



Managing Your Cellular Spend



Stephen M. Leaden
Leaden Associates, Inc.
www.leaden.com

VoiceCon San Francisco 2008
November 11, 2008

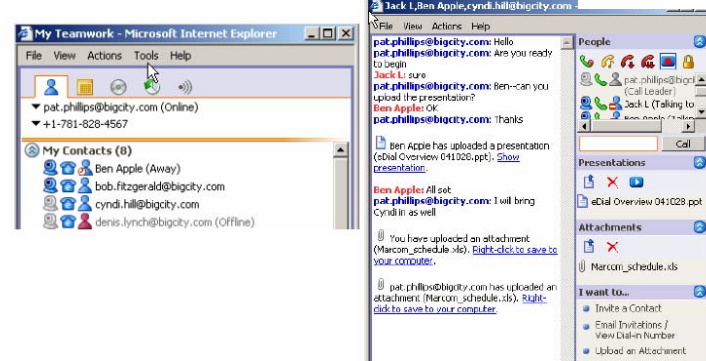
Wireless Facts/Trends



- Yankee Group
 - Wireless voice and data services now represent **25 percent** of U.S. enterprises' total telecom spend
- Wireless Spend
 - **One-third** of the corporate bill for telecommunication services in 2006, says a new market research report from Insight Research
- Future Wireless Spend
 - U.S. corporate spending on **wireless** voice and mobile data services will **exceed** business spending on all **wireline** voice and data services by 2010
 - (source - [In-Stat](#))

Market Trends – Mobility

- E-mail anywhere
- Voice notification of land voice mail
- Softphones for laptops
- Wireless VPN access, secure
- Wireless phones (on prem) – 802.11x
- Hard phones off site available



Aberdeen Group

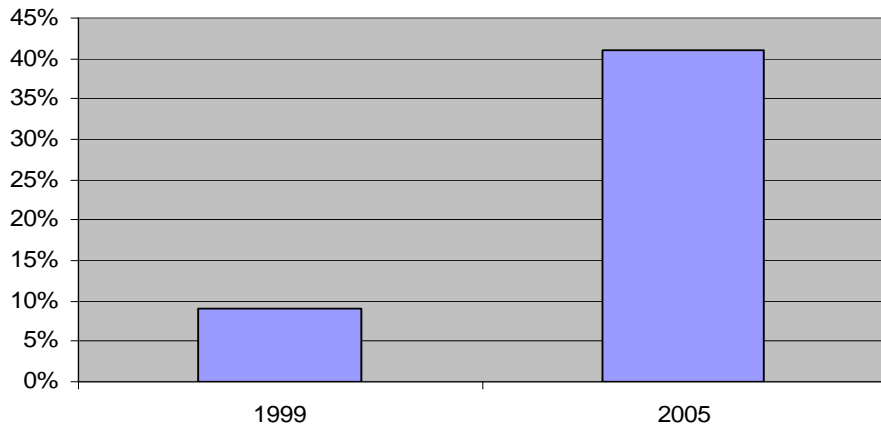


- 73% of enterprises surveyed
 - Implementing or have programs for wireless expense management
 - These programs address escalating spending with carriers and rising support costs for wireless mobility
- Best-in-Class Performance
 - Aberdeen used three key performance criteria to distinguish Best-in-Class from all other organizations. These include:
 - Best-in-Class require **two times fewer FTEs** to manage device fulfillment and help desk support of mobile workers (normalized by number of mobile users) compared to Laggards.
 - Best-in-Class spend on average **\$72.40** per user per month compared to **\$124.5** for all others.
 - Best-in-Class proactively manage **97%** of their wireless expenses compared to **20%** for Laggards.

The Problem



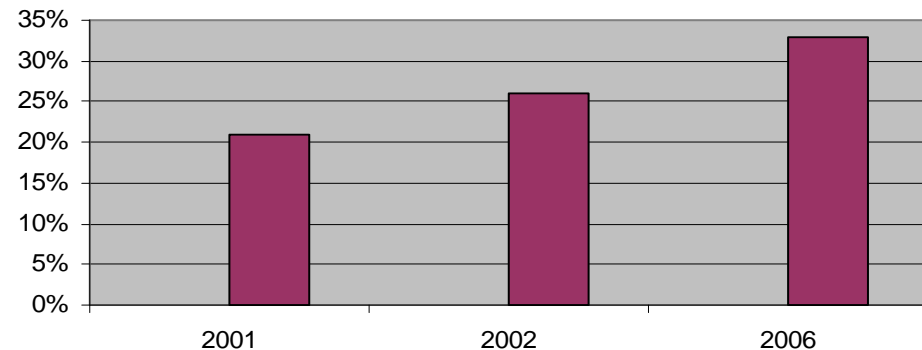
Cell Phone Minutes of Use as a Percentage of Total Telephony Minutes



Wireless usage is dramatically increasing ...


Wireless is now the fastest growing Telecom expense

Wireless Costs as a Percentage of Total Telecomm Budget



The Problem



<p>Motorola RAZR Black</p>  <p>cingular raising the bar™</p> <p>Compare Prices</p> <p>#1 Seller - Cingular Bluetooth Camera Phone!</p> <p>From: Free \$0.00 Offered by: install</p>	<p>Motorola V3c RAZR</p>  <p>verizon wireless</p> <p>Compare Prices</p> <p>Now CDMA technology available with the RAZR.</p> <p>From: \$99.99 Offered by: wirefly</p>	<p>Sony Ericsson W600</p>  <p>cingular raising the bar™</p> <p>Compare Prices</p> <p>New Walkman Phone Now Available.</p> <p>From: Free \$0.00 Offered by: wirefly</p>
<p>BlackBerry 7130e</p>  <p>verizon wireless</p> <p>Compare Prices</p> <p>First EV-DO BlackBerry on the Market!</p> <p>From: \$149.99 Offered by: wirefly</p>	<p>Motorola PEBL</p>  <p>T-Mobile</p> <p>Compare Prices</p> <p>stylish Flip Phone Loaded with Great Features Including Bluetooth!</p> <p>From: \$299.99 Offered by: wirefly</p>	<p>BlackBerry 7100i</p>  <p>NEXTEL</p> <p>Compare Prices</p> <p>Bluetooth, E-mail on the go, and Much More!</p> <p>From: \$129.99 Offered by: install</p>
<p>PalmOne Treo 700w</p>  <p>verizon wireless</p> <p>Compare Prices</p> <p>Treo 700w, Camera, Bluetooth, and so much more!</p> <p>From: \$299.99 Offered by: wirefly</p>	<p>Motorola V330</p>  <p>T-Mobile</p> <p>Compare Prices</p> <p>Bluetooth, Digital Camera & Speakerphone!</p> <p>From: Free \$0.00 Offered by: wirefly</p>	<p>Motorola RAZR V3 Pink</p>  <p>cingular raising the bar™</p> <p>Compare Prices</p> <p>#1 Seller - Cingular Bluetooth Camera Phone now in Pink!</p> <p>From: Free \$0.00 Offered by: install</p>
<p>Nokia VI-3155</p>  <p>Sprint</p>	<p>Motorola RAZR V3</p>  <p>cingular raising the bar™</p>	<p>Motorola RAZR V3c Pink</p>  <p>verizon wireless</p>

NEXTEL	National Team Share Add-on Plan (Must Call To Order) Coverage: National Minutes Included: None View Plan Details	Monthly Fee \$19.99
NEXTEL	Fair & Flexible 200 Coverage: National Minutes Included: 200 View Plan Details	Monthly Fee \$29.99
Sprint	Sprint PCS Fair & Flexible 200 Coverage: National Minutes Included: 200 View Plan Details	Monthly Fee \$29.99
Sprint	Sprint PCS Fair & Flexible 400 Coverage: National Minutes Included: 400 View Plan Details	Monthly Fee \$34.99
NEXTEL	Fair & Flexible 400 Coverage: National Minutes Included: 400 View Plan Details	Monthly Fee \$34.99
NEXTEL	National Team Share 400 Plan Coverage: National Minutes Included: 400 View Plan Details	Monthly Fee \$39.99
verizon wireless	America's Choice 450 Coverage: National Minutes Included: 450 View Plan Details	Monthly Fee \$39.99
cingular raising the bar™	Cingular Nation 450 w/ Rollover Coverage: National Minutes Included: 450 View Plan Details	Monthly Fee \$39.99
	Nextel National Power 500 Plan	

The complexity and difference in Carriers, Rate plans and Devices makes this an even more difficult task to manage

Cellular Pricing Options



- Individual liable
- Corporate liable
- Pooled minute plans
- Shared plans
- Unlimited plans



Mobile/Cellular Elements



- Rate plans
 - Optimizing for best aggregate rates
 - Geographies/coverage, International
 - Term agreements
 - Corporate vs. personal liable and tax implications
 - Managing costs
- 

Mobile/Cellular – Corp. vs. Individual Liable



- Reimbursement OK with Small Business environments
- Larger environments costs will be higher for individual-liable based on individual vs. corporate buying power
- Trend: Carriers are looking to stabilize corporate plans for the enterprise

Auditing Cellular Bills



- There are no Customer Service Records produced by wireless carriers
- Need
 - (1) Contract
 - (2) Several months' billing
 - (3) Specific rate plan details – found on carrier website
- Know the key wireless billing components
 - Access
 - Included plan minutes, anytime, peak/off-peak, nights, weekends, roaming,
 - Text messaging
 - Data plans

Cellular Bill Plan of Attack



- Validate rate plans match contract less discounts
- Validate that the rate plan is appropriate to the usage need
- Are there any “grandfathered” plans and are they still beneficial?
- Determine if roaming and compare to contract
- Questions to ask:
 - Long distance charges?
 - Valid inventory of devices vs. users?
 - Other services billed on an individual basis, i.e.,
 - *Device insurance, directory assistance, downloads, text (SMS) messaging, MMS messaging, etc.*
- Identify whether the usage is appropriate to the needs/position of the employee

Auditing a Wireless Bill – Most Common Errors



- Contract Compliance issues
 - Conduct a bi-annual or quarterly optimization/review.
- Disconnecting devices that keep billing
 - Continued oversight is very important
- Portability issues –
 - Assigning dummy numbers during transition that are not removed resulting in double billing
- Roaming in non-roaming areas
- Equipment discounts not applied correctly
- Misapplication of flex credits

Wireless Auditing - Recommendations



- Stay “on top” of wireless billing and inventory
- Have a tight, binding and enforced Corporate Acceptable Use Policy
- Standardize on equipment and assignment based on employee need
- Keep records of business vs. personal usage –
 - Tax implications!
- Let users know that bills/spend are being watched
 - This can rein in overage issues

Mobile/Cellular Steps



- Inventory all mobile users and features
- Break down to cost per minute
- Break out taxes and equipment
- Analyze and move to bundled from family share-plan strategy
- Determine best pricing and plans and contracts around models

Mobile Optimization Sample



Sample Client					
92 phones		86000 peak minutes required			
		Plan 1	Plan 2	Plan 3	Plan 4
	Min	0	1000	2000	4000
	Cost	\$ 25.00	\$ 59.99	\$ 99.99	\$ 199.99
Config. Cost	Combined Minutes	Plan 1 Phones	Plan 2 Phones	Plan 3 Phones	Plan 4 Phones
\$5,309.14	86000	6	86	0	0
\$5,314.15	86000	7	84	1	0
\$5,319.16	86000	8	82	2	0
\$5,324.17	86000	9	80	3	0
\$5,329.18	86000	10	78	4	0
\$5,334.19	86000	11	76	5	0
\$5,339.20	86000	12	74	6	0
\$5,344.17	86000	9	82	0	1
\$5,344.21	86000	13	72	7	0
\$5,349.18	86000	10	80	1	1
\$5,349.22	86000	14	70	8	0
\$5,354.19	86000	11	78	2	1
\$5,354.23	86000	15	68	9	0
\$5,359.20	86000	12	76	3	1
\$5,359.24	86000	16	66	10	0
\$5,364.21	86000	13	74	4	1
\$5,364.25	86000	17	64	11	0

- Pairing up different plans works in favor of lower cost
- Variances not significant in this example
- Needs monthly maintenance and management

Customer Example – Wireless/Mobile



		<u>Monthly Savings</u>	<u>Annual Savings</u>
Reduce Voice Minutes in plans		\$ 5,501.44	\$ 66,017.28
Modify Plans		\$ 410.00	\$ 4,920.00
Modify Carriers to lower cost plans (e.g. Sprint to Nextel)		\$ 600.00	\$ 7,200.00
Estimate Cingular Savings (inc. LD)		\$ 1,619.63	\$ 19,435.60
Total	31%	\$ 8,131.07	\$ 97,572.88

Customer Example – Wireless Detail



Summary	
# units	298
Discount	
Total Billed	\$ 26,588.86
Monthly Voice Access	\$ 10,040.77
Monthly Blackberry Access	\$ 8,518.83
Other Charges & Credits	\$ 1,815.55
Airtime	\$ 1,191.75
Roaming	\$ 1,174.92
International Roaming	\$ 899.96
Text Messaging - Usage	\$ 304.03
Directory Assistance	\$ 295.59
Subtotal	\$ 22,899.88
Tax/Surcharges	\$ 3,004.14
Plan Minutes Used	48485
LD/Roaming	1707
Text Messages	2120
Average Cost Per Minute (excluding international)	\$ 0.247

<u>Sprint</u>	<u>Verizon</u>	<u>Cingular</u>	<u>T-Mobile</u>	<u>Nextel</u>	<u>Blackberry</u>
25	74	50	78	41	30
	17% Voice 20% Data	20% + \$10 Voice/Data	TBD	13%	
\$ 1,580.96	\$ 5,660.06	\$ 5,254.10	\$ 7,761.34	\$ 4,888.95	\$ 1,443.45
\$ 1,200.00	2693.598	\$ 1,799.71	\$ 2,429.34	\$ 1,918.12	
\$ -	1583.912	\$ 1,522.28	\$ 2,468.58	\$ 1,564.35	\$ 1,379.70
\$ -	199.14	\$ 71.52	\$ 986.11	\$ 549.78	\$ 9.00
\$ 9.50	186.25	\$ 776.05	\$ 194.25	\$ 25.70	
\$ 45.25	251.49	\$ 867.93	\$ 10.25	\$ -	
			\$ 880.06	\$ 19.90	
\$ 16.77	17.06	\$ 197.79	\$ 71.81	\$ 0.60	
\$ 70.00	90	\$ 48.00	\$ 35.79	\$ 51.80	
\$ 1,341.52	\$ 5,021.45	\$ 5,283.28	\$ 7,076.19	\$ 4,130.26	\$ 1,388.70
\$ 239.44	\$ 638.61	\$ 627.50	\$ 685.15	\$ 758.69	\$ 54.75
	6827	15658	6547	6784	12669
	86	360	1133	0	127.55
	1335	467	209.2	0	109
\$ 0.182	\$ 0.195	\$ 0.448	\$ 0.388	\$ 0.152	

Wireless Savings Example – One Quarter



Carrier	Average # Phones	Average Monthly Invoice	Estimated Savings	% of Monthly Invoice
Team Share Pool	2,798	\$ 152,394.04	\$ 58,499.54	26.2%
Nat'l Business Pool	987	\$ 71,119.59	\$ 25,337.62	11.3%
Rate Plan SubTotal	3,785	\$ 223,513.63	\$ 83,837.16	37.5%
Terminations	217		\$ 3,686.83	1.6%
Total	3,785	\$ 223,513.63	\$ 87,523.99	39.2%
Estimated Annual Savings			\$ 1,050,287.80	

Wireless Savings Areas



- Audit for charges inconsistent w/ Contract Discounts, cancellation penalties, equipment, activation fees, shipping, etc
- Plan Minutes vs peak usage
- Data usage
- Zero usage
- International voice and data
- Text messaging plans

Wireless Gotchas



- Excessive Text Messaging
- Inappropriate charges for ring tones and ring back tones and games (non business use)
- Unnecessary International roaming charges for calls made by the employee in a foreign corporate office

Mobile/Cellular Mistakes



- Users do not use average of 80%+ usage on plans
- Some think that everyone should be on same plan
- No International is considered
 - Including wireless PC access cost/minute if at International office
 - Aircard data costs are growing exponentially
- Text messaging – not considered in pricing plan
- No benchmarking – compare with others for baseline purposes

Mobile Cellular Contract Points



- Review contracts for what is included, not included
 - Bundling
 - Rate plans
 - Phone costs
 - Text messaging
 - Data wireless
- Auto renew excluded
 - Add 90 days beyond contract period
- Direct carrier towards plan(s) you want to be on
- Do NOT allow carrier to remove Act of 1934 clause allowing audit refund > 3 months

Call Accounting/TEM Add-Ins



- Call Accounting data
- **Wireless devices and usage**
- Calling Cards
- Conference Calling
- Any other usage sensitive data where active management leads to reduced costs

FMC Points - Fixed Mobile Convergence (FMC)



- A converged telecommunications service consisting of wireless, wireline and/or cable services
- Allows subscribers to use dual-mode cell phones in order to access a common service via cellular and WiFi access networks in
 - Home
 - Enterprise
 - HotSpots

FMC Points - Fixed Mobile Convergence (FMC)



- Projection
 - U.S. cellular operators are headed toward a loss of \$3.3 billion a year by 2011 because of FMC
 - FMC being evaluated cautiously by cellular operators because of uncertainty over the technology's impact on their business
- FACT
 - Mobile Data Security/Cellular operators in the US
 - Need to gain a market share of 61% in FMC by 2011 to balance the impact of FMC on their revenue
 - United Kingdom 63% by the year 2011

IRS Points



- IRS is starting to take the position that personal use of company cell phones
 - Should be taxed to the employee as compensation
 - Employers would be responsible for federal withholding
- The IRS is reportedly
 - Treating employer-provided cell phones as a working-condition fringe benefit
 - i.e., company cars, other

***ESTIMATED 30% OF
INDIVIDUAL CELL
USAGE IS PERSONAL***

IRS Points



News and guidance for end users on getting the best rates, services and equipment

This Issue...

- ▶ Tax Tips on Personal Calls..... 1
- ▶ How the Tax Code Treats Cell Phones .. 2
- ▶ 6 Ways to Keep the IRS at Bay..... 2

More Bookkeeping for Voice Pros

IRS Cracks Down on Personal Cell Phone Use

Industry watchers say the IRS has begun auditing companies that don't separate business from personal cell phone use when they write off their deductions. The IRS has not made any policy rulings or changes in that area of the tax code, says John Lipold, an IRS spokesman. But stories from the field have already begun filtering in.

Consider Ron Babich, director of Phoenix-based consulting firm

IRS Compliance issues are creating a new headache

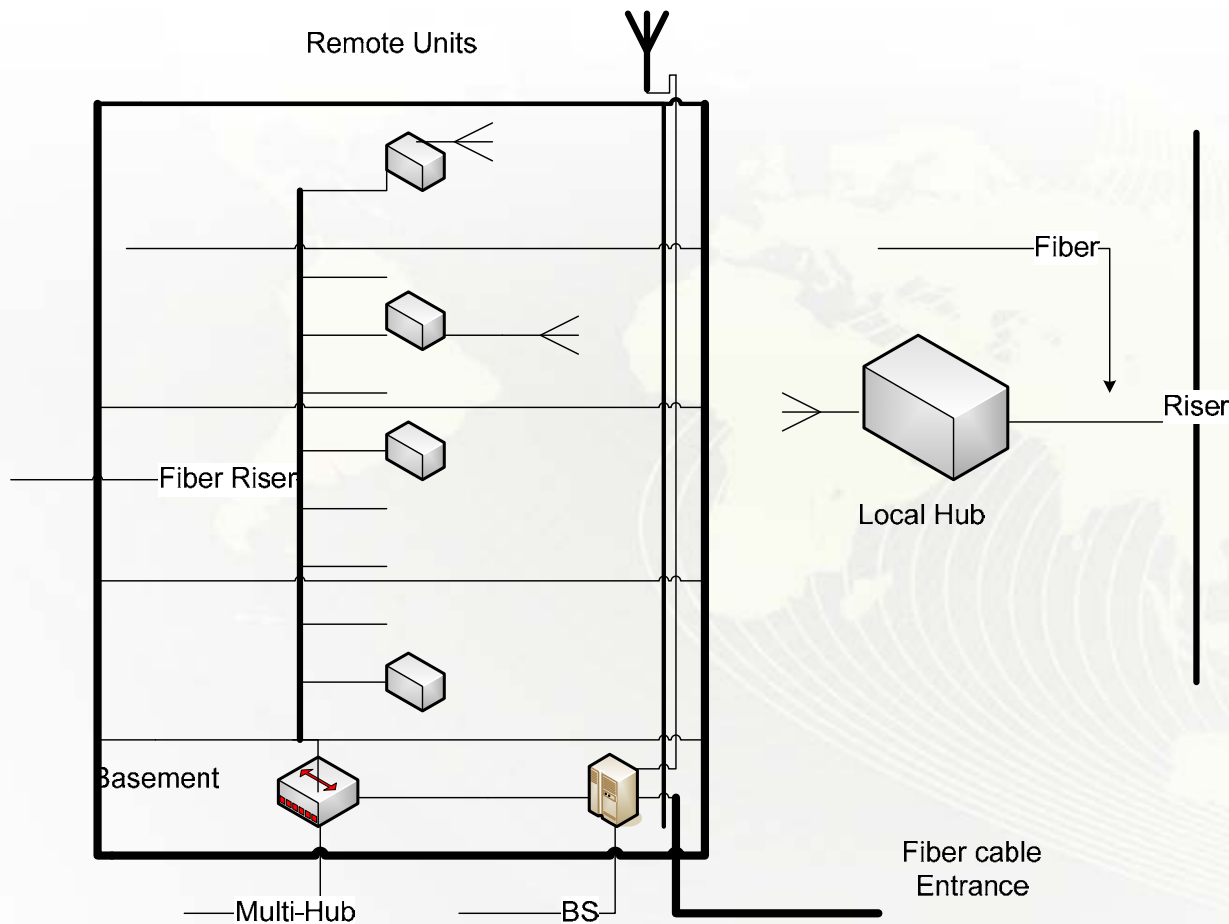
Source: The Voice Report

Indoor Antennas



- Available
 - Extending existing RF (private)
 - Extending new RF signal (carrier)
 - Each carrier must supply their own antenna
 - Distributed antenna systems also available

Distributed Antenna Systems (DAS)



- Active Distributed Antenna System-Negotiation must be done with cellular carriers
- The gateway is a Multi-hub

DAS Points



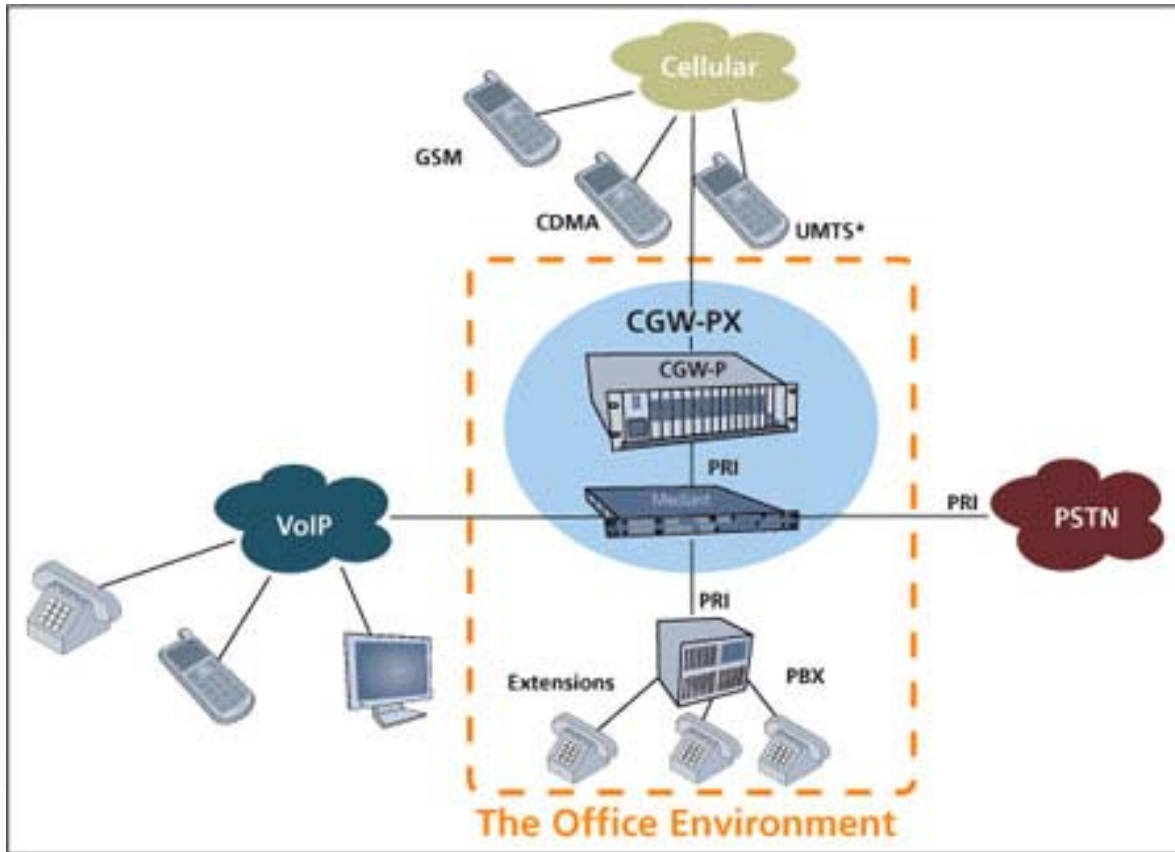
- DASs that are designed and available for use by multiple service providers
 - Commonly referred to as neutral host systems
- Goal - to achieve common coverage that results in capacity benefits to more than one provider
- A DAS processes signals via a single distribution backbone without a need to add a series of independent systems

DAS Points (2)



- Each carrier needs to provide only the head-end equipment to connect their macro network to the DAS system
 - Usually via a dedicated base station or a donor antenna/amplifier
 - A donor site
 - Not exclusively used for the DAS system
 - Provides service to areas outside of the DAS
- Cost/Benefit - Based on
 - In building coverage
 - One time and licensing costs from carriers
 - Promise of traffic and # of users
 - Individual case basis (ICB)

Cellular Gateways



- Economical alternative to PSTN call
- Calls originate from PBX to cellular gateway
- Example: ITS Telecom's cellular gateway yields an integrated solution for cellular, PSTN and VoIP



Questions?

Remember ...



**“Even if you’re on the right track,
you’ll get run over if you just sit
there.”**

- Will Rodgers