mobile Managed Services Survey 2011

In Asia Pacific, while content provider management and portal management were also seen as key areas for managed services support, business intelligence also emerged as a critical function (see fig. 11). This is line with qualitative insights described in Section 3, which indicate that the greater complexity and dynamism of the markets in Asia Pacific, and Southeast Asia in particular, are calling for additional expertise in the area of strategic market segmentation.

Well-targeted business intelligence is capable of identifying emerging 'micro-segments' within a broader consumer sector such as prepaid. Operators which can precisely align their service offering to these segments are able to deliver content which represents higher value both to the consumer and to the operator's business partners. This pattern is already seen in markets such as India and Malaysia, where consumption trends differ widely between urban and rural areas and also between regions.

Fig. 11: Asia Pacific, main areas that are already supported by managed services



Source: Mobile Managed Services Survey 2011

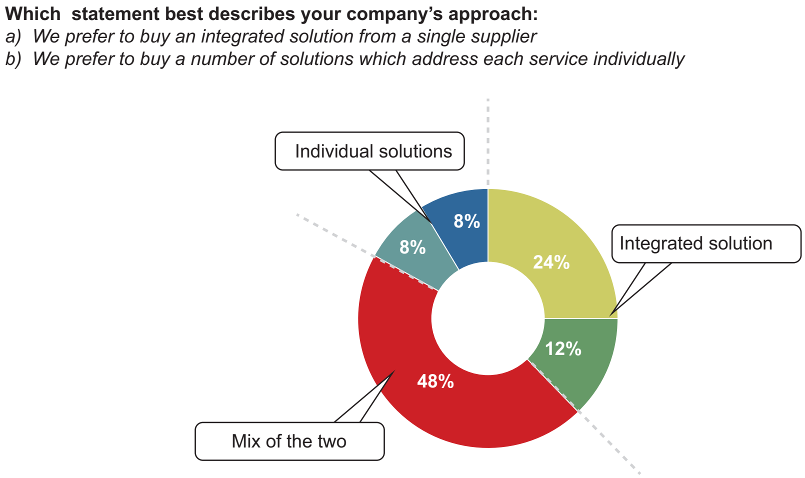
Operators' attitudes towards buying either integrated single-source solutions or individual point-source solutions were assessed by presenting them with the following two statements:

- We prefer to buy an integrated solution from a single supplier.
- We prefer to buy a number of solutions that address each service individually.

Respondents were then asked to score their company's approach from 1 to 5 depending on which option best applied to them.

At a global level, integrated solutions are fairly well established, with 24% of the respondents saying they use this approach exclusively and a further 12% saying this is their main approach to buying services (see fig. 12). Most companies however preferred a middle course with almost half saying they adopted a mixture of the two methods.

Fig. 12: Global, integrated vs. individual solutions

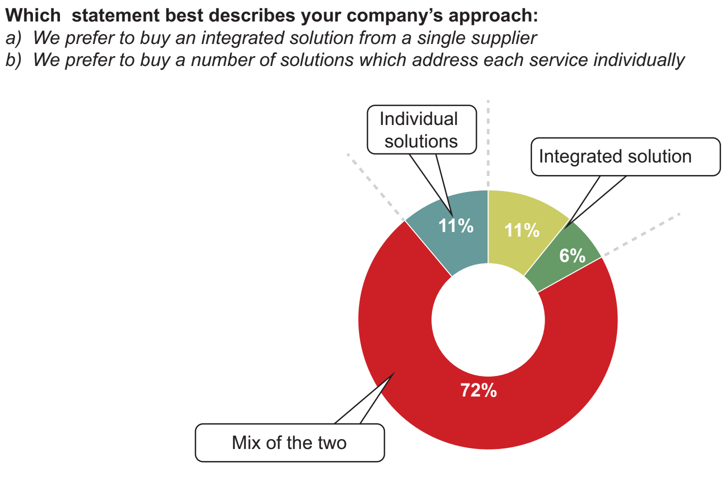


Note: Based on 5 point scale where: 1+2 = Integrated solution; 3 = Mix of the two; 4 + 5 = Individual solutions

Source: Mobile Managed Services Survey 2011

Respondents in Asia Pacific were even more inclined to opt for the middle approach, with a clear majority choosing this option (see fig. 13). This may well be due to the fact that integrated solution providers are not yet as well-established as they are in the mature markets, and may reflect an area of potential in this market.

Fig. 13: Asia Pacific, integrated vs. individual solutions



Note: Based on 5 point scale where: 1+2 = Integrated solution; 3 = Mix of the two; 4 + 5 = Individual solutions

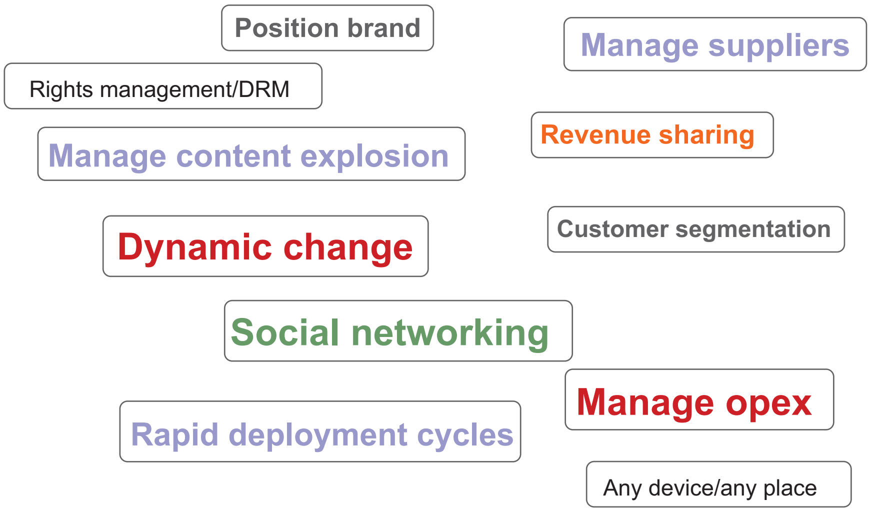
Source: Mobile Managed Services Survey 2011

Hot issues in mobile data services

When respondents were asked about the top three hot issues in mobile data services over the next two years, a wide range of topics was mentioned. The key concern for most mobile operators seems to be how to cope with dynamic change – understanding new services such as social networking, launching new services within increasingly rapid deployment cycles, and managing opex.

Positioning the operator's brand in a complex and changing ecosystem is also a "top of the mind" issue, and aligned to this is the need for tighter customer segmentation in order to address the vast range of new services on offer, i.e., managing the content explosion. Managing suppliers is one aspect of this concern, but equally important is ensuring any-device/any-place access to the operator's services.

Fig. 14: Hot issues in mobile services



Source: Mobile Managed Services Survey 2011

The word cloud (see fig. 14) illustrates hot issues that were mentioned with the phrases displayed in a size relating to the number of mentions by the respondents.

These results appear to indicate that the complexity of the industry seems to trickle over into the way that operators choose to manage their providers. The struggle of trying to understand how an operator plays a central role in the emerging ecosystem revolves around a similar confusion and fragmentation in the management of service providers, as operators seek to source and acquire solutions for a specific type of content or service.

Key future business areas

In terms of the perceived key business areas for mobile operators over the next two years, there were a number of similarities between the global set of responses and those from the Asia Pacific region.

In both cases, developing new media and entertainment services were regarded as a top priority, with maintaining the operator's brand relevance in data services also seen as a top-three concern.

However, in Asia Pacific, developing new commerce and advertising services was seen as the number-two priority, whereas globally it was developing new business models more generally. This is in line with evidence noted elsewhere in this paper that mobile commerce is a major market driver alongside the mobile Internet, especially in those countries where the fixed-line Internet is a relatively weaker presence. Operators in emerging markets view mobile commerce as an area of opportunity both for consumers and for businesses, with many examples of simple services such as pricing information which have helped to transform the working lives of farmers and small traders by saving time and allowing them to market their goods more efficiently. Equally, operators are keen to exploit the advertising power of new services such as social networking, but without eroding their competitive advantage of their in-house customer data. In these circumstances, the value of external consulting expertise is particularly pertinent.

3 Focus on Asia Pacific

The majority of the next wave of mobile subscribers will come from emerging markets, such as Southeast Asia and the Indian subcontinent, and a large proportion of these new users will be from rural areas and smaller cities.

While these "bottom of the pyramid" subscribers may account for a lower ARPU on average than in the more mature markets, they are willing to spend on mobile services which are clearly targeted to their particular requirements. For many users in this segment, the mobile phone will be their only communication and entertainment device. In addition, mobile-oriented devices like smartphones and tablets offer the opportunity for users in these markets to leapfrog fixed-line Internet access and move straight to mobile Internet access. These factors represent a major opportunity to offer compelling and differentiated mobile services to this subscriber group.

One of the key findings from Informa's ongoing research on the high-growth emerging markets is that mobile operators have, in many respects, been more innovative and proactive in terms of deploying new services than their counterparts in the more developed markets (see fig. 15). Many of these new service initiatives have been successful, especially offerings such as mobile banking, P2P fund transfers, and market-pricing alert services. As described later in this section, these services are making the day-to-day lives of the mass-market consumer easier, and are also contributing to social and economic development on a wider level.

The M Pesa service in Kenya for example provides consumers with access to banking services without the need for a bank account. By allowing them to exchange cash for 'e-money', M Pesa enables a subscriber to send money to another person in a different part of the country without having to use a traditional but insecure method, such as giving cash to a third party. Other services include Grameenphone's CellBazaar in Bangladesh which offers a virtual marketplace for mobile users and enables them to trade a variety of goods. These initiatives allow operators to address a much wider cross-section of the population, reaching consumers with little or no access to traditional infrastructure or systems, and with limited ability to acquire capital resources.

Fig. 15: Examples of innovative mobile VAS in growth markets

Country	Service provider	Service	Description
China	China Mobile	Rural Information Service	Provides weather forecasts and crop pricing information to farmers. Over 40 million mobile subscribers are using this service.
Kenya	Safaricom	M-Pesa	The service allows users to complete basic banking transactions on their mobile phones without the need for a bank account. Users register with an agent for an account that enables them to exchange cash for "e-money." The technology for the service is provided by Microsoft.
Turkey	Turkcell, Avea	Mobile Signature Service	Provides users with a "qualifed electronic certificate" which they can use as their secure identification while carrying out transactions in an electronic environment. The mobile signature allows users to carry financial transactions and use online banking services from banks on their mobile phones.
China	China Mobile	Fetion	Mobile IM service with over 100 million registered users that can access the service via SMS, IVR and GPRS.
South Africa	MTN	Please Call Me	MTN currently offers 1 million "Please Call Me" messages a day to Project M (Masiluleke). The receiver of the SMS gets a short message with the phone number of the sender, indicating that the sender of the SMS wants them to call back. The remaining characters in the SMS is used to promote HIV/AIDS awareness.

Fig. 15: Examples of innovative mobile VAS in growth markets (cont.)

Country	Service provider	Service	Description
Nigeria	Globacom	Glo Caller Tune	Ringback tone service which allows users to download up to five different tunes and assign them to their different contacts/callers, or setup different tunes for different times of the day. Corporate users can have personalized caller tunes so that their callers can listen to different messages, or corporate jingles.
Bangladesh	GrameenPhone	CellBazaar	Offers a virtual mobile marketplace for users and enables them to trade a variety of goods.
South Africa	Mxit	Mxit	Most widely-used mobile social networking service in South Africa. The service platform has been extended into a range of new areas beyond simple mobile chat and IM features and a number of organizations are using the platform to deliver different services, including maths education, through a program backed by Nokia South Africa.

Source: Informa Telecoms & Media

Country Service provider Service Description

Two markets in the Asia Pacific region present the biggest opportunity for mobile operators and the wider service ecosystem – India and Indonesia.

India

Worth approximately US$4.6 billion in 2010, India's mobile data market, according to Informa's forecasts is set to grow in value to US$13.3 billion in 2014.

While mobile messaging services accounted for almost half of total data revenues in 2010, and 95% of these revenues came from SMS, this is expected to change during the forecast period. By 2014, messaging will account for less than a third of data revenues and the proportion of SMS revenues will be approximately 85%.

Income from mobile Internet services in India will be very strong. Set to be worth over US$5 billion by 2014, mobile Internet revenues will, according to Informa's forecasts, become the largest revenue-generating type of mobile content in India. Growth in revenues from mobile banking and payment services will also be considerable in India, with Informa projecting revenues to reach approximately US$830 million, representing 6% of overall non-voice revenues, by 2014.

Indonesia

The fourth most populous nation in the world – Indonesia – generated mobile data revenues of approximately US$3.6 billion in 2010. Informa projects that this figure will climb to US$6.2 billion in 2014.

Like India, SMS is the main driver for mobile data revenues in Indonesia, accounting for two-thirds of the total amount. However, music services are very popular in Indonesia – ringtones, ringback tones, music track downloads – and Informa projects that these services will yield US$418 million by 2014. But again, like India, mobile Internet services are set to be the big growth engine behind mobile data services, with Informa projecting these revenues to reach US$1.9 billion by 2014.

Other Asia Pacific markets

However, there is more to Asia Pacific than India and Indonesia. Indeed, with its mix of cultures and countries, the region is one of the most dynamic globally. It contains a great range and variety of markets – rural and urban, mass market and niche, emerging and developed, Asian and Western. There is a broad spectrum of countries in which mobile operators have recently been challenged to think beyond dongles and ringtones to expand their data revenues.

While many operators are looking to managed mobile data services to enable new services, it is clear that their requirements go well beyond enablement.

With a deluge of new 3G devices set to hit the market, both opportunity and service delivery complexity will increase drastically, while competition for high-value customers will intensify. In this type of environment, operators are looking to prioritize the following:

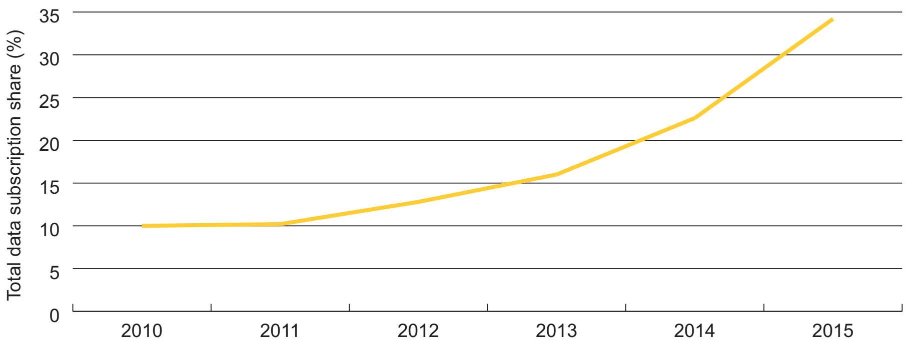
- Speed-to-market of key services (SMS, mobile Internet, IM).
- Flexibility in regional service portfolio mix.
- Assurance of smooth execution for billing and settlements (ecosystem growth).
- Minimizing development costs of new products (ROI and margins).
- Managing the increasing complexity required by tighter device and service integration.

Managed data services address these priorities and outsourcing in this area is seen as the natural extension to traditional managed network services already popular with many Indian operators.

In Bangladesh, a high-growth market where consumers will increasingly have access to mobile data (see fig. 16), the leading operator provisioning mobile Internet access told Informa that it is looking to take advantage of its brand and stimulate growth by diversifying its data offering – which until now has been primarily about messaging and access. The operator plans the launch of a mobile marketplace, provisioning access to online shopping malls, social networking applications, mobile TV and vehicle tracking

For this operator, the main attraction of going with a managed service is risk mitigation, as it keeps capital investments and R&D spend to an absolute minimum. However, beyond that are the more practical market issues a managed solution solves; in Bangladesh, there are few IT professionals with the expertise or experience required to manage sophisticated mobile data solutions, let alone develop them from scratch.

Fig. 16: Bangladesh, mobile data subscribers as proportion of the total subscription base, 2010-2015



Subscriptions (mil.)	2010	2011	2012	2013	2014	2015
WCDMA + HSPA	0	0	3	6	13	25
Total subs	73	88	94	98	100	102
WCDMA + HSPA as % of total	0.0	0.2	2.8	6.0	12.6	24.2
GPRS estimate (%)	10.0	10.0	10.0	10.0	10.0	10.0
Total data subscription share (%)	10.0	10.2	12.8	16.0	22.6	34.2

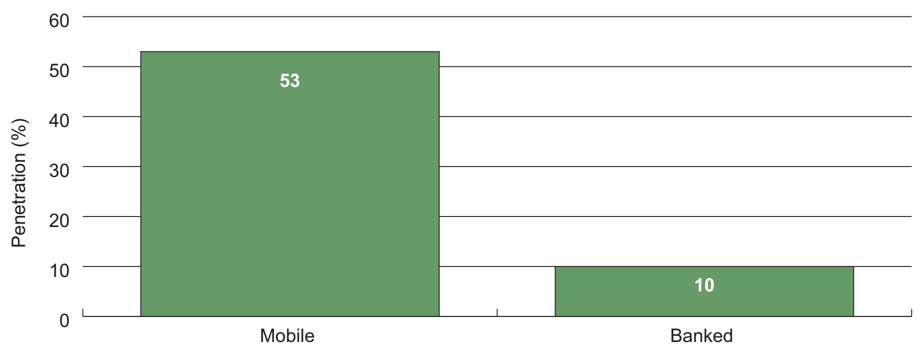
Note: Figures refer to year-end

Source: Informa Telecoms & Media

In Vietnam, S-Fone, the country's largest CDMA operator, told Informa that it considers managed data services to be imperative, as they will improve its handset offering to include smartphones with more sophisticated CDMA2000 1xEV-DO features such as mobile Internet, Web search and mobile commerce during 2011. Risk reduction and product breadth are also important, as are consultative services with advice on global best practices, case studies and marketing insights being seen as invaluable in supplementing local expertise and customer knowledge.

In Laos, the smaller players are using managed data services to provide them with more options when thinking strategically about their customers. In a country where the ratio of mobile subscriptions to bank accounts is 5:1 (see fig. 17), mobile operators have the opportunity to become a key part of people's daily lives through the introduction of mobile payment and remittance services. However, to even consider this strategy, partnering with a managed service provider is considered a must, allowing the operators to focus on their core business areas while making mobile commerce execution faster, safer and less risky.

Fig. 17: Laos, mobile vs. banked penetration, 2010



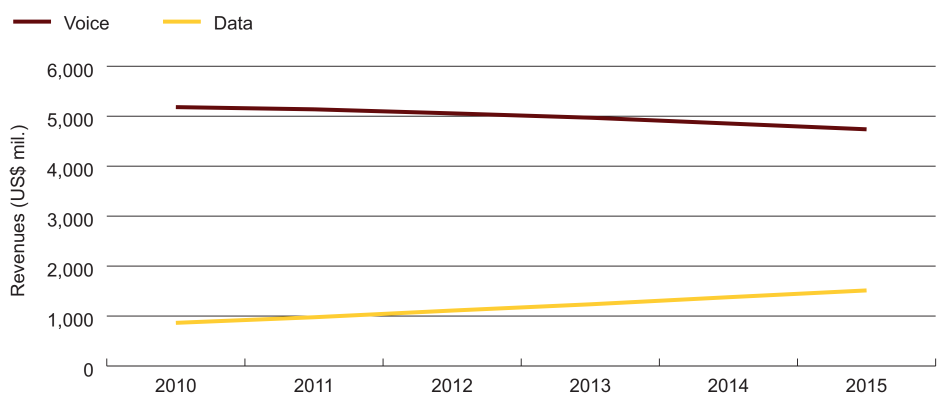
Source: Informa Telecoms & Media

Thailand provides a set of interesting challenges for mobile operators, as continued delays in the issuing of 3G licenses have resulted in "unofficial" launches in major cities and Informa expects high-capacity mobile data usage to increase rapidly.

With a comparatively high Internet penetration in the country's larger cities and the presence of robust online content, operators are playing catch-up to provision, in particular, social networking services like Facebook to urban users. Time to market is therefore critical in aligning the operators with these brands, and managed data services can allow them to do so quickly with minimal internal resources allocated.

Informa's forecasts show that annual data revenues in Thailand will increase by 75% between 2010 and 2015 (see fig. 18). As, at the same time, voice revenues are falling, there is a clear potential for correctly-positioned managed services in this sector of the Thai market.

Fig. 18: Thailand, voice vs. data revenues 2010-2015



Revenues (US$ mil.)	2010	2011	2012	2013	2014	2015
Voice	5,182	5,138	5,057	4,970	4,854	4,738
Data	864	976	1,110	1,235	1,377	1,513

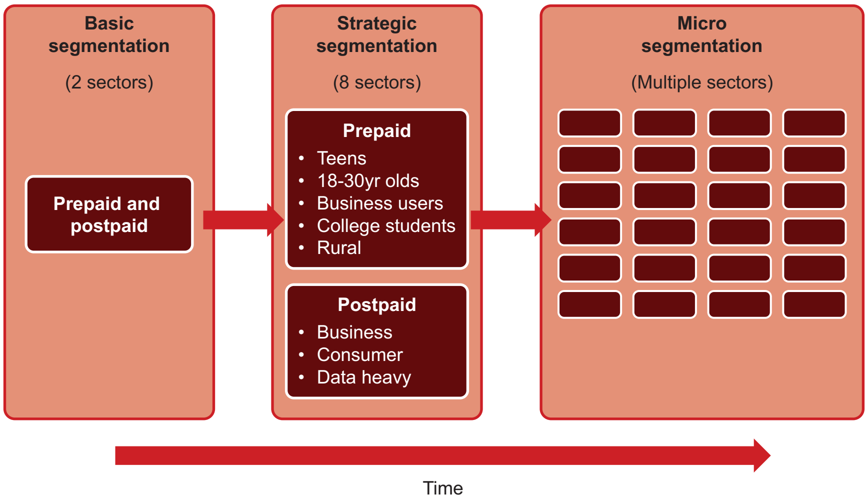
Source: Informa Telecoms & Media

Malaysia is home to Axiata, which has operating entities in many countries throughout the region, including Celcom at home and XL in Indonesia.

With an intense focus on securing market share over the past two years, Celcom and XL have both managed double-digit share gains since the end of 2009. They are now focused on improving their already-strong margins, and engaging with a service partner is seen as the best way of maintaining growth in their mobile data profits. This strategy ensures that costs are kept to a minimum, while the modular service portfolio allows continued growth in revenue-generating products.

Coupled with analytics and consultancy services, operators can significantly improve their customer segmentation capabilities for data services. Business intelligence systems, combined with the right platform and network component integration, can target emerging multiple micro-segments within each prepaid or postpaid sector as part of a longer term market development strategy (see fig. 19). Operators that align these components to end-user purchase habits and core network assets like location are able to deliver a "micro-segment of one", which enables the targeting and messaging of relevant marketing offers and content to a single subscriber's usage and needs. With some of the most savvy consumers in the region, the ability of Malaysian operators to quickly integrate and offer new services, such as mobile advertising, across disparate products will be a key advantage to maintaining leadership in user experience

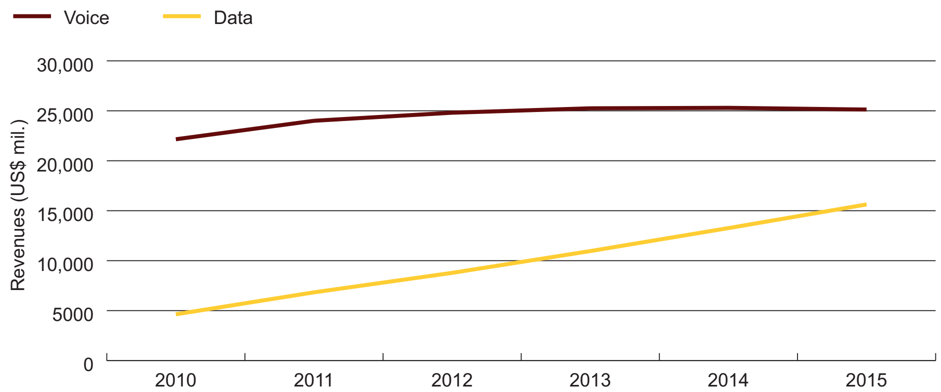
Fig. 19: Malaysia: Market segmentation strategy



Source: Informa Telecoms & Media

Back to the region's (and indeed the world's) fastest-growing consumer market, India, where the mobile subscription base grew by a staggering 45% in 2010. Long delays to 3G licensing have had an impact on the growth of the mobile data market but WCDMA usage is expected to rise rapidly towards the middle of this decade, along with strong growth in annual mobile data revenues (see fig. 20)

Fig. 20: India, voice vs. data revenues 2010-2015



Revenues (US$ mil.)	2010	2011	2012	2013	2014	2015
Voice	22,152	24,002	24,807	25,251	25,298	25,126
Data	4,634	6,831	8,780	10,961	13,259	15,627

Source: Informa Telecoms & Media

With Phase I 3G rollouts nearing completion and Phase II set to begin shortly, mobile operators like Tata DoCoMo are looking to offer more sophisticated data services to take advantage of the faster networks and boost overall revenues Tata DoCoMo, which has enjoyed the strongest brand growth amongst all Indian operators over the past two years, sees managed data services as crucial to allowing it to maintain relevance and evolve data strategies to encompass richer offerings and include broader swathes of the Internet ecosystem.

Mobile operators across Asia Pacific are considering managed data services for a multitude of reasons. Top-line growth and ease of implementation are certainly important factors, but are not the only focus, as demands from competition, investors and subscribers are also pushing operators to innovate. Data services are central to this by helping them to manage churn closely, expand margins and improve the user experience.