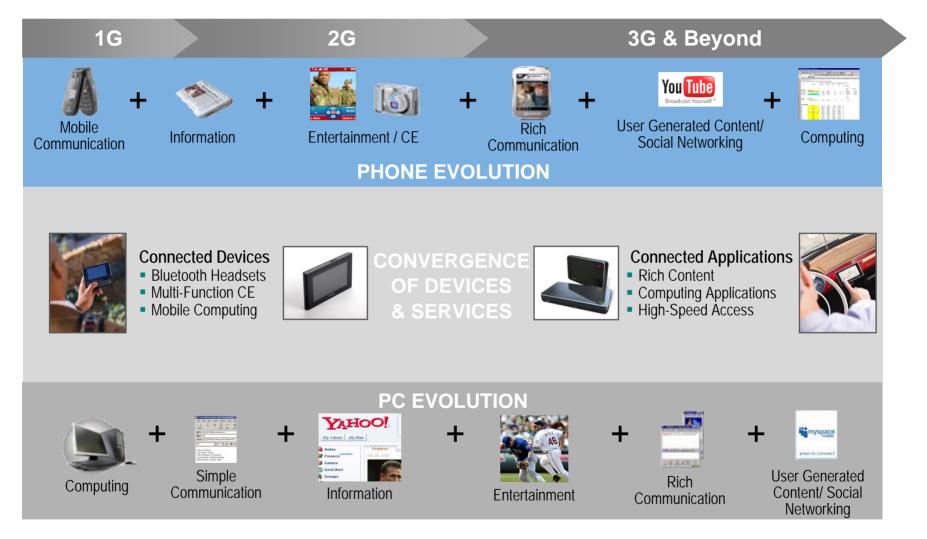
Virtual Platforms: Enablement Challenges

Jose Corleto Architecture Qualcomm CDMA Technologies July 29, 2009





Mobile Devices Become Increasingly More Complex



Converged devices demand higher HW complexity and SW content!

CDMA Technolog

REDEFINING MOBILITY

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Product Development Challenges & Mitigation

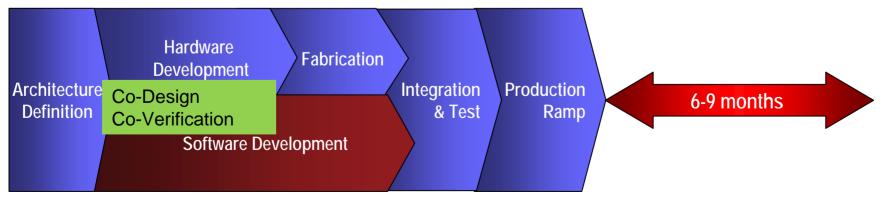
Typical Product Development Cycle

MOBILITY



- Market demands shorter but product complexity can drive longer development times.
- Delays cost \$10-20 million/week or \$\$hundreds millions lost revenue if the socket is lost!
- Virtual platforms, can decouple SW development from silicon availability; enable early HW and SW verification; avoid delays; increase quality and lower development costs

Concurrent HW and SW Development and Verification





EDA Requirements and Challenges

- Integrated tools and methodologies that enable:
 - Timely product requirements
 - Stable architecture specifications
 - Model availability (CPU, DSP, Multimedia, Modem, etc)
 - Tight integration of virtual platform and silicon verification environments
 - Integrated virtual platform models, HW and SW databases
 - Simulation speed
 - Affordable virtual platforms
- Support to enable customers to reduce their time to revenue

