



Outsmart Your Competitors

Business & Technical Obstacles For Femtocell Deployment

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Current Analysis

July 2007

Company Background

- Founded in 1997
- Leading Provider of Competitive Response Solutions
- 60 Researchers & Analysts Worldwide
- 40,000+ Subscribers
- 250 Enterprise Customers
- 25+ Coverage Areas
 - Fixed Line
 - Mobile
 - Enterprise
 - Consumer Electronics
 - Software
- Headquarters in Sterling, VA



Agenda

What Are We Going To Talk About?

■ The Good News

- Technical
- Marketing
- Big Picture

■ The Bad News We've Been Talking About

■ The Bad News We're Not Talking About

- For Operators
- For Vendors
- For Everyone

■ Conclusions / Recommendations

The Good News

Technical & Marketing

■ Technical

- Silicon Galore
- CE Industry
 - forms
 - interfaces
 - modems
- Cost Curves
- Integration Options
 - anchor
 - transition
 - transform
- Network Leverage
 - OSS / BSS
 - management
 - timing



■ Marketing & Biz

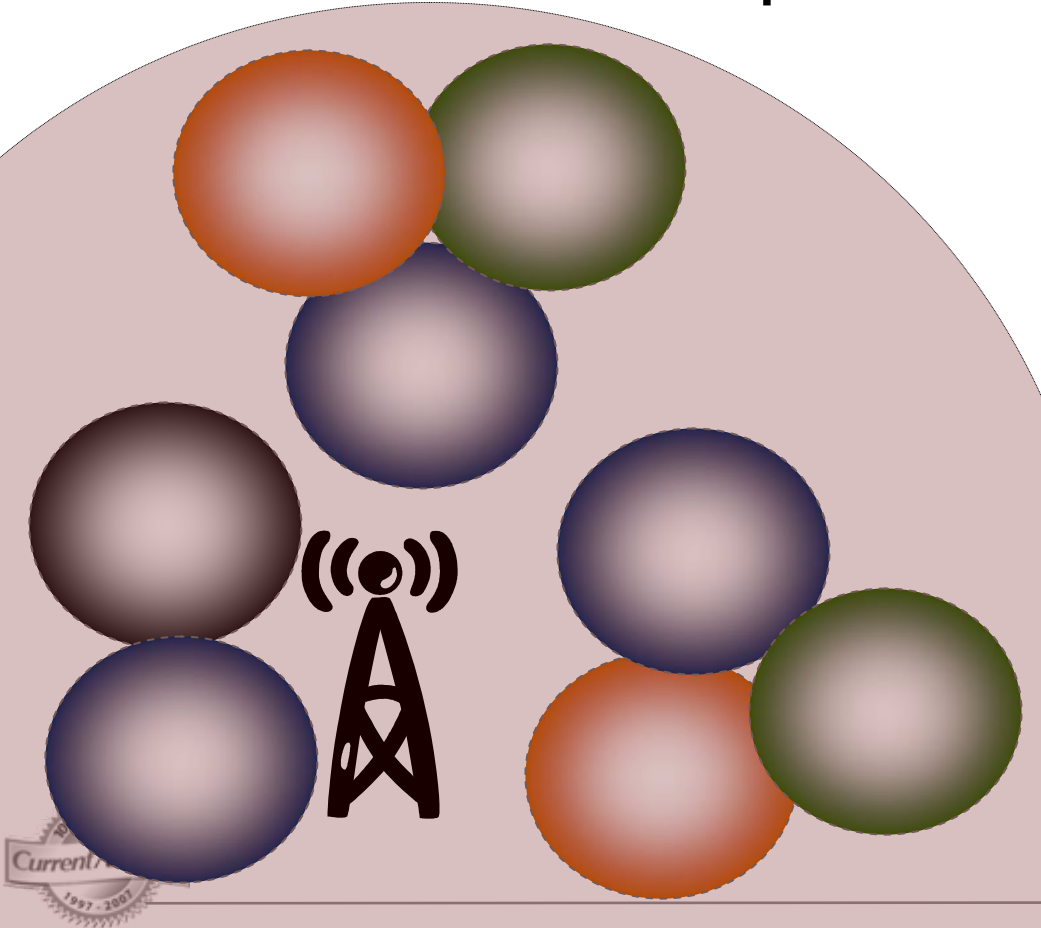
- Demand Drivers
 - coverage
 - capacity
 - cost
- Supply Drivers
 - devices
 - spectrum
 - fallow capacity
- Ubiquity of WiFi
- Lessons of Early FMC
- Vendors Galore
- Analyst Predictions
- Buzz, Buzz, Buzz



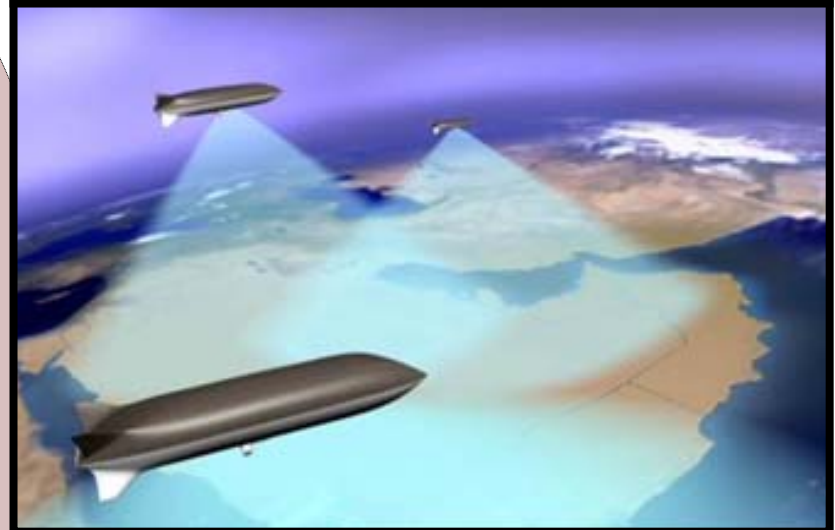
The Good News

Bigger Picture – The “65,000 Foot” View

- Femto / Pico:
Return of Spatial Efficiency
- WiFi Mesh:
Limits of License-Exempt



Remember This?



The Bad News

Stuff We've All Been Talking About

■ BOM

■ Upgradeability

- once designed
- once deployed
- how far?
- at what cost

■ Massive Management

- hopes and fears
- how much time?
- first impressions

■ Biz Models: Femto

- FMC vs. FMS
- service pricing
- standalone vs. gateway
- enterprise vs. residential

■ Biz Models: Competition

- WiFi-based
- coverage based
 - repeaters
 - picocells
 - distributed antenna sys.
- cost-based

Video

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<http://www.youtube.com/watch?v=lj2fLHp3AVA>

The Bad News

Stuff We're Not Talking About...Impacting Operators

RF Nightmares – # 1

- planning
- coordination
- rubber-meet-road

RF Nightmares – # 2

- NIMBY for Real
- not even WiFi Is safe

Net Neutrality

End-to-End Service Quality

- Skype costs are expected
- Skype quality is not
- your name is on the femto
- deployment solutions
- network solutions
- network agreements



Students and Staff :

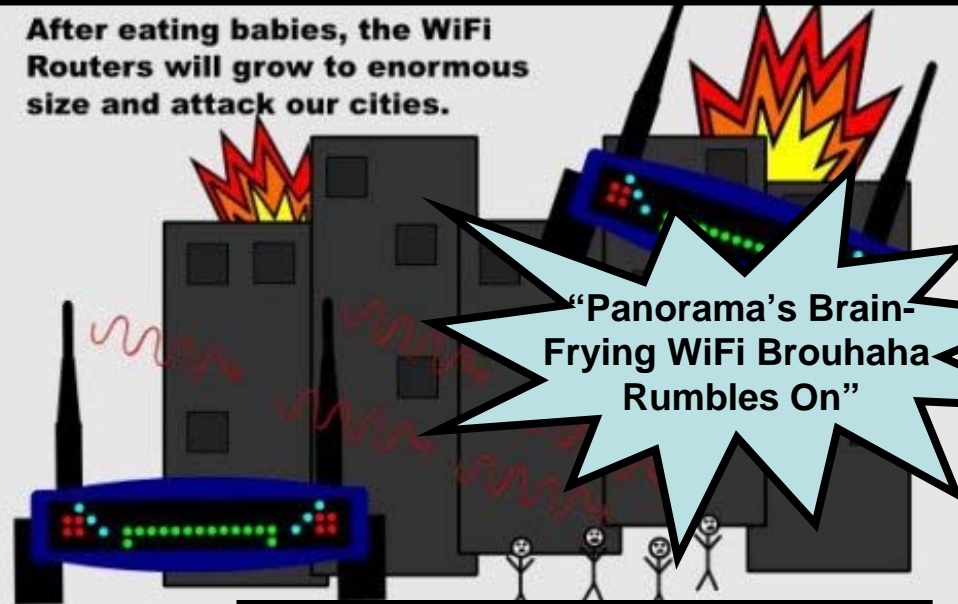
YEARS under or Close to Cell Phone Antennas, while being beside WiFi Networks, Computer Monitors and CellPhones....

..EMF HEALTH EFFECTS WILL ADD UP FAST

These Effects can last a **LIFE TIME.**



After eating babies, the WiFi Routers will grow to enormous size and attack our cities.



Wi-Fi: A Warning Signal

"If you go into the data you can see a very very clear picture... from DNA break ups to the animal studies and up to the epidemiological evidence...as well as increased cancer rates."

The Bad News

Stuff We're Not Talking About...Impacting Vendors

■ BOM Expectations

- approaching WiFi, right?
- set-up for disappointment
- the femto rationale = costs

■ Chinese Menu-itis

- access + core
- security
- technologies
- forms / applications

■ The Birth of a New Market

- over-crowded
- rubber-meet-road
- expectations, revisited
- product marketing in a pitch-black room

■ Economics

- “at volume” vs. “forward pricing”
- niche market vs. niche vendor
- \$4.5 billion between dozens
- 36 million vs. 1 billion

■ Differentiating Kit

- femto features
- integration options
- waiting for proof?

■ Speaking With One Voice

- diversity validates a model
- Qualcomm executes quicker
- responding to the market
 - giving direction
 - taking direction

Conclusions & Recommendations

■ Femtocell Hype

- deserved
- today: well executed
- tomorrow: dangerous

■ Two-Prong Marketing

- us vs. them
- us vs. us

■ Quality & Execution

■ Standards Bodies

■ Key-in On Bigger Picture

■ Prepare for Long Haul

Video
@

<http://www.youtube.com/watch?v=cVtUidrKjQc>

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[Competitive
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enables you to
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