

# WiMAX Success Story: How Packet One (P1) Did It

A Malaysian Field of Dreams  
P1 Built It—And They Did Come



## TABLE OF CONTENTS

|                              |    |
|------------------------------|----|
| The P1 Business Challenge    | 2  |
| Innovative Tools and Tactics | 3  |
| Driving Sales with WiMAX     | 4  |
| Usage Models                 | 6  |
| P1's Public Partnership      |    |
| Program Projects             | 10 |
| Summary of Key Learnings     | 11 |
| Acronyms                     | 12 |

## Executive Summary

WiMAX is the first 4G technology to meet the pent-up demand for the mobile Internet, offering significant speed, loads of capacity, and value for money. Currently, there are over 480 Fixed and Mobile WiMAX trials and commercial deployments in over 140 countries, and Packet One Networks (Malaysia) Sdn Bhd (P1) represents one of the shining examples.

P1 is Malaysia's first and leading WiMAX telecommunications company with the country's widest WiMAX network. Launched on August 19, 2008, P1 WiMAX™ represents the first large-scale commercial deployment of Mobile WiMAX in Southeast Asia, as well as the first large-scale deployment of an 802.16e 2.3GHz WiMAX network outside Korea. P1's goal is to bridge the digital divide by making access to the Internet universal, ubiquitous, and affordable for every Malaysian.

In addition to Internet connectivity, P1 expects to continue launching new and innovative services throughout 2009 and beyond. In its consumer product lineup, P1 has a fixed desktop modem solution, as well as an Internet on-the-go offering called WIGGY\*—Malaysia's most advanced USB modem incorporating Multiple-Input Multiple-Output (MIMO) technology. P1's latest all-in-one WiMAX modem, the DV230, with

integrated Wi-Fi and voice functionality, adds to this ease-of-use proposition by omitting the need to configure a separate Wi-Fi router to share WiMAX broadband connectivity. In addition, a subsidiary under P1 has created a social networking tool called Ruumz\*, the first social networking portal in Malaysia.

P1 also formed a partnership with Sunway Group and completed deployment of the first phase of the Wireless@Sunway project, providing wireless broadband Internet access to more than 80 percent of home and business users and over 2 million visitors to the group's flagship township, making Bandar Sunway the first integrated Wi-Fi/WiMAX wireless township in Malaysia. Moreover, P1 was chosen by the local government, the Kuala Lumpur City Hall (DBKL), and regulator, the Malaysian Communications and Multimedia Commission (MCMC), to set up the Wi-Fi/WiMAX (Wi-Fi mesh) Kuala Lumpur Wireless Metropolitan Project (Wireless@KL), deploying over 1,500 hotspots and currently serving more than 130,000 users with free wireless broadband Internet access in Kuala Lumpur.

Despite an historically low-level of broadband penetration (just 22.6 percent of households, according to government figures), P1 states that it aims to hit about 250,000 subscribers by the end of 2009. That's about 500 new subscribers added every day and the goal is to hit 1,000 per day. Malaysia wants to have 50% broadband penetration by 2010—and P1 hopes to play a major part in realizing that dream.

***This white paper discusses P1's Best Known Methods (BKMs) and shares key learnings resulting from its WiMAX deployment experience. P1 has indeed built a Malaysian field of dreams—and others can follow.***

# The P1 Business Challenge

To establish itself as a new broadband service provider in a market with a strong embedded incumbent, P1's first challenge was to differentiate itself. In the initial phase of its differentiation strategy, P1 has targeted the fixed broadband marketplace. Leveraging the competitive advantage of WiMAX quality and performance, as of Q1 2009, P1 is winning 30% of new fixed broadband subscribers, just months after launch.

Although the incumbent is responding by bundling voice services with its broadband offering, it is merely repackaging services, not offering discounts or anything fundamentally different. P1 customers, on the other hand, are enjoying real value for their money, paying a bit more but getting faster speeds and better customer service. Customers also get a convenient and fast plug-and-play experience without having to wait days or weeks to subscribe to a fixed telephone line. P1's biggest challenge now is how fast it can roll out services to cater to new subscribers.

## KEY COMPETITIVE STRATEGIES AGAINST INCUMBENTS

- Leverage the ability to respond more quickly to changing market conditions
- Use innovative and targeted advertising, especially with online media
- Create awareness and interest with road shows to support coverage launches

## P1 W1MAX™ vs. the Competition

To win fixed broadband market share, P1 emphasizes the differences between itself and the competition with crisp and attention-grabbing messaging:

- **Ease of Use:** P1 W1MAX™ requires no configuration, no software installation (for desktop modems), no additional lines—just plug-and-play operation.
- **Affordable Next-Generation Technology Now:** P1 offers WiMAX at DSL prices, with home packages starting at RM49/month (~US\$14) for up to 400 Kbps (downlink), 150 Kbps (uplink), and a 5 GB fair-use limit, ranging to RM199/month (~US\$57) for up to 2.4 Mbps (downlink), 500 kbps (uplink), and a 40 GB fair-use limit. Business packages with unlimited use range from RM159 (~US\$45) to RM339/month (~US\$96).
- **Wireless Flexibility:** All P1 W1MAX™ modems can be used anywhere within coverage areas, so customers are not tethered to their home for connectivity.
- **QoS:** Broadband users in Malaysia are demanding, and in terms of rich media use, Malaysia ranks among the highest in the Southeast Asian region. QoS, network coverage, and customer service are key to servicing and maintaining a loyal customer base.



# Innovative Tools and Tactics

To reach large numbers of customers quickly, P1 initially targeted metropolitan areas, such as Kuala Lumpur and the Klang Valley, with innovative tools and tactics. Emphasizing the broad benefits of WiMAX compared with the limited existing options, P1 was able to effectively build awareness—and signed up over 80,000 subscribers in its first 12 months.

## What Works for P1 W1MAX™

### On-the-Ground Guerilla Marketing

P1's promotional strategy starts with educating customers about fixed broadband coverage. Specifically targeting areas with low broadband penetration to ensure quick ROI, as the company lights up an area with WiMAX, P1 touts its high-performance, next-generation 4G wireless broadband with colorful, eye-catching door hangers. Billboards are an effective marketing tool as well. In Kuala Lumpur, for example, there are P1 billboards wherever the company has coverage. Street banners and shopping mall kiosks also showcase the message—and trucks with music literally drive the message home. P1 also uses online tools, such as viral marketing, Facebook\* pages, and Twitter\*—not to mention its own social network, Ruumz. Wherever there is WiMAX coverage, P1 makes sure that potential customers know about it and can register their interest through P1's Web site using a live P1 W1MAX™ connection. Consumers may also vote online on the P1 website if they want P1 W1MAX™ to be available in their area.

### One-Swipe Service and Free Netbooks

Malaysia has three PC fairs a year. During the April 2009 fair, customers who signed up for WIGGY at RM149 (US\$43) per month for two years, got a free Acer\* Aspire One\* netbook. P1 also has arrangements with credit card companies so that customers can just swipe their card and pay on a monthly basis automatically. In other words, customers can walk away with network service, a free netbook, and a lower-risk payment—all with one swipe of a card instead of three different transactions and lots of paperwork.

### Effective WiMAX Positioning

P1 positions WiMAX as a 4G technology that is superior to current HSPA or 3G technology, specifically pointing to its WIGGY portable WiMAX on the go as an example. Good, convenient broadband service at a competitive price makes the choice for consumers easy. In fact, Malaysia is known as a WiMAX country—thanks in large part to government education on the technology—to the point that other mobile broadband technologies are very seldom talked about in the media. P1 believes that this is an affirmation of its aggressive positioning of WiMAX as it builds out coverage—positioning that is so successful that consumers are demanding to know when the service will be available in their area.

### Value for Money Proposition

Because consumers are so money and value conscious, P1 has developed a “value for the money” proposition. With P1 W1MAX™, consumers can enjoy next-generation technology, along with better customer service. Due to P1 W1MAX™'s plug-and-play simplicity, consumers don't even have to wait for installation. Overall TCO is also lower because consumers do not have to pay for a fixed-line package—and young people are not interested in fixed lines and their associated costs anyway.

### Using Bloggers to Generate Buzz

P1 engages a lot of the top bloggers in Malaysia and now has a very focused and supportive blogging community. Feedback from these bloggers is that P1's CEO is the only CEO whom they can talk to personally and consult with in terms of feedback. The CEO even gives bloggers the privilege of product previews before launches so that they can spread the word.

WEDNESDAY, AUGUST 19, 2009

 **Happy Birthday Packet One**

P1 started offering their WiMAX services exactly **1 year ago** from today. According to their **latest tweet**, P1 now has over 80,000 subscribers.



**Happy Birthday**

You are a great telco, please keep up the great work!

**Congratulation P1 & HAPPY BIRTHDAY!!!**

Example Blog

# Driving Sales with WiMAX

Part of P1's strategy in rolling out new services is called DNA: Devices, Network, and Applications— with Intel largely putting the D in Devices. No matter how fast a network is, devices are obviously necessary to push customer usage and acquisition, and applications can drive customers to the network and the device.

## Embedded Devices Can Improve WiMAX Uptake and Upsell

While cellular voice penetration in Malaysia is above 95 percent, wireless broadband penetration is only at 8 percent— due in large part to lack of devices. With PC penetration in Malaysia also very low at around 26 to 27 percent, P1 recognized the need and opportunity for a strong device strategy.

P1 is working with Intel to bring embedded notebooks and netbooks to Malaysia as early as January 2010. In fact, Intel is forecasting 1.5 million of these Intel-powered devices for the country. Affordable embedded chipsets will help tremendously in terms of lowering subscriber acquisition costs and the ability to market a wider variety of devices. If only 10 to 20 percent of these devices actually gets activated on P1 WiMAX™, that will be a tremendous uplift. Moreover, the WiMAX ecosystem's ability to keep prices low for operators and consumers is absolutely critical.

As these devices enter the market, P1 expects its coverage to only improve. With MIDs targeted for the second half of 2010 and dual-mode devices (WiMAX handsets with voice capability) in 2011 and 2012, the timing should be right to push WiMAX even more aggressively. The "grand vision" for WiMAX in Malaysia is for subscribers to use the service in all their consumer electronics: notebooks, netbooks, MIDs, handsets, digital cameras, MP3s, camcorders, Wiis\* etc. Embedded devices will increase the uptake and upsell of WiMAX, and bundles will make the service even sexier.

In a survey conducted by P1, most P1 WiMAX™ subscribers are already satisfied with their user experience. Customers are happy with the ease-of-use offered by current modems, with true plug-and-play compatibility for typical users and greater flexibility for more advanced users (such as online gamers and heavy downloaders) to get the connection configuration freedom that they need. P1's latest all-in-one WiMAX modem, the DV230, with integrated Wi-Fi and voice functionality, adds to this ease-of-use proposition by omitting the need to configure a separate Wi-Fi router to share WiMAX broadband connectivity. Moreover, WIGGY, P1's on-the-go product and Malaysia's most advanced USB WiMAX modem, offers customers a simple, four-click installation procedure.

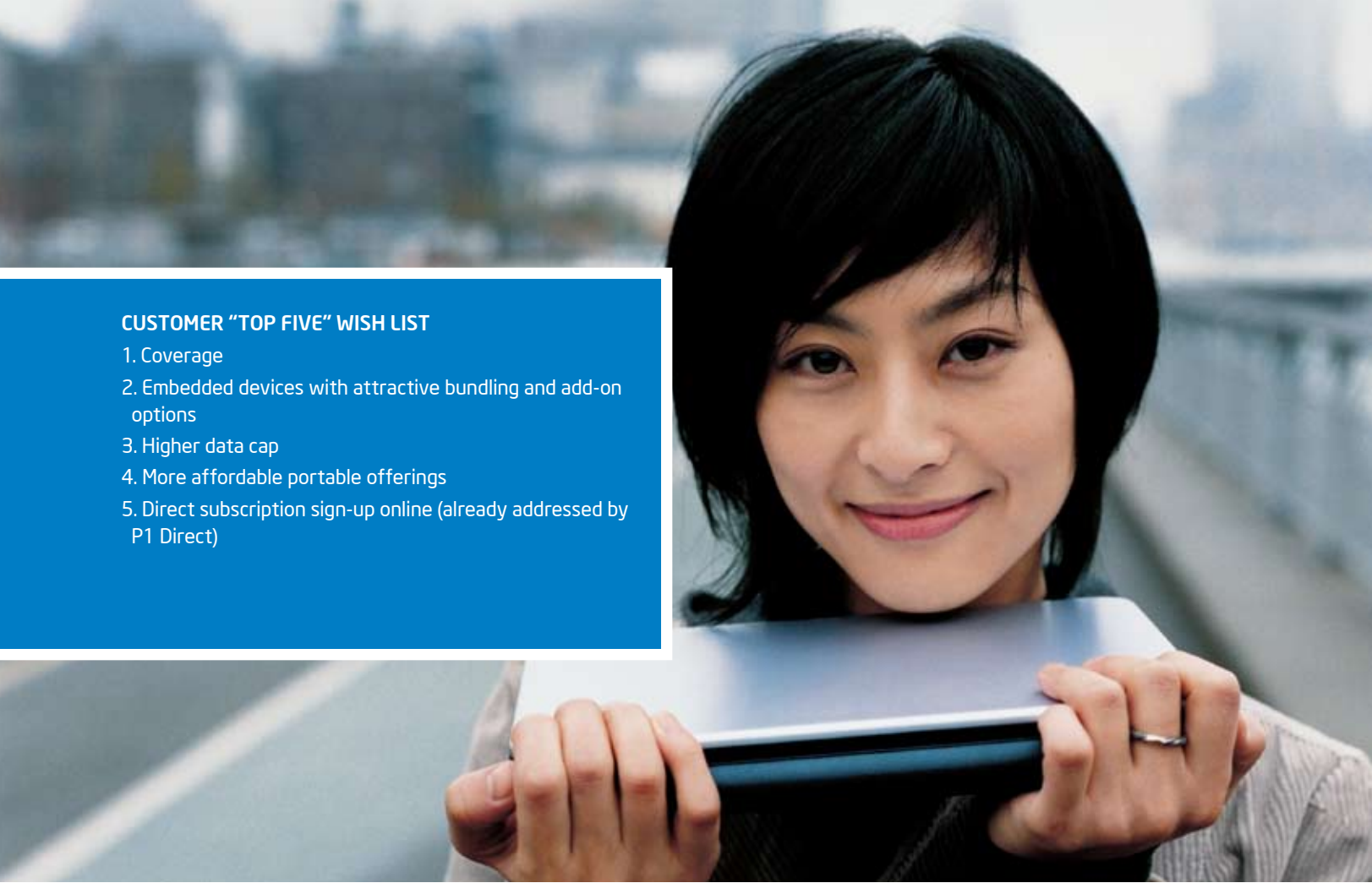
## P1 DIRECT

On 1 July 2009, P1 introduced P1 Direct; a service that makes signing up for P1 WiMAX™ even easier via [p1.com.my/](http://p1.com.my/) and the P1 Careline (1300-800-888). With the new sign-up option, interested users can save valuable time by just calling P1 Careline or filling out an online form available at the P1 Web site, all done at their own convenience. Once the applications are approved, the P1 WiMAX™ modem will be delivered to their premise within three working days at no extra cost or if customers prefer, they may collect the modem from the main office in Petaling Jaya.

## PC Bundles Can Capture Customers

Bundles have had a positive impact on the currently low PC ownership rates in Malaysia, based on the two PC bundling programs that P1 has executed to date. The first PC bundling program in December 2008 was a soft bundle on any type of PC powered by Intel Processor technology. The program gave the PC buyers the option to subscribe to P1 WiMAX™ services with subsidies. Although the interest was very high, due to the limited coverage of P1 services at that time, the take-up rate was moderate. To overcome this obstacle, P1 had those who were interested but resided outside P1 coverage to "pre-register" for WiMAX. More than 10,000 potential customers signed up! P1 made it a point to call the potential customers back once their area was covered to convert them into subscribers. The second PC bundling program hard-bundled a free Acer Aspire One netbook powered by Intel Atom\* processors with P1's newly introduced WIGGY services when customers signed a two-year contract.

Working with Intel and the rest of the WiMAX ecosystem, P1 will continue to develop bundling programs that can provide ease of ownership for both PCs and broadband.



### CUSTOMER “TOP FIVE” WISH LIST

1. Coverage
2. Embedded devices with attractive bundling and add-on options
3. Higher data cap
4. More affordable portable offerings
5. Direct subscription sign-up online (already addressed by P1 Direct)

### Applications and Services Can Increase WiMAX Demand

The Malaysian government has identified as a priority the need for locally-developed content—and applications are necessary to deliver this content and increase the demand for broadband services. The National Strategic Framework for Bridging the Digital Divide (BDD) includes a broad range of initiatives, including promotion of telehealth services for rural areas, compelling e-government services, and content and on-line applications in Bahasa Malaysia and other local languages. P1 has already started to support BDD with applications and will continue to do so in the future.

### Monetizing Malaysia’s First Social Networking Application

Running on the P1 network, one of the new applications is Ruumz, the first Malaysian social networking portal. Ruumz was just launched, but P1 expects that it will drive the need for speed to access rich media content. Malaysia has two million dial-up users today, and Ruumz can provide an attractive incentive to migrate to P1, as well as an upsell to its current subscriber base. About 15% of P1’s subscribers use Ruumz at the moment. Ruumz also offers the opportunity for advertising revenue, as well as selling content and services, such as photo printing, album printing, music downloads, and subscriptions paid with P1’s online Blings!® currency. P1’s long-term goal for Ruumz is monetization.

### New Voice over WiMAX Services

Currently, there is about US\$1.3 billion in the Malaysian fixed-voice market—which is basically monopolized. While broadband connectivity is P1’s number-one priority, voice can be a value add and increase ARPU as a complementary strategy. With Voice over WiMAX, P1 can ensure end-to-end QoS because it is in control of the call from the WiMAX network through to the PSTN. However, with standard Voice over IP (VoIP) fixed line providers, customers can actually be offloaded to the public Internet before hitting the PSTN, with no QoS guarantees.

### Device Advice

**Based on its experience, P1 offers this “device advice” to WiMAX operators:**

Listen to what consumers are currently looking for, yet at the same time constantly look for future opportunities for new devices. Often consumers don’t really know that they want something until they see it in the market. The drive for compelling devices comes from a combination of consumer insight and manufacturer foresight.

# Usage Models

## P1'S REPEATABLE PROCESSES FOR MARKETING SUCCESS

In the year since launch, P1 has learned from its WiMAX marketing experience and developed a repeatable process for success that can be summarized as the "Six Ms":

- **Market:** Do market research. There are two billion people within a three-to-four hour flight from Kuala Lumpur and broadband penetration among these potential customers is less than 3 percent. This adds up to a lot of pent-up demand that can be exploited.
- **Mission:** Articulate what the technology offers to different consumers and segments with targeted messaging.
- **Money:** Invest in the business.
- **Manpower:** Develop the right team to capitalize on opportunities.
- **Machine:** Deploy a reliable network, offer a variety of competitive devices, and depend on the ecosystem.
- **Methods:** Improve processes constantly to remain current and competitive.

WiMAX can provide a huge growth opportunity for companies that follow the Six Ms to capitalize on demand, as P1 has demonstrated.

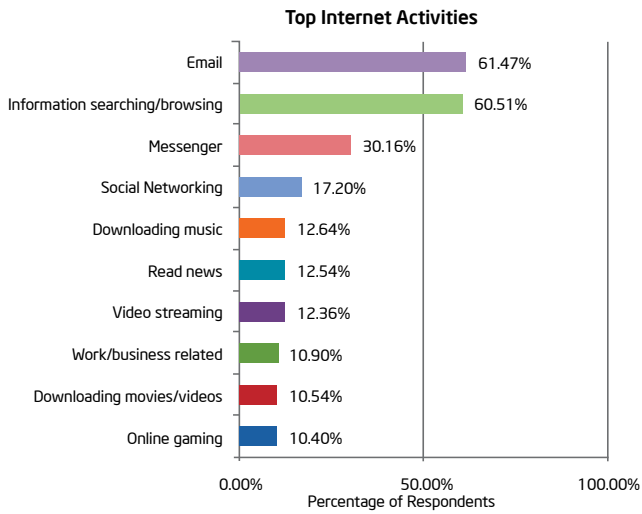
## WiMAX Goes Mainstream

When P1 first launched, the company thought that with a next-generation, cutting-edge technology such as WiMAX, first-time subscribers would be high-end users. As evidence of the pent-up demand for broadband, however, what P1 quickly realized was that WiMAX is actually pretty mainstream—after less than a year in the market. For example, in Malaysia there are a lot of roadside vendors that sell food, and quite a few P1 subscribers are actually these vendors using WiMAX for everything from gaming when there are no customers to chatting to watching videos. The vendors access WiMAX from an ordinary PC plugged into a fixed modem. They have a power converter for their truck battery and plug the CPE and their computer right in.

## Subscriber Mix

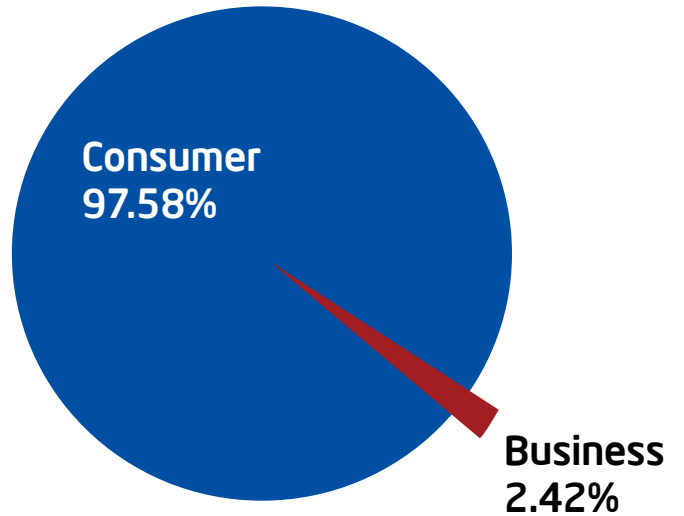
P1's customers are predominantly male, from 20-49 years old, and based on plan segregation, most P1 WiMAX™ subscribers are home users; however, this breakdown does not account for SOHO or SME/SMI users who are using home plans.



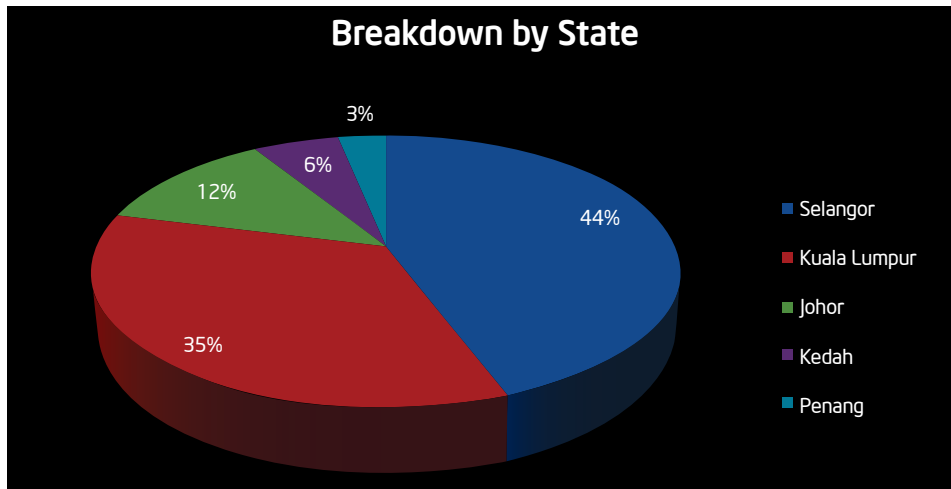


Base: 2808 subs (All Respondents who provided answers)

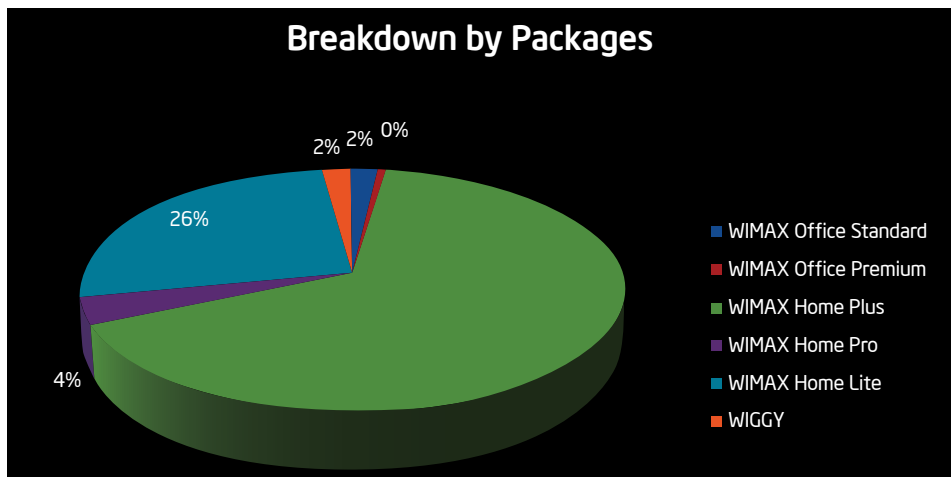
Top Internet Activities as of Q1 2009



Base: Total Active WiMAX Subs as of Q1 2009



Breakdown by State as of Q1 2009



Breakdown by Packages as of Q1 2009

GETTING A 69 FOR MY  
**WIGGY**  
 WAS UNBELIEVABLE.

**WIGGY™ 69**  
 800 Kbps OF WIGGYLICIOUS FUN

**RM 69**  
 MONTHLY

Up to 800 Kbps

Terms and conditions apply.

P1 wimax. THE FASTEST WIRELESS BROADBAND NETWORK.

intel  
 Centrino  
 inside

www.p1.com.my  
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POWERED BY  
**P1**  
 Personal Broadband

### High and Growing Average Data Usage

The rich media world has basically changed the usage behavior and patterns for many broadband users today. Thus far, P1 is looking at an average usage rate between 5-7 GB a month for its subscriber base—a number unsupportable by 3G. DSL averages 4-5 GB/month by contrast, but downloading movies at 600 MB each can quickly catapult usage over this limit. P1 believes its WiMAX user behavior would effectively crash any 3G network today: broadband customers need a technology that is truly IP based.

### Competitive “Stimulus” Packages

Recently, P1 began to target the startup market and first-time broadband users by offering a “stimulus package”: RM49 (~US\$15) per month for 5 GB. Unlike some other carriers, P1 believes in an “honesty policy” in which the subscriber knows upfront which speed and volume will cost what. Moreover, if P1 notes an increase in customer usage patterns, it will proactively reach out and offer an upgrade to the next package level instead of waiting for the user to get in touch after incurring overage fees.

Another competitive package includes WIGGY: mobile broadband that is accessible from notebooks and provides a convenient, on-the-go experience. WIGGY has a low monthly fee of RM69 (~US\$20) with a 5 GB monthly data cap, or RM149 (~US\$43) for up to 10 GB of downloads per month at speeds of up to 10 Mbps. P1 has also bundled WIGGY with an Acer Aspire One netbook as a customer incentive. With over 400 base stations now in place, P1 expects to hit more than 1,000 sites by the end of 2009. Once it has achieved widespread coverage across peninsular Malaysia, the company will extend its network across eastern Malaysia as well, for even broader P1 W1MAX™ coverage.

Compared to 3G data caps, P1's WiMAX data caps are superior. On average, 3G data caps range from 3 to 5 GB per month. While a rival broadband provider offers a 20 GB monthly data cap for its Extreme Plan at RM188/month (~US\$54), P1 offers 20 GB for RM99 (~US\$28) and 40 GB for only RM199 (~US\$57).

| Type   | Type Name | Speeds*        |              | Monthly Subscription Fee |                   | Fair Usage Threshold |
|--------|-----------|----------------|--------------|--------------------------|-------------------|----------------------|
|        |           | Download up to | Upload up to | 12-Month Contract        | 24-Month Contract |                      |
| Home   | LITE      | 400 Kbps       | 150 Kbps     | RM 49                    |                   | 5 GB                 |
|        | PLUS      | 1.2 Mbps       | 500 Kbps     | RM 99                    |                   | 20 GB                |
|        | PRO       | 2.4 Mbps       | 500 Kbps     | RM 199                   |                   | 40 GB                |
| Office | STANDARD  | 1.2 Mbps       | 500 Kbps     | RM 159                   |                   | Unlimited            |
|        | PREMIUM   | 2.4 Mbps       | 500 Kbps     | RM 339                   |                   | Unlimited            |

P1 Competitive "Stimulus" Packages

| Postpaid type<br>Business/Personal | Download Speed | Monthly Subscription Fee                 |                        | Fair Usage Threshold |
|------------------------------------|----------------|--|------------------------|----------------------|
|                                    |                | 12-Month Contract                        | 24-Month Contract      |                      |
| WIGGY*                             | Up to 10 Mbps  | RM 149                                   |                        | 10 GB                |
| WIGGY 69                           | Up to 800 Mbps | RM 69                                    |                        | 5 GB                 |
| <b>WIGGY Portable Modem Fee</b>    |                | RM 299 Upfront Payment (1 year warranty) | FREE (1 year warranty) |                      |

WIGGY Mobile Broadband Package

# P1's Public Partnership Program Projects

## Fast-Tracking Rollouts & Attracting Customers

P1 has established relationships with various local governments and communities—sometimes even down to the local council level—to fast-track rollouts.

For example, Wireless@Sunway is a collaboration effort between Sunway Group and P1 to enable Bandar Sunway to become the first Integrated Wireless Township in Malaysia, benefiting its 30,000 residents and 2 million visitors per year. Bandar Sunway residents had been primarily relying on DSL and cable modems for Internet connectivity (as most Malaysian townships currently do). Wireless@Sunway now provides wireless broadband coverage to the flourishing 800-acre Bandar Sunway which includes Sunway Pyramid Shopping Mall, Sunway Lagoon Theme Park, Monash University Sunway Campus, Sunway University College, Sunway Metro, and Sunway Mentari. The creation of Bandar Sunway's integrated wireless community was a significant milestone in bringing Internet power to the township's community and making it an even greater place to live.

Moreover, in Kuala Lumpur, P1 developed Wireless@KL—a joint project among P1, the Kuala Lumpur City Hall (DBKL), and the Malaysian Communications and Multimedia Commission (MCMC)—aimed at making Kuala Lumpur a world-class wireless city by 2010. Aside from offering free broadband connectivity for citizens and visitors for two years upon its launch, the project hopes to help boost tourism, economic capabilities, and social and education opportunities so that the city can leapfrog the development and growth of Information and Communications Technology (ICT) as a whole. P1 was appointed as DBKL and MCMC's infrastructure provider and has completed deploying 1,500 Wi-Fi hotspots using WiMAX technology for the core network in selected areas within the Golden Triangle, as well as in DBKL offices and community centers. P1 thus supports the government's National Broadband Plan to progress Malaysia and make it a knowledge-based economy.

Yet a third project, Wireless@Penang, is a state government initiative engaging the WiMAX-based P1 wireless Internet service. P1's part of the project is actually named WiMAX@Penang, a subset of the larger initiative, to deliver broadband Internet connectivity to areas with high numbers of tourists, as well as densely-populated locations, making Penang one of the first cities in the world offering full WiMAX connectivity.

Since these partnership projects, P1 has received a number of calls from other property developers requesting that P1 service be included in their projects and acknowledging the importance of a broadband connection in attracting consumers. Now, a project with good broadband infrastructure has become an essential pull factor for property development.

### P1 WiMAX™

- Super-Fast Connection
- No Phone Line Required
- Plug & Play
- Great Rates
- Extended Coverage



# Summary of Key Learnings

P1 is creating a need beyond broadband, and its success can be inspiring and beneficial for other WiMAX providers, as well as for members of the WiMAX ecosystem. Some of the most valuable P1 learnings include the following:

- Differentiation is essential: P1 primarily focuses on its ease of use, affordable 4G technology today, and QoS.
- Marketing, sales tactics and effective tools can help exploit growth opportunities.
- Devices can push customer usage and acquisition.
- Applications can drive the need for speed.
- Knowing the market, from high-end users to roadside vendors, can help drive volume.
- Partnering with government can fast-track deployments and help attract new customers.

## And they did come to P1...

- 80,000 customers in the first 12 months of rollout
- 500 new customers daily and increasing by the day
- 250,000 new customers projected by the end of 2009
- 30% of the new fixed broadband subscribers for Q1 2009, just months after launch (in a market with a strong, embedded incumbent provider)
- 1.5 million Intel-powered devices forecast for Malaysia by the end of 2009
- 35% population coverage by the end of 2009, 45% by the end of 2010, and 65% by the end of 2012

Intel and WiMAX:

Helping to Connect the "Next Billion" People to the Internet

For more information on WiMAX, visit

<http://www.intel.com/go/wimax>

# Acronyms

|       |   |      |  |
|-------|---|------|--|
| 3G    | Third Generation                          | LTE  | Long Term Evolution                                |
| 4G    | Fourth Generation                         | MB   | Megabyte   |
| ADSL  | Asymmetric Digital Subscriber Line        | Mbps | Megabits per second                                |
| ARPU  | Average Revenue Per User                  | MCMC | Malaysian Communications and Multimedia Commission |
| BDD   | Bridging the Digital Divide               | MID  | Mobile Internet Device                             |
| BKM   | Best Known Method                         | MIMO | Multiple-Input Multiple-Output                     |
| Capex | Capital Expenditures                      | Opex | Operational Expenses                               |
| CEO   | Chief Executive Officer                   | P1   | Packet One   |
| CPE   | Customer Premise Equipment                | PC   | Personal Computer                                  |
| DBKL  | Kuala Lumpur City Hall                    | PSTN | Public Switched Telephone Network                  |
| DMP   | Dealer Management Portal                  | Q1   | Quarter 1  |
| DSL   | Digital Subscriber Line                   | QoS  | Quality of Service                                 |
| GB    | Gigabyte                                  | RM   | Malaysian Ringgit                                  |
| GSM   | Global System for Mobile Communications   | ROI  | Return on Investment                               |
| HSPA  | High Speed Packet Access                  | SME  | Small and Medium Enterprises                       |
| HSDPA | High Speed Data Packet Access             | SMI  | Small and Medium Industries                        |
| ICT   | Information and Communications Technology | SOHO | Small Office/Home Office                           |
| IDD   | International Direct Dialing              | TCO  | Total Cost of Ownership                            |
| IOT   | InterOperability Testing                  | USB  | Universal Serial Bus                               |
| IP    | Internet Protocol                         | VoIP | Voice over IP                                      |
| Kbps  | Kilobits per second                       |      |  |

For more information on P1, visit <http://www.p1.com.my/>

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