Key Success Factors

Beyond IPTV

Paul Berriman
PCCW
12th October 2006
now TV – Introduction

- Performance to date
- The Platform and capabilities
- Content and Marketing
- Strategy and Integrated Services
- The Future: Interactivity and Home Networking
now TV – Introduction

- Performance to date
- The Platform and capabilities
- Content and Marketing
- Strategy and Integrated Services
- The Future: Interactivity and Home Networking
Hong Kong

a Leader in **Technology** and **Competition**

- 7M population, multi-lingual, mainly Chinese speaking
- 4 pay TV operators, 5 fixed operators, 5 mobile operators
- 2 free to air broadcasters with 4 channels (2 Eng + 2 Chi)
- 3.8 million telephone lines
- Mobile penetration over 100% with 3G launched in 2003
- World’s 2nd most developed broadband market with more than 1.6m accounts – about 60% household penetration
- Over 50% pay-TV penetration
Introduction

- 650k+ installed customer base in 3 years
  - 25% of Households
- Over 110 TV and audio channels
- Innovative pro-active marketing
- High quality platform
- Growing array of new Interactive services
- Significant benefits to broadband business
  - Broadband Churn halved to <1%
- CASBAA Chairman’s Award 2004
Sustained Momentum

Strong Demand for Pay Channel Customers & ARPU

Residential
- Installed
- Pay channel customers

Commercial
- Installed pay channel services

Pay channel customers as % of total installed

- Residential
- Commercial

(‘000)

Steadily rising ARPU as new content introduced

Mini Packs launched

Reached 654,000 at end of August

2003 2004 2005 2006

H2 H1 H2 H1 H2 H1

2003 2004 2005 2006

29 106 182 254 369 418

26 10 10 17 17 26

608 549 441 361 269 147

26 22 22

(+)38% y-o-y

Pay channel customers as % of total installed

100%

Residential

Commercial

Reached 654,000 at end of August
Strategy is Working

Growing penetration rate of **now** among consumer NETVIGATOR

- **H2'03**: 28%
- **H1'04**: 48%
- **H2'04**: 53%
- **H1'05**: 59%
- **H1'06**: 68%

Maintained low churn rate of consumer NETVIGATOR since launch

- **Before launch**: Dropped by half
- **Jun-05**:

**Broadband Lines Continue to Grow**

- Wholesale
- Business
- Consumer

<table>
<thead>
<tr>
<th>Period</th>
<th>Wholesale ('000)</th>
<th>Business ('000)</th>
<th>Consumer ('000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 2003</td>
<td>460</td>
<td>63</td>
<td>58</td>
</tr>
<tr>
<td>H2 2003</td>
<td>517</td>
<td>68</td>
<td>63</td>
</tr>
<tr>
<td>H1 2004</td>
<td>558</td>
<td>74</td>
<td>68</td>
</tr>
<tr>
<td>H2 2004</td>
<td>660</td>
<td>796</td>
<td>74</td>
</tr>
<tr>
<td>H1 2005</td>
<td>715</td>
<td>80</td>
<td>798</td>
</tr>
<tr>
<td>H2 2005</td>
<td>88</td>
<td>840</td>
<td></td>
</tr>
<tr>
<td>H1 2006</td>
<td></td>
<td></td>
<td>998</td>
</tr>
</tbody>
</table>

+16% y-o-y
Expanding the Pay TV Market by More than 60%

Bringing Quality Entertainment to More Consumers

HK Cable TV
13 Years
Customers 740K
@20% Piracy

now BroadbandTV
3 Years
Customers > 650K
Zero Piracy
**now TV – Introduction**

<table>
<thead>
<tr>
<th>Performance to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Platform and capabilities</td>
</tr>
<tr>
<td>Content and Marketing</td>
</tr>
<tr>
<td>Strategy and Integrated Services</td>
</tr>
<tr>
<td>The Future: Interactivity and Home Networking</td>
</tr>
</tbody>
</table>
now TV – Platform

Custom Network Based Conditional Access Unit in DSLAM

Low Cost Digital Decoder Based on DVD Chipset
End to End Dynamic Key encryption With/Without DVD
Auto Software Upgrades

Web Browser & Web Server Based EPG with On-line Subscription Management & Billing Enquiry

6 Mbit/s ADSL to over 93% of Households over existing copper
High quality picture with NICAM digital sound
Ability to offer multiple language channels
Viewer reporting – *time of day viewing*
Secure platform – network based CAU
  ✓ Digital encryption
  ✓ No geographic overspill
  ✓ Firewalled from internet
  ✓ Zero Piracy – Revenue Assurance
Installation easy and targets feasible
Growing interactivity and integrated services
>990,000 Broadband Customers to Upsell
Scaleable Network with Large Channel Capacity and “Add-Ons”
HDTV in commercial service by end 2006
now TV – Introduction

- Performance to date
- The Platform and capabilities
- Content and Marketing
- Strategy and Integrated Services
- The Future: Interactivity and Home Networking
## Flexible Pricing Options

<table>
<thead>
<tr>
<th>Service</th>
<th>Monthly (approx. US$)</th>
<th>12 Month Contract (approx. US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadband plus Internet access</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Broadband plus Internet plus pay TV</td>
<td>NA</td>
<td>20*</td>
</tr>
<tr>
<td>Broadband plus pay TV only</td>
<td>NA</td>
<td>10**</td>
</tr>
<tr>
<td>Pay TV content (per channel)</td>
<td>1.5 – 10 each</td>
<td>1 – 8 each</td>
</tr>
<tr>
<td>Minipack (choice of 8 pay channels with selected genre mix) - Larger packs available</td>
<td>NA</td>
<td>14</td>
</tr>
</tbody>
</table>

- **Installation and STB charges waived plus 17 free channels**
- **Customer must have minimum pay channels**

---

ITU-T IPTV Global Technical Workshop  
Seoul, Korea, 12-13 October 2006
Pay TV is about watching great TV content...

- All genres: Movies & drama, Travel & documentary, News & Information, Kids, Entertainment & Music, Sports, Foreign language, TVB Pay Vision, Adult
- Local / localisation
- Mass & niche
- Some great exclusiveness
The Movie House

- Long term exclusive arrangements – 2011 & 2014 with STAR and HBO
- Continue to strengthen local content including exclusive Mei Ah Movies & STAR Chinese Movies
- Recognition that content providers have fantastic brands
- Comprehensive channel proposition with high quality picture
- “Arm chair” proposition… buy on screen, check bills on screen
- Flexible “a-la-carte” channel / “a-la-carte” pack pricing structure
- Easy to use EPG, parental control, bill viewing, previews, barker…
- Mass / CRM based marketing - internal: shops, call-centre, EDMs, promos / barker channel and external: road shows, TV, radio, print, bill-boards, busses, door-to-door…

now TV Marketing ….. Maintaining Momentum!
Enrich content
- From 23 to 90+ channels in just over 24 months

Unique flexible pricing
- A la carte proposition – low entry point

Drive ARPU
- Mini-packs drive up ARPU

Mass market packages
- Chinese Content Platform

More exclusive deals
- Ticketing, NOW Select

Interactivity

Sept-03  Mar-04  Nov-04  Oct-05  Jan-06

Marketing .... Maintaining Momentum !
PCCW Business Transformation

Access

Conduit (POTS, Basic Broadband)
Own content (e.g. phone calls)
Separate networks and billing

Extending Value Chain

Content Application Transactions

Unlocking Capabilities
Secure third party content
Managed high bandwidth
Network and Billing
Trusted partner
Increased stickiness
Customers Access Integrated Services through Quadruple Play on an All IP Core Network

Access to valuable content and transaction revenues will be via multiple access technologies for a number of customer situations, devices and experiences, fixed, wireless and mobile.

- Wireline
- Telephone
- Mobile Cellular 2G/3G
- Wireless Broadband
- Home/Office
- Broadband Wireless
- TV
- Mobile
- PC

Content Applications & Transactional Services
IP Core Network
Access Layer
Quadruple Play

Complete Platform for Integrated Services

**Fixed-line**
- Continued line gain
- Market share returned to 68%

**Broadband**
- 998k lines, up 16% y-o-y
- Music library launched

**Pay TV**
- 654k subscribers, up 38% y-o-y
- HDTV in trial

**Mobile**
- Migrating PCCW 3G trial users
--Launched Mobile TV

Plus: TV Content + ISP Portal Content + Mobile Content
Content on Multiple Platforms:
UEFA Champions League Soccer

- Broadcasting 77 games live
- Simultaneous broadcast up to 4 games
- All 125 games on demand

now.com.hk

- Broadcasting all 125 games live
- jointly developed UEFA Champions League on-line Challenge Games

- Video clips of all 125 games
- Content includes preview, match highlights, etc. from now

On All Platforms Began September 13
• Exclusive content made available to customers

• Utilizing CMB technology, content can be broadcast more efficiently and to a large group of users

Initial programming will include local & international news, finance & sports:

• Other entertainment and infotainment available soon:
now TV – Introduction

- Performance to date
- The Platform and capabilities
- Content and Marketing
- Strategy and Integrated Services
- The Future: Interactivity and Home Networking
Evolution from Basic Broadband to HD IPTV

- **Basic Interactivity**
  - Electronic program guide
  - Online subscription
  - Online billing
  - Traffic & weather channels
  - 95 channels (ESPN, ATV, drama)
  - MINI-packages
  - 23 channels a la carte model MPEG2

- **Advanced Interactivity**
  - Media server
  - Network based personal video recorder
  - Replay/ timeshift
  - On-demand
  - Interactive advertising
  - Transactional services (e.g. Movie Trailers/Cinema Ticketing)
  - Casual games
  - "Side" Channels including ESPN Plus and HBO Uncut

- **HDTV**
  - MPEG4
  - Home networking
  - Multiple TVs

- **IP TV**
  - 2006 STB with H.264 for HD @ 8 Mbit/s plus MPEG2 for SD

- **Broadband Internet**
  - Today
  - 2006 STB with H.264 for HD @ 8 Mbit/s plus MPEG2 for SD

- **MOBILE TV**
  - 95 channels (ESPN, ATV, drama)
  - MINI-packages
  - 23 channels a la carte model MPEG2

- **Evolution from Basic Evolution from Basic Broadband to HD IPTV**
  - Broadband to HD IPTV
ITU-T IPTV Global Technical Workshop
Seoul, Korea, 12-13 October 2006

Broadband Access Development

- Early ramp up of fiber to the building/kerb
- 6Mbps
- 8Mbps
- 18 - 25Mbps

Percentage of Territorial Reach (%)

- 85%
- 93%

- via FTTB + ADSL2+ and VDSL

Dedicated Managed Bandwidth with Q.o.S.
NOT SHARED

- ADLS to 8Mbps To 50% from exchange

Today

Time
New Interactive Services
• Hong Kong’s first-ever instant box office on TV through partnership with UA Cinemas and Cityline

• Customers can preview theatrical trailers then pick the seats and purchase tickets from UA Cinemas by clicking on the buttons on their remote control

• More customers using Movie Ticketing than Cityline on Internet
New Interactive Services

- **nowshop** - the place to shop
  - Interactive shopping mall
  - DVDs/Books, Kids/Sports, Leisure, PCCW Products, Bargain Corner & more

- **now** - Stock Market Express – Real Time Quotes
  - Stock quotes, FX spot rates and gold prices
  - Transactional capabilities to come

- **nowGame** - A selection of casual games for the whole family
  - Currently 8 games on free trial for high ARPU customers
  - Major enhancement by November ’06

Mall out of the box!!
Experience Gained: Some Key Success Factors

• Start with large Broadband Customer Base enabled by Bandwidth everywhere and low cost STB decoder

• Award winning customer relationship management with proactive outbound call centre telesales. Cross Selling-Upselling. Not Bundling

• A La Carte as competitive entry strategy, migrating to “mini packs” retaining choice

• Wide choice of content, some “killers”, some exclusives

• Constant progress monitoring and marketing initiatives which evolve to keep up the momentum.

• Protect Content Providers Rights – Zero Piracy, Revenue Assurance
  – Become Trusted Partner – for customer and content provider

• Quality Picture, better than Cable and Easy to use Customer Interface with phased introduction of interactive services

• Strong “in-house” capabilities for network/systems development and Installation
PAUL BERRIMAN
Head of Strategic Market Development
PCCW Limited
40F PCCW Tower
Taikoo Place
Quarry Bay
HONG KONG
Tel +852 90241312
Email: paul.berriman@pccw.com