

Lessons learned from our FTTH pilot in France

Paul-François Fournier
senior VP, advanced products and services
marketing NExT



agenda

- 1 what we have learned from our customer pilot
- 2 marketing orientations for 2007

agenda

1 what we have learned from our customer pilot

2 marketing orientations for 2007

3

more bandwidth for more services



HDTV
with interactive programs, on multiple
TV sets or PCs



VOD movies and programs
streaming or download



video games
on-line or download



video blogs / online photos
for digital cameras and camcorders



online storage and back-up
data security for consumers and SoHo's

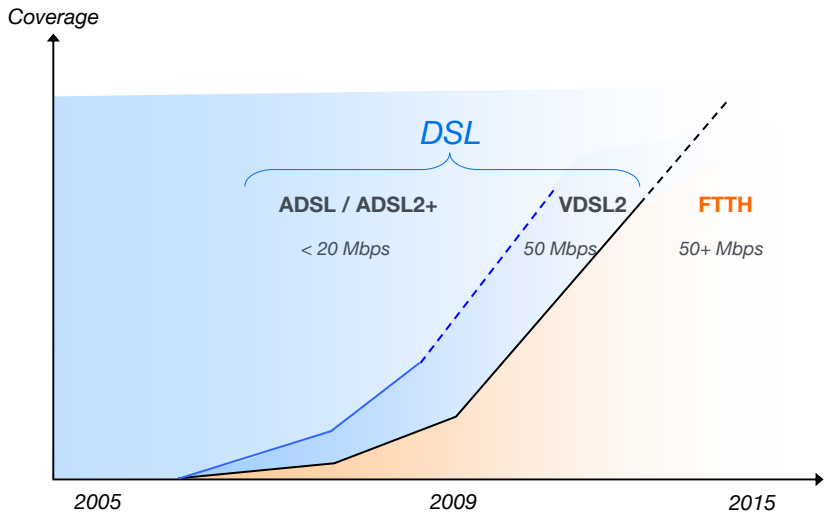


simultaneous and symmetrical usage
powered by the livebox (eg peer to peer TV)



Orange role is to meet customer demand beyond
4 what ADSL-type solutions can provide, for mass market take-off in 2009

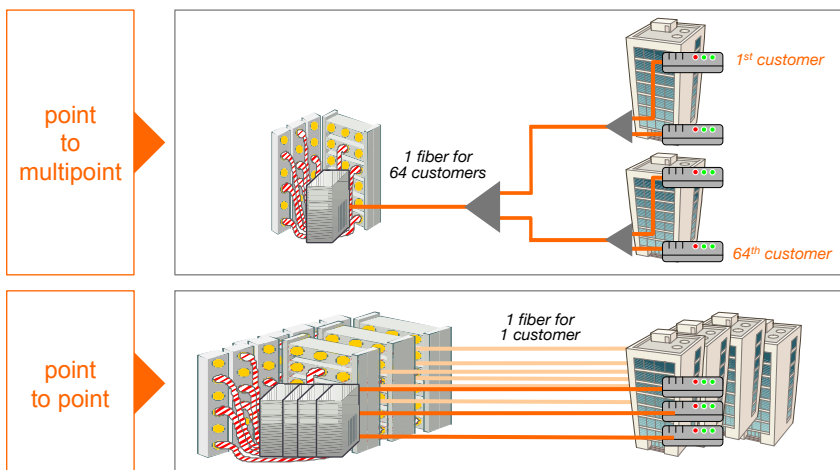
customer keep asking for more bandwidth



we chose FTTH as it is the most upward scalable, therefore future proof, solution

5



which architecture should we use ?



point to multipoint (on GPON) is the most CAPEX efficient (lower duct occupancy with less fiber) and saves OPEX at the central office there is no foreseeable limit in available bandwidth.

6

customer pilot began June 1st 2006

 <ul style="list-style-type: none"> 5 cities in the Hauts-de-Seine <ul style="list-style-type: none"> Asnières-sur-Seine Boulogne-Billancourt Issy-les-Moulineaux Rueil-Malmaison Villeneuve-La-Garenne  <ul style="list-style-type: none"> 6 districts in Paris <ul style="list-style-type: none"> 3rd, 4th, 6th, 7th, 13th, 16th 	<p><i>all-included offer</i></p> <ul style="list-style-type: none"> 100 Mbps symmetrical Internet access simultaneously 2 HDTV streams on TV and 1 stream on PC unlimited VoIP dedicated Web 2.0 portal on-site home installation and services activation dedicated hotline <p>€ 70 / month</p>
--	---

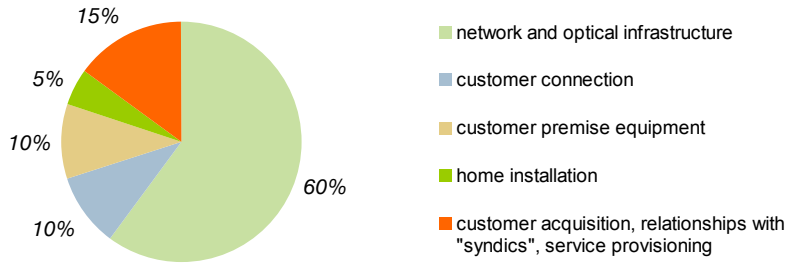
11 500 homes passed
 650 agreements with managing agents for collective buildings ("syndics")
 500 customers (5% penetration)
 100 000 km fiber installed
 less than € 5 m CAPEX

lessons learned from our 2006 pilot

customers	<p>high level of interest for FTTH symmetrical bandwidth and reliability, with technical support required for mass market adoption</p> <p>main applications are : HDTV, multi-access, photos, video, home working, sharing of user generated content</p>	<p>70% of customers own 2 or more TV sets</p> <p>30% of customers own a HDTV set</p>
roll-out	<p>key parameters are :</p> <ul style="list-style-type: none"> lead time to get agreements from "syndics" lead time to connect and install customers on-site <p>pilot helped define end-to-end roll-out processes in various habitations (old or recent apartment buildings, detached houses)</p>	<p>several months to get agreement with "syndics"</p> <p>between 4 and 12 hours for on-site home connection and service activation</p>
technology	<p>our technology choices (GPON, FTTH livebox) proved effective</p> <p>we learned how to best leverage our working relationships with industrial partners</p>	<p>first consumer box to have been upgraded for 100 Mbps symmetrical throughput</p> <p>France Telecom is 1st major incumbent to deploy GPON</p>

deploying a FTTH infrastructure takes time, resources, and the skills of a fixed local loop operator

pilot helped us to accurately assess our cost structure



for a 10% penetration rate (subscribers / home passed)

we have launched action plans to reduce these costs for most efficient deployment

9

what we have learned from advanced countries

USA

fixed operators respond with fiber to cable predominance, and to customer demand for HDTV
FTTH PON is the architecture chosen by Verizon (≈ 500 K customers by 3Q06) and AT&T

JAPAN

main lever is bandwidth : Internet remains the "killer application"
mid-2006, ≈ 3 M FTTH / PON-based customers installed

very high speed access is gradually taking off throughout the world, mainly by means of FTTH PON

10

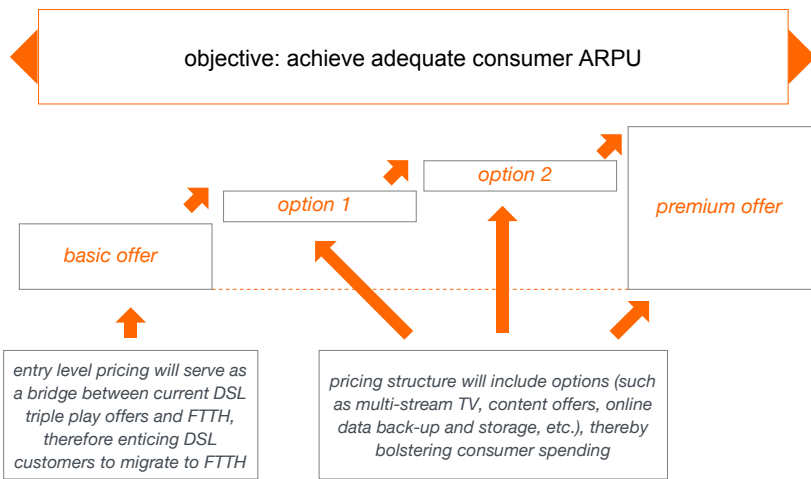
Sources: Idate, Infocom, 2006

agenda

- 1 what we have learned from our customer pilot
- 2 marketing orientations for 2007

11

2007 pricing will improve value for money



balancing FTTH penetration with FTTH ARPU, while providing consumers with better value for money

12

2007 new services to enhance customer experience

today's services

*up to 100 Mbps symmetric Internet
Web 2.0 portal — including TV over PC
multi-stream TV
High Definition TV and PVR*



2007 evolutions

*High Definition Communication (voice and video)
sharing of User Generated Content
personal Broadcast
gaming
security : online storage and back-up
convergent services*

13

summary

- *demand for very high speed access is emerging, and will achieve mass market status in 2009*
- *we have started to industrialize our roll-out processes*
- *our selected technology is mature (GPON, FTTH livebox)*
- *our pricing approach in 2007 will facilitate migration from ADSL while protecting long-term ARPU potential*
- *new services to be launched in 2007 will further improve customer experience with FTTH*

2006 pilot has been successfully completed and paves the way for the next phase to begin in 2007

14