

FTTH/B MAKES A REAL DIFFERENCE

Usage Survey Results (France & Portugal)

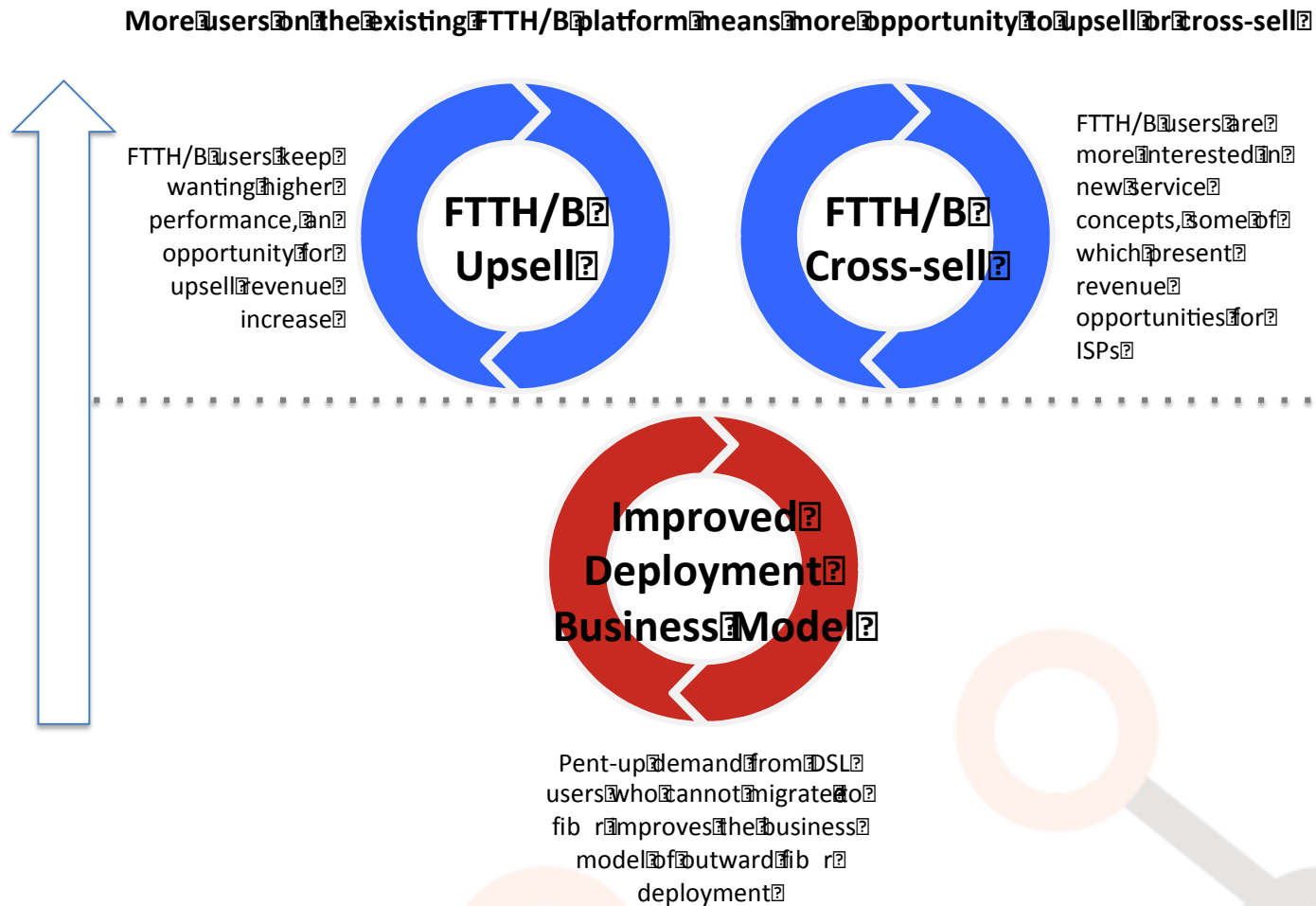
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In assistance to

Purpose and Methodology

- Following an insightful study of Swedish Broadband Users in 2014, this study commissioned by the FTTH Council Europe aimed at measuring the differences in broadband attitudes and usage between FTTH/B users and legacy DSL users in France and Portugal.
- The study was conducted in early December 2014, via an online quantitative survey of 2x400 broadband respondents. The survey was run by Paradox' Opinion / OpinionWay
- The sample included 2x300 FTTH/B users and 2x100 DSL users. The surveys were conducted in French and Portuguese.
- The following presentation highlights the key findings.

Key Findings of the 2014 Swedish Study



Easier economics in fiber network extension feeds the revenue opportunity of FTTH/B

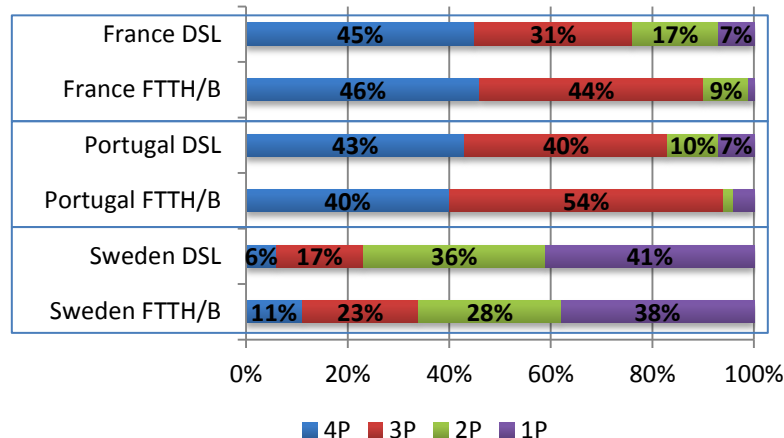
Source: Diffraction Analysis, 2014

Key Question Raised?

- Is the Swedish FTTH/B Users' Satisfaction related to the access technology or to a great job by Swedish Fiber ISPs ? Is it verified elsewhere ?
- Would DSL users perceive FTTH/B so positively in less mature markets ?
- Is the difference in broadband user behaviour verified in less mature markets ?
- Ultimately, does FTTH/B drive advanced usage, or are advanced users just attracted to the FTTH/B platform ?

Key Differences between Markets

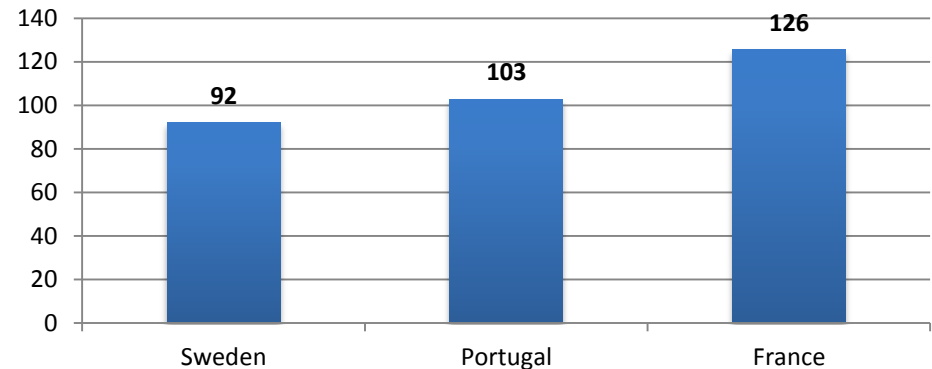
Types of Broadband Offers



Source: FTTH Council Europe / Diffraction Analysis / Paradox' Opinion / OpinionWay

- Swedish Market is heavily weighed towards single and double play offers
- Portuguese and French markets are heavily weighed towards triple and quadruple play offers

Average FTTH/B Revenue Upswing (Base 100 is Average DSL Revenue)

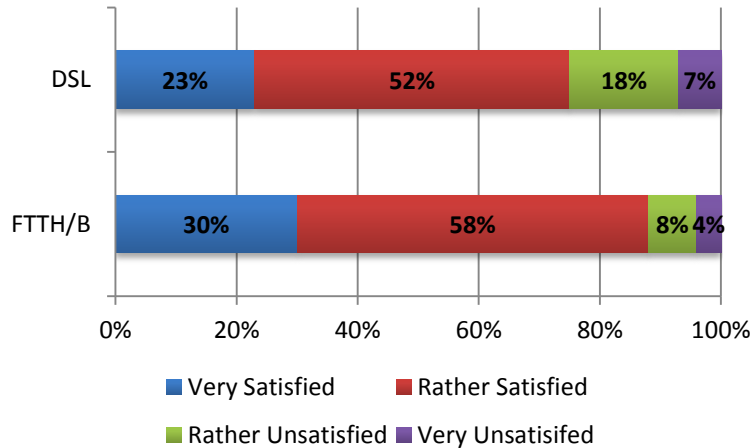


Source: FTTH Council Europe / Diffraction Analysis / Paradox' Opinion / OpinionWay

- In Sweden and Portugal, no revenue upswing from FTTH/B.
- In France, big revenue upswing from FTTH/B.

Perception of Quality (Portugal)

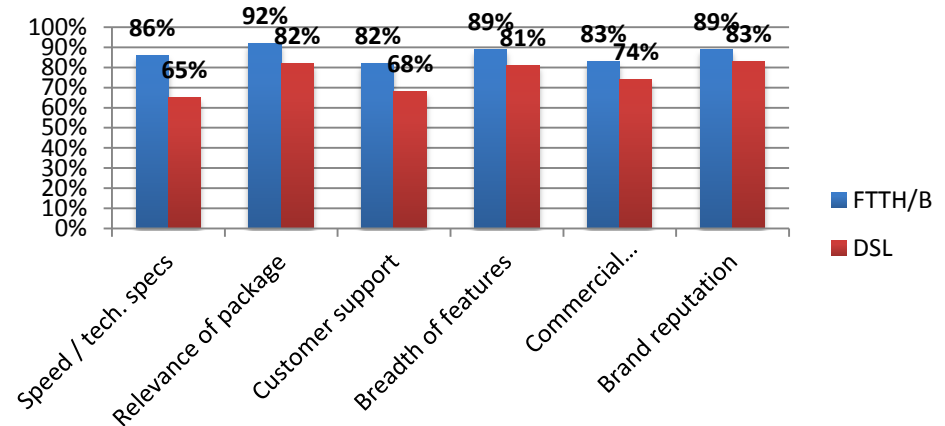
Overall Quality Perception



Source: FTTH Council Europe / Diffraction Analysis / Paradox' Opinion / OpinionWay

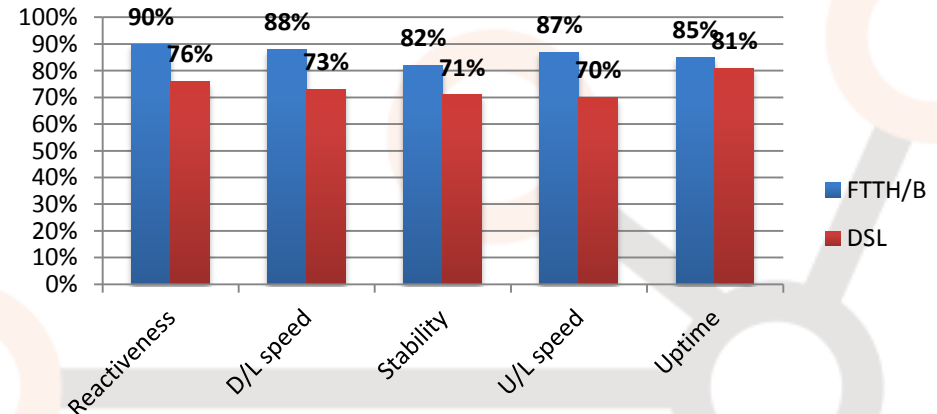
- FTTH/B users are overall more satisfied with their FTTH/B (88% vs. 75%.)
- They are also more satisfied on all commercial and technical criteria.

Detailed Quality Perception



Source: FTTH Council Europe / Diffraction Analysis / Paradox' Opinion / OpinionWay

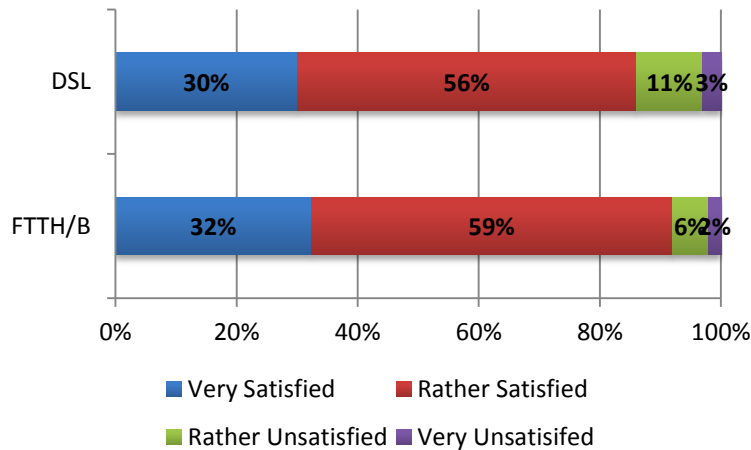
Quality of Technical Aspects Perception



Source: FTTH Council Europe / Diffraction Analysis / Paradox' Opinion / OpinionWay

Perception of Quality (France)

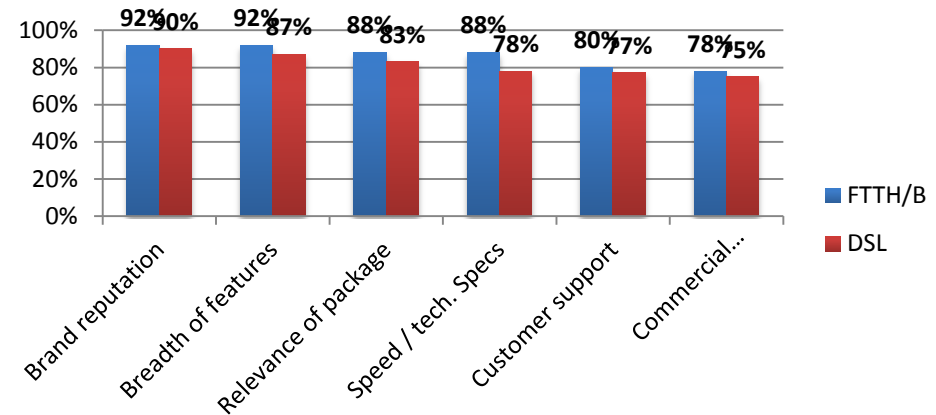
Overall Quality Perception



Source: FTTH Council Europe / Diffraction Analysis / Paradox' Opinion / OpinionWay

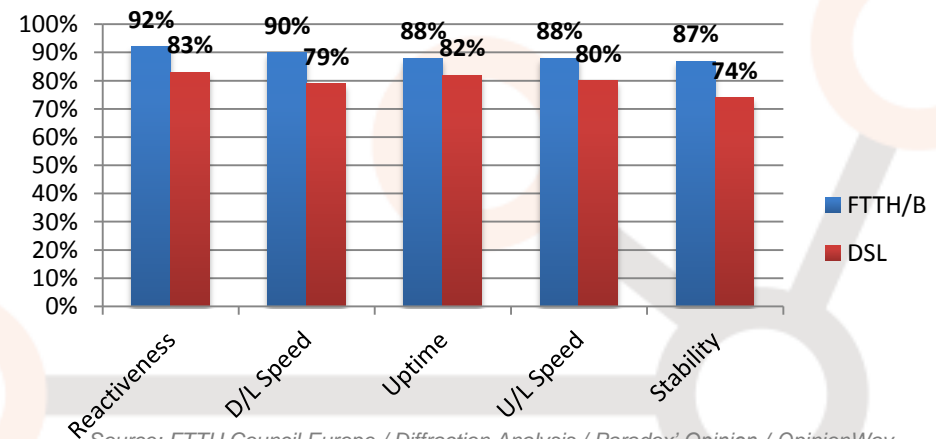
- FTTH/B users are overall more satisfied with their FTTH/B (91% vs. 86%)
- Lower differential is due to higher prices.

Detailed Quality Perception



Source: FTTH Council Europe / Diffraction Analysis / Paradox' Opinion / OpinionWay

Quality of Technical Aspects Perception

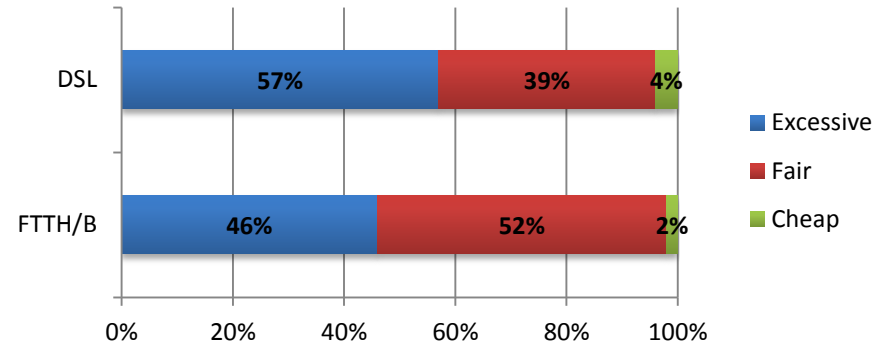


Source: FTTH Council Europe / Diffraction Analysis / Paradox' Opinion / OpinionWay

Price perception is directly linked to price levels

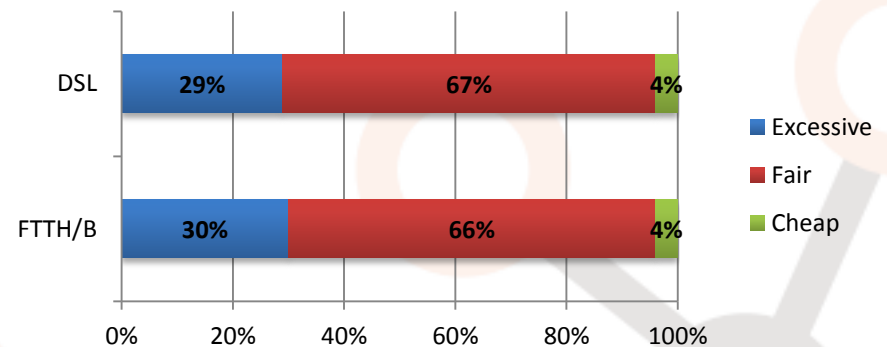
- In Portugal (where FTTH/B ARPU is roughly in line with DSL), the proportion of DSL users who find prices excessive is much higher than for FTTH/B (57% vs. 46%)
- In France (where FTTH/B ARPU is 25% higher than DSL ARPU), price perception is roughly equivalent between FTTH/B and DSL users.
- This explains why overall satisfaction differentials are lower in France than elsewhere.

Price Perception (Portugal)



Source: FTTH Council Europe / Diffraction Analysis / Paradox' Opinion / OpinionWay

Price Perception (France)

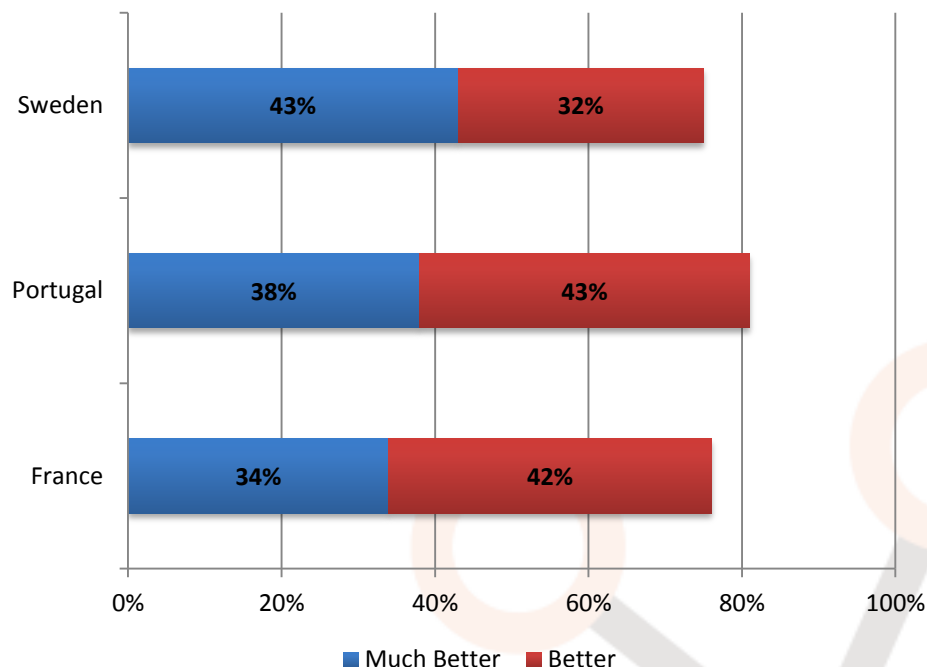


Source: FTTH Council Europe / Diffraction Analysis / Paradox' Opinion / OpinionWay

Comparing fiber solutions with previous non-fiber solution

- Across the three countries surveyed, users who have FTTH/B rate their solution very highly when compared to their previous non-fiber solution.
- In Sweden the intensity of the satisfaction is significantly higher than in France or Portugal.
- More generally, at least 75% (France) of users consider their fiber solution to be better or much better than their previous non-fiber solution.

How do you rate you fiber solution compared to your previous (non-fiber) solution?

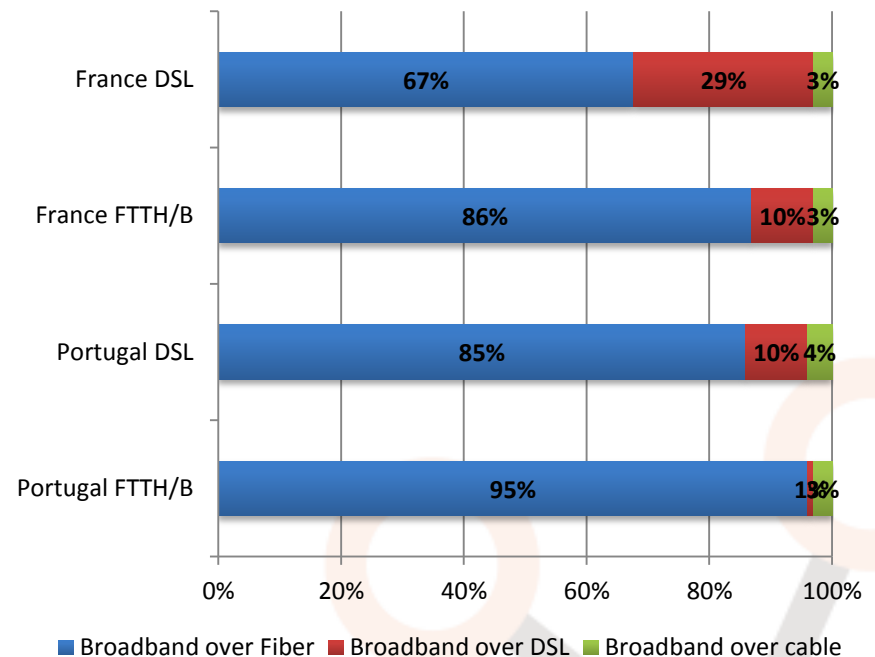


Source: FTTH Council Europe / Diffraction Analysis / Paradox' Opinion / OpinionWay

Migration Intentions

- Generally, as was the case with Sweden, FTTH/B users would massively stay on FTTH/B if they were to upgrade their broadband.
- DSL users in Portugal would also massively move to FTTH/B while this is less pronounced in France.
- In France (as in Sweden), 'no better solution available where I live' is listed as the main reason not to migrate (57%)
- In Portugal, being locked in a contract is the first reason not to migrate (54%) and lack of availability is only second.

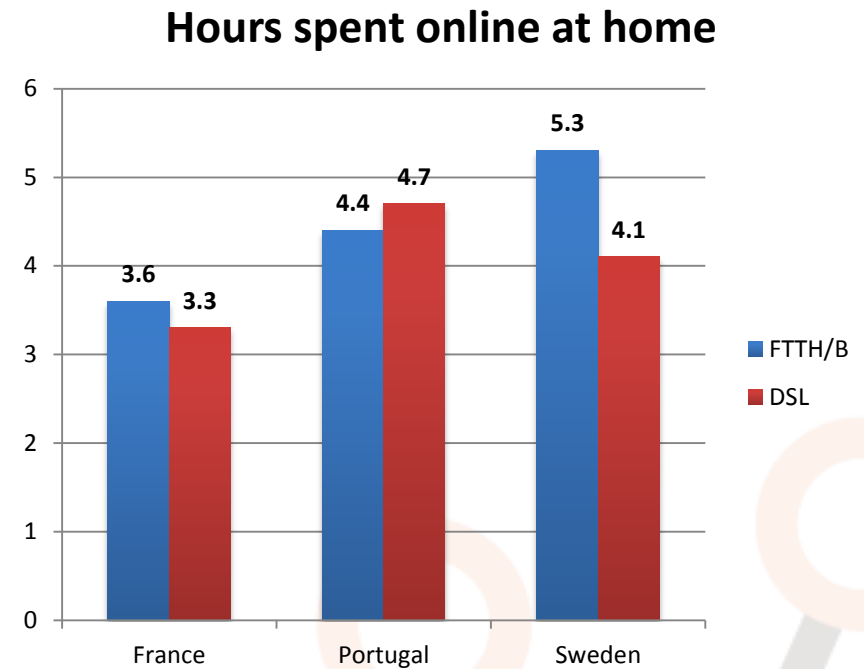
Platform of choice in case of migration



Source: FTTH Council Europe / Diffraction Analysis / Paradox' Opinion / OpinionWay

In less mature markets there is little difference in online usage

- The differences in intensity and type of online usage between FTTH/B and DSL users in Sweden were significant. In France and Portugal they are practically non-existent.
- Several aspects may explain this. First, the Portuguese and French markets have much higher emphasis on TV than the Swedish market (as shown by the proportion of 3P/4P products).
- Second, these markets are less mature, so users have not had FTTH/B for as long on average.

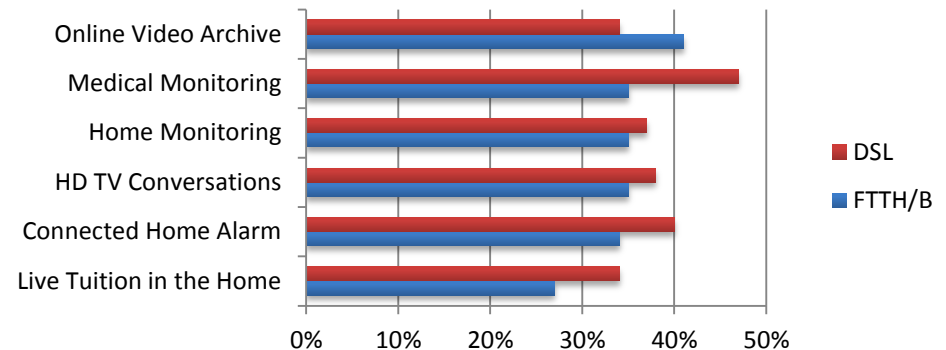


Source: FTTH Council Europe / Diffraction Analysis / Paradox' Opinion / OpinionWay

The potential for future services exists but is less focused towards FTTH/B

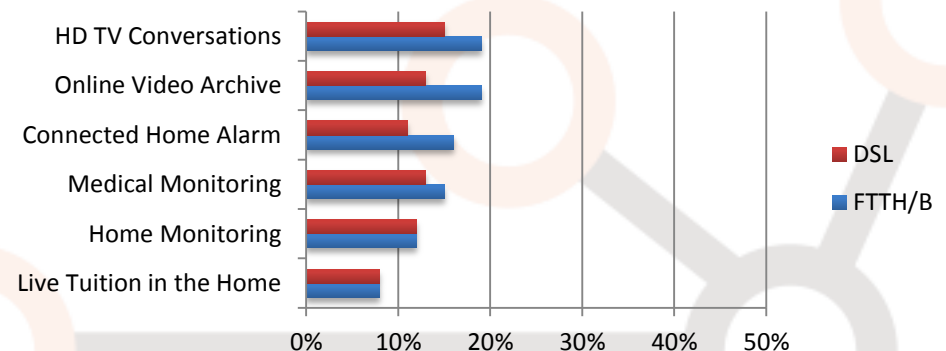
- Interest in future service concepts is very high in Portugal, but no different between DSL and FTTH/B (in fact DSL users are if anything slightly more interested).
- In France, the levels of interest are more comparable to those of Sweden, but the difference between FTTH/B and DSL is smaller.
- This suggests that not only market maturity but general market conditions determine interest in new and innovative services.

Interest in Future Service Concepts
(Portugal – Very Interested Only)



Source: FTTH Council Europe / Diffraction Analysis / Paradox' Opinion / OpinionWay

Interest in Future Service Concepts
(France – Very Interested Only)



Source: FTTH Council Europe / Diffraction Analysis / Paradox' Opinion / OpinionWay

Conclusions

- Across all three markets, the superior quality of FTTH/B over DSL is perceived and valued by FTTH/B users:
 - Technical aspects (speed, latency) are all valued,
 - In addition, non technical aspects also favor FTTH/B.
- How this perception of quality is shared with DSL users is more dependent on market maturity: in less mature markets (Portugal, and especially France) the perceived quality of FTTH/B by DSL users is not as high as in Sweden.
- Intentions to upgrade strongly favor FTTH/B as a platform in all markets, but again it's stronger in more mature markets.
- The main barrier to upgrade is availability of a better service where people live, highlighting the limitations of FTTH/B deployment.
- User behaviour in Portugal and France is not significantly different between FTTH/B and DSL users. This is partly down to maturity and partly down to the importance of TV in those markets.
- This does suggest however that in Sweden the differences in behaviour are driven by FTTH/B adoption, not a result of power users choosing FTTH/B.