

# Consumer Electronics Marketing Taskforce

April 25, 2012

# Areas for Today's Discussion

- **Consumer Electronics marketplace**
- **Opportunities for 4G/TDD-LTE enablement**
- **Key requirements for Consumer Electronic OEMs**
- **Consumer Electronics Marketing Taskforce – Plan for engaging with OEM community**

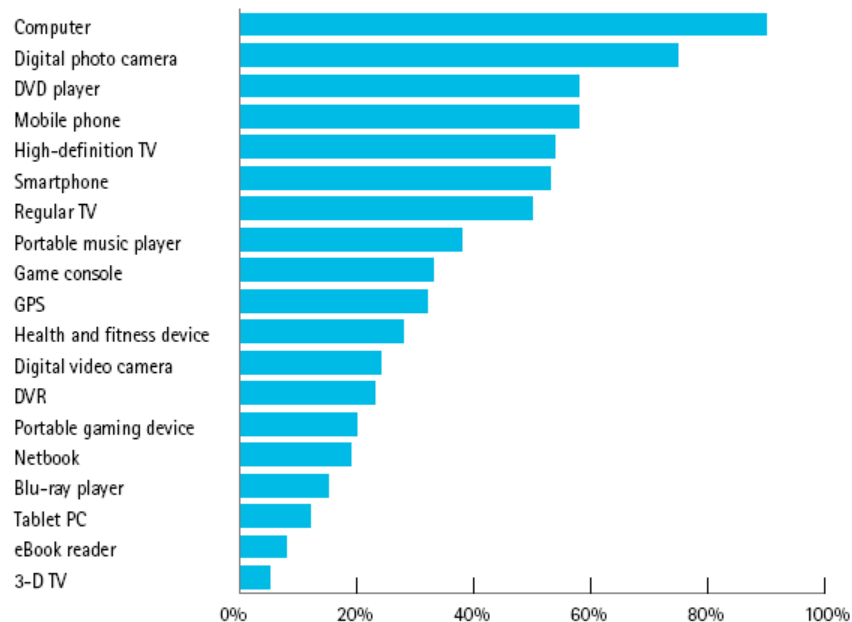
# Consumer Electronics Market

- **This year, global Consumer Electronics sales are expected to top \$1 trillion, increasing by 5% over 2011's figure of \$993 billion**
- **Retail volume is estimated to be 3.5 – 4 billion units in 2012**
- **Computer purchases make up the largest Consumer Electronics segment and on the mobility side there is strong momentum behind Tablet PCs**
- **Trend towards “hypermobility”, where consumers are rapidly adopting mobile technologies and downloading apps that keep them connected anywhere, anytime**
- **Growth in cloud services, where consumers are increasingly reaching into the network and modifying their behaviors, is accelerating this trend**
- **Only a small percentage of Consumer Electronic devices are 3G and 4G-enabled, largely due to high service plans, service contracts, chipset costs, and network speeds**
- **The build-out of higher capacity 4G networks, like TDD-LTE, offers cost efficiencies and higher throughput that will address customer requirements**

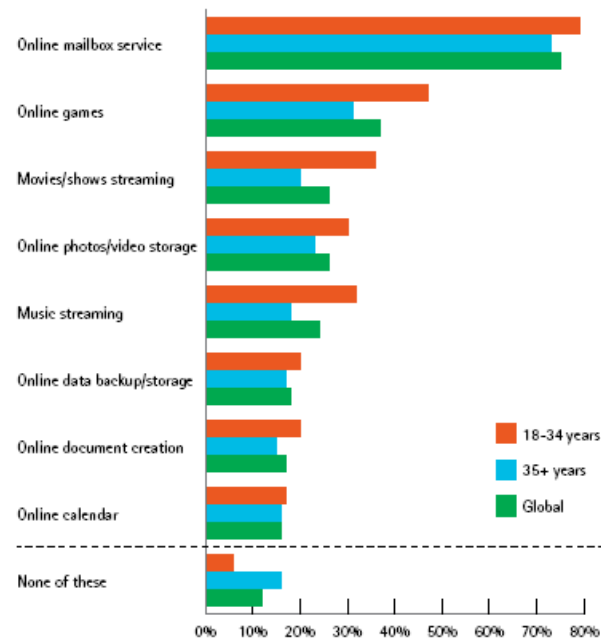
# Consumer Electronic Landscape

**Based on Industry Research taken from a Global Sample**

Which of the following consumer electronics do you currently own?



Which of the following online services do you use?

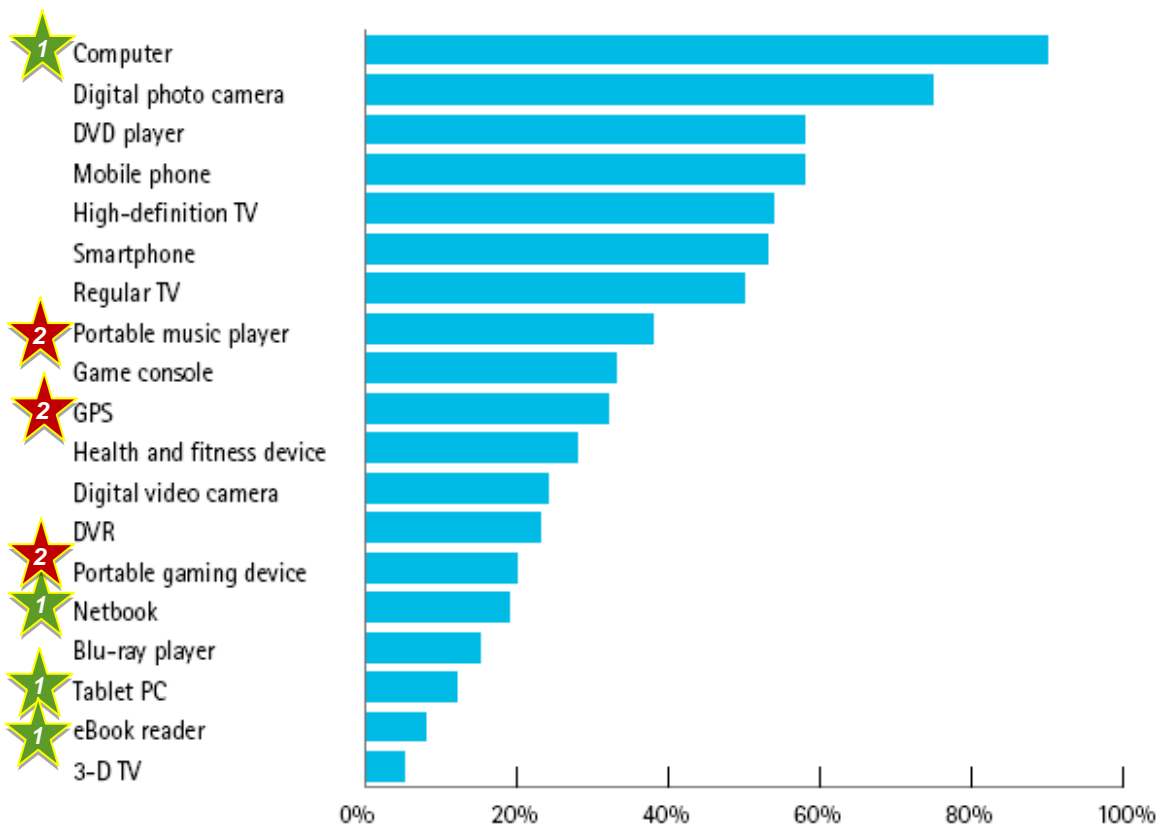


- Computers have the highest household penetration, but is forecasted to have flat to negative growth. Notebooks expected to modestly offset drop in desktop PCs
- While Tablet PCs/eReaders are in their infancy, the segment grew 50% last year
- Connected services driving mobile computing demand

- Consumers are reaching into the network for services and content
- As consumers are reaching into the cloud, a majority (56%) are changing the choices they make and how they behave

# Consumer Electronics Market

**Computing devices are the “low hanging fruit” for TD-LTE focus**



## 1 Primary Focus

- **Based on consumer trends and need for mobile access, Notebooks/Netbooks and Tablets/eReaders appear to be best suited for near-term LTE-enablement**

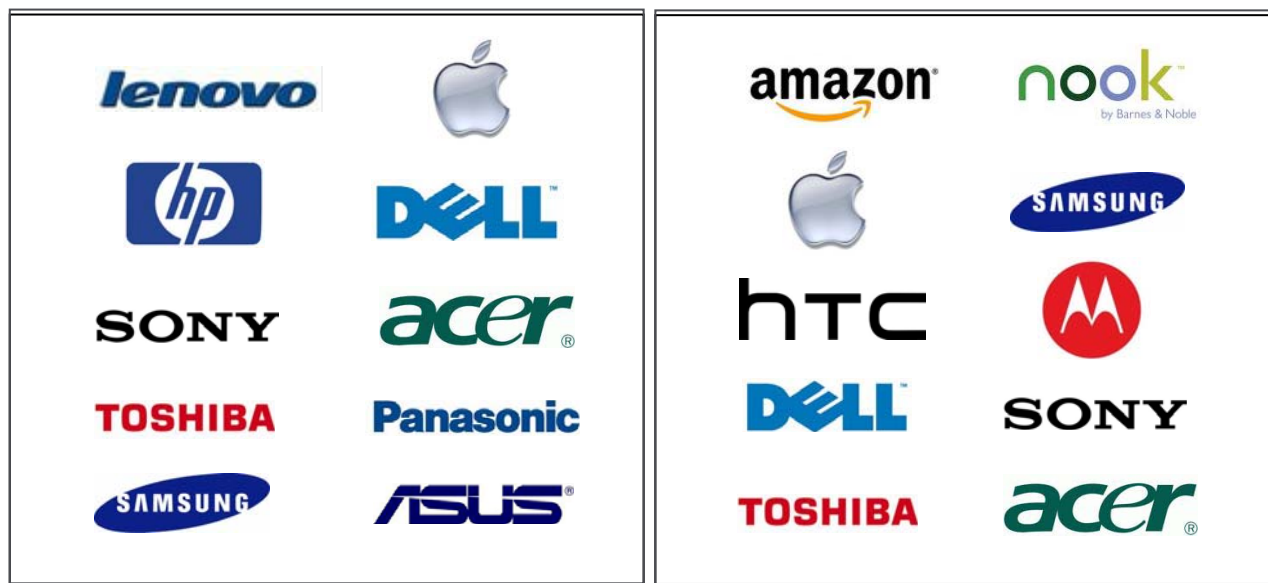
## 2 Secondary Focus

- **GPS segment – As it relates to in-vehicle and telematics**
- **Portable Gaming and Portable Music Players – Key requirement will be low-cost chipset (i.e. iPod Touch, Sony PSP, etc)**

# Notebook & Tablet Opportunity

**The Notebooks and Tablet device segments were the early adopters in embedded 3G and 4G**

	★ 1 Notebooks & Netbooks		★ 1 Tablets & eReaders	
	2012	2015	2012	2015
Worldwide Sales	250M	400M	70M	200M
Percentage Growth		60%		185%



# Example: WWAN Enablement in US

- **Embedded 3G Notebook market in the US has been geared to niche segments – mobile business professionals and high-end consumers**
- **Approximately 5%-10% of Notebooks sold have embedded modules**
- **Impediments to embedded 3G has been:**
  - Chipset pricing
  - Service plans and contract pricing
  - Long certification and testing cycle
  - Throughput performance
- **Tablets are still a relatively new device category and has initially relied on carrier distribution channels**
- **While the iPad initially saw higher demand for embedded 3G, estimated sales had dropped from 50% of sales to 30% (prior to launch of new iPad)**

# Example: WWAN Enablement in US



- Latitude line geared to Business and Mobile Professionals
- Build-to-order Dell Latitude E5520
- Base price for configuration is \$659
- Configuration over Dell.com

Select options below

[Help Me Choose](#)

None

Dell Wireless™ DW5630 Multi-mode HSPA-EVDO Mini Card (Gobi™ 3000) [add \$125.00]

Dell Wireless™ DW5630 Multi-mode HSPA-EVDO Mini Card (Gobi™ 3000) - AT&T [add \$125.00]

Dell Wireless™ DW5630 Multi-mode HSPA-EVDO Mini Card (Gobi™ 3000) - Sprint [add \$125.00]

**Dell Recommended**

Dell Wireless™ DW5630 Multi-mode HSPA-EVDO Mini Card (Gobi™ 3000) - Verizon [add \$125.00]

- \$125 cost adder for Gobi 3000 (HSPA/EVDO)
- Across AT&T, Sprint, and Verizon

Device Selection	Device Details	Carrier	Plan
	Latitude E5520	Verizon Wireless	None Selected

Rate Plan	Carrier	Term	Plan Type	Instant Savings	Monthly Cost
<input checked="" type="radio"/> 3G Mobile Broadband 5 GB	Verizon Wireless	2 Year(s)	DATA	\$0.00	\$50.00
<input checked="" type="radio"/> 3G Mobile Broadband 10 GB	Verizon Wireless	2 Year(s)	DATA	\$0.00	\$80.00

- Service pricing options \$50 (5 GB) and \$80 (10 GB)
- Activation fee up to \$35
- \$10 overage per GB
- Promotional Instant Rebate sometimes offered for contract commitment



# Example: Clearwire 4G Learnings

- **Clearwire has seen initial success with embedded 4G in Notebooks**
- **Chipset partner showed strength in pricing and technical support**
  - Pricing to OEMs was about half compared to 3G module
  - Reference design development and technical support
- **Embedded 4G in consumer-oriented and lower-priced Notebooks, across Intel Core i3, i5, and i7 platforms**
- **Higher throughput and unlimited data plans priced at \$34.99 (1.5 Mbps DL and 0.5 Mbps UL) and \$49.99 (3-6 Mbps DL and 1.5 Mbps UL)**
- **Support from 8 leading PC OEMs (Dell, HP, Lenovo, Toshiba, Acer, Asus, Sony, and Samsung), representing over 50 models**
- **Retail distribution at 3 national retailers (including Best Buy) with associated marketing in circulars, buying guides, and promotional materials**

# Example: Clearwire 4G Learnings



## 1 Newspaper Advertising



## 2 Circular Advertising

**CLEAR™ 4G WIMAX Built In**  
A hotspot that travels with you.

Discover CLEAR™ super-fast 4G Internet that works as fast on-the-go as it does at home. \$150 Instant Savings with activation of a new CLEAR™ service plan with 2-year agreement. Learn more at BestBuy.com/WIMAX.

Not available in all stores. Available in Cherry Hill, Deptford and Mount Laurel, NJ stores. Not available at BestBuy.com.

**SAVE \$150 ON ANY 4G WIMAX-ENABLED LAPTOP WITH ACTIVATION OF A 2-YEAR BEST BUY™ CONNECT MOBILE BROADBAND PLAN**

Get Unlimited 4G Data Access for just \$45 per month.

Learn more at BestBuy.com/BestBuyConnect

**Intel® Core™ i3 Processor**

4-way processing, Windows™ 7 Home Premium, built-in Blu-ray Disc™ player, webcam and Intel® Wireless Display Technology. Includes Best Buy™ pc app. SKUs: 1892044 - White, 1892035 - Purple

**779<sup>99</sup>**

**ALL APPLE MACBOOKS AND IMACS ON SALE!**

PLUS, GET FREE SHIPPING AT BESTBUY.COM™

Authorized Reseller

Find an Apple Shop in a Best Buy® store near you at BestBuy.com/Apple

**WHAT THEY WANT. WHEN THEY WANT.**  
e-Gift Cards, sent right to their e-mail inbox. Redeemable online or in store.

## 3 In-Store Marketing & Promotions

**SAMSUNG**

Intel® Core™ i3-380M Processor Laptop

**549<sup>99</sup>**

**OPTIONS**

PRICE WITH 4G MOBILE BROADBAND PLAN Clear 2-year Contract **\$449<sup>99</sup>**

Best Buy Connect 2-year Contract **\$399<sup>99</sup>**

**hp**

Intel® Core™ i5-460M Processor Laptop

**649<sup>99</sup>**

**OPTIONS**

PRICE WITH 4G MOBILE BROADBAND PLAN Clear 2-year Contract **\$449<sup>99</sup>**

Best Buy Connect 2-year Contract **\$399<sup>99</sup>**

**SPEEDS**

**3G** CURRENT STANDARD. PROVIDES A RELIABLE CONNECTION NATIONWIDE WITHIN YOUR CARRIER'S COVERAGE AREA.

**4G** THE FUTURE OF WIRELESS. LETS YOU CONNECT AT UP TO 10X THE SPEED OF 3G IN SELECT MARKETS.

**SIGN UP IN STORE TODAY.** SEE A CUSTOMER SPECIALIST FOR PROVIDERS IN YOUR AREA, RATE PLANS AND OTHER DETAILS.

# Initial Focus of the Taskforce

**Goal is for OEM considering LTE to procure TD-LTE capable modules**

**In Addition to SmartPhone/MiFi OEM/ODMs, Suggested Primary Focus for Marketing Working Group**

**Secondary Focus**



**1 Notebook OEM Target List**



**1 Tablet/eReader OEM Target List**



**2 Examples of Other Opportunities**



# Plans for Engaging with OEMs

## Tactics for the Marketing Working Taskforce

- **Develop a target list of OEMs/ODMs, which represents strong market share in desired device markets**
- **Assign Marketing Taskforce team members to OEM global and region-specific teams to ensure discussions are scheduled and appropriate follow-up is achieved**
- **Educate OEMs/ODMs with necessary information to propel investigation and deliver of TDD-LTE device – including market opportunity, carrier support, chipset providers, technical considerations and technical/certification process**
- **Build “documentation hub” for Consumer Electronic OEMs to service provider business plans and technical information**
- **Leverage channels, like GTI web-site, PR and industry analysts to communicate to the market and ecosystem**
- **Develop robust IOT support for chipset providers, which will enable a healthy and price competitive marketplace**
- **Work with MM-MB Taskforce to track vendors and pricing for single antennas that support multi-mode and multi-bands**
- **Share important learnings from the OEMs/ODMs back to GTI Business & Services Working Group for consideration**