Why Corporate Interest In QDA?

ELEVATOR SPEAK. QDA (**Q**uantized **D**igital **A**mplification) is an invention. Before discussing it, crisp and immediate answers are needed to five critical questions:

1. What is QDA?
    - QDA **is not** a new attachment, device, machine, or software app.
    - **QDA is a process** which is a significantly more efficient method for amplifying broadcast radio frequency (RF) signals, using substantially less electrical power.
    - **QDA** is implemented in hardware and firmware.

2. Why is QDA significant?
    - Power Amplifiers, the workhorse of cell phones and telecommunication base stations, consume an amount of electrical power *hugely disproportionate* to the rest of the equipment.
    - In mobile phones Power Amplifiers consume 25% to 50% of the power. In base stations that number is 38%. **REPEAT 25% of mobile phone battery and 38% of all base station power is consumed by power Amplifiers!** QDA improves the efficiency of Power Amplifiers by a factor of 5 which allows the above percentages to be reduced by half - .

3. Who does QDA benefit?
    - Primarily, QDA benefits manufacturers, allowing them to pass along significantly less electricity costs, longer battery operational usage times and life, adding new functionality etc. to their customers – the secondary beneficiaries.

4. Why is QDA valuable?
    - In normal mobile phone usage, 25% to 50% of the battery energy goes to power amplification. Using QDA could recover at least 50% of that number.
    - On the other side of the cell tower, in worldwide usage, 18 to 20 billion dollars a year of electricity costs could be saved, annually, by using QDA.
    - Practical Example: American Tower (AT), headquartered in Boston, provides management services to its clients on over 225,000 base stations worldwide. The electricity costs alone to operate these base stations is, on average, $780 million to $1.3 billion a year. Using QDA could save American Tower $265 to $495 million annually.

5. How does a Manufacturer use QDA?
    - QDA technology needs be added to a company's product *before* they manufacture it.
    - QDA technology replaces some existing RF circuitry and in the net *decreases* the per unit manufacturing costs.