

# Woodlawn Associates

## Management Consulting

### Multiple-Device Data Plans

Josh Lutton and Iain Drummond  
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The growth in data traffic on wireless networks over the past several years has been truly astonishing. The trend is likely to continue, too, as faster data speeds, reduced latency, more capable devices, and lower cost encourage customers to connect more types of devices to the network and use them more heavily. It is not surprising, therefore, that many operators believe data services are the key to maintaining or growing average revenue per user.

However, while individuals, families, and businesses are likely to use more data, they are unlikely to tolerate separate, full-priced data plans for each device. Very soon, one individual could conceivably want wireless internet access for a laptop, home computer, smartphone, tablet computer, camera, video camera, gaming device, e-reader, automobile, and numerous “smart” appliances. Therefore, operators need to develop offers that give customers a simple and affordable way to connect multiple devices while growing revenues at least as fast as costs.

In addition to driving revenue, multiple-device data plans have the potential to significantly reduce churn. Customers with a large investment in devices are unlikely to switch carriers if doing so requires upgrading their entire device collection. One little-recognized implication of this is that operators able to get compatible radios embedded in more consumer products will have considerable advantage in attracting customers and minimizing churn.

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### Many Operators Considering

Many U.S. and Canadian operators are already considering such plans. Canadian operator Rogers Communications is in the lead—it already allows its customers to use data plans across multiple devices for \$15 per month per additional device.

Major U.S. operators are also clearly considering shared data plans:

“The trend is toward one plan for all of your devices, like tablets, phones, PCS, etc. That’s the next step to simplicity. Three years ago, it was about one device.”

Dan Hesse, CEO, Sprint (at D: Dive into Mobile)

“We’ve shared voice minutes and text messages for the family. I think it’s fully in the realm of possibility in the not-too-distant future to be able to start thinking through the options [of a ‘family plan’ for data]. Describe it as account-level pricing.”

Daniel Mead, CEO, Verizon Wireless (in the Wall Street Journal)

“Family plans were born because there were three or four devices in the house. We’re obviously looking like that. Maybe a bucket with four or five devices eating from it. We’re looking to see where this will go.”

Glen Lurie, Head of Emerging Devices, AT&T Wireless (at D: Dive into Mobile)

## Significant Uncertainties

As operators think about how and when to roll out multiple-device data plans, they face some significant uncertainties. These are factors whose outcomes are difficult to predict today, yet that will have a major influence on the end state of the market.

Among these uncertainties are:

- To what extent will device manufacturers embed wireless data radio in their products, and under what circumstances?
- Are device manufacturers likely to include multi-protocol, multi-band radios in their products, enabling them to be used with a variety of operators’ networks? If not, how many separate configurations will they make available to support different operators’ networks? Which networks will they support?
- Will device manufacturers negotiate “lifetime” data plans (à la Kindle), or will consumers need to pay operators separately for data services?
- How much data will each connected device use? How does this vary by device type?
- At what prices will customers forgo service and/or use less capable alternatives (such as Wi-Fi where it is available)? How does this vary by device type?
- For which consumers might wireless be an effective substitute for wired internet service, if any?

## Key Considerations

Once an operator has a point of view about the above uncertainties, it still has several key items to consider in designing multi-device data plans:

### Offer definition

- Unlimited vs. metered vs. per device (or combinations)
- Tethering / Wi-Fi
- Broadband or DSL replacement vs. mobile only
- Branding

### Device acquisition

- Devices sold by operator vs. those available from other sources with compatible radios
- Number of compatible devices
- Encouraging availability of compatible radios

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<b>Pricing</b>	<ul style="list-style-type: none"><li>• Revenue vs. expected cost</li><li>• Bundling (with voice, text, landline, TV, etc.)</li></ul>
<b>Financial effects</b>	<ul style="list-style-type: none"><li>• Churn reduction</li><li>• ARPU, CPGA</li><li>• Revenue, operating cost, and capex</li></ul>
<b>Usage / uptake expectations</b>	<ul style="list-style-type: none"><li>• Ramifications of incorrect forecasts</li><li>• How fast network can be upgraded</li></ul>
<b>Fraud prevention</b>	<ul style="list-style-type: none"><li>• Data caps or metering</li><li>• Device limit</li></ul>
<b>Rollout timing</b>	<ul style="list-style-type: none"><li>• First mover lock-in advantages</li><li>• Competitor actions</li><li>• Device availability</li></ul>
<b>Operational readiness &amp; project management</b>	<ul style="list-style-type: none"><li>• Sales support, retail operations</li><li>• Provisioning</li><li>• Network operations</li><li>• Billing</li><li>• Technical support</li><li>• User controls (setting up new devices, notification of usage vs. plan, notification of overage charges)</li></ul>

## How Woodlawn Associates Can Help

Woodlawn Associates can accelerate the roll out of multiple-device wireless data plans. As consultants, our expertise is in quickly gathering information for fact-based analysis and in synthesizing it into a clear set of recommendations. Since we have also held operating roles, however, we know how to turn plans into reality.

We can also help with scenario planning. We can work with your teams to understand how various uncertainties around wireless data could get resolved and what the implications are for the industry and your company. Having a clear view of possible outcomes can help executives respond more quickly to events.

## Representative Telecom Experience

- Showed wireless operators how to use analytics to reduce churn and improve marketing efficiency
- Helped Unitymedia, the second largest cable operator in Europe, determine the appropriate response to Internet TV and how to deploy applications on TVs

- Developed business plan for voice-over-IP for Level 3 in Europe
- Headed \$500 million, 700-person mobile phone retail sales channel
- Led project to identify, prioritize, and approve \$40 million in new smartphone software investments for Motorola
- Coordinated due diligence and negotiations for the acquisition of cable television assets in Germany
- Advised wireless technology company about which of several growth opportunities to pursue and recommended a go-to-market approach
- Led a networking equipment business through a full strategic planning process, analyzing technology trends, customer needs, market evolution, and competitive response. Achieved consensus on the strategic direction and built a financial plan to facilitate necessary tactical changes
- Analyzed pricing policy and market dynamics in the PRC for mobile phone manufacturer. Identified opportunities to improve gross margins by 23% and extend product life through better price management