

1. Welcome

I'd like to thank the Georgia Tech Information Security Center and the College of Computing for the inviting us to join you this morning. My name is Mitch Gelman. I am executive producer of CNN.com and I am joined by my colleague, John Paris, the head of our wireless service product development.

It is always exciting to be among people who are on the cutting edge, people who walk around with a special smile, a knowing smile, the look of someone who knows that he or she sees what others have not yet recognized, or are just beginning to figure out.

Let me show you something. This is fascinating and we only recently realized it. Look at this chart. It reflects page views for CNN.com starting in 1996, the first full year of the Web site. Back then, we had about two-million page views on an average day. Today, that number has grown to about 40-million page views daily.

Now, we look at page views for CNN's wireless services, the pages delivered on cell phones and over PDAs. These are the numbers for 1999, and if you normalize and overlay them, the growth is almost identical to that of CNN.com.

Even the spikes are similar: Here you have the 1996 elections and, then, Monica Lewinsky, the Clinton impeachment and JFK Jr.'s plane crash; and here you have spikes for more recent events as they impacted our wireless traffic. If that pace continues, we are, maybe, six or seven years away from the similar uptake and impact to news distribution on wireless systems.

2. Atlanta:

Most of you are from Atlanta. Those of you who are visiting, welcome to town. This is the home to CNN, and a few blocks down, past the Varsity and across Centennial Olympic Park is CNN headquarters.

Down in the basement of CNN headquarters is the CNN.com newsroom. When Ted Turner bought the building, it had a movie theater in it. He called it the CNN Cinema Six and when he purchased the MGM library, which included *Gone With the Wind*, Ted, a proud southerner, committed that *Gone With the Wind* would play in downtown Atlanta now and forever. Until he realized that no one wanted to see *Gone With the Wind*, now and forever, even in Atlanta. So, the theater became a great place to see the worst of the D-run movies. *Lawnmower Man II* was among the highest quality films it showed. Others we have posters for. The floors were sticky. The popcorn was salty. Four years ago, we tore down the theater and created the CNN.com newsroom. I am hopeful that we found a better use for the space.

And, now, if you want to see *Gone With the Wind*, just download it to your video I-pod and take it with you wherever you go.

3. Wireless Society:

We do live in a wireless society.

Earlier this year, CNN.com published a special report on the Wireless Society that we inhabit. You see it everywhere you walk. I am from New York City, and it used to be that we were the only city in the country where people talked to themselves on the street. That still may be the case. But you can't tell. Everywhere I go these days, the streets are filled with people talking into little micro recorders attached to wireless headsets connected to cellular phones. You can't tell anymore: Who's closing a deal? Who's speaking to an imaginary friend?

You know we are living in a wireless society when the only thing that will make my 20 month old son stop crying is when you give him mommy's cell phone. He loves the buttons. The sounds. More fun than the car keys or the dog's toys. Kids aren't trying to stick their fingers in electric sockets anymore -- they're playing with the wireless high speed Internet router. We are at the dawn of the Wireless Age. Our children will inherit the mobility necessary to live in a world that is growing smaller every day and that has redefined the meaning of time and begun to erase the nearly Paleolithic limitations of space.

John will join me shortly to show you some of the things that CNN is doing to distribute news and information via wireless services, but I want to talk for a few minutes about how fascinating this is.

You saw the growth chart earlier. Here is another one that is indicative of where we are heading: It shows the number of WiFi hot spots in the United States increased by four times in '04. Any follow-up to that in '05 is still anecdotal, but hard to find a McDonalds, Starbucks or even corner coffee shop now that doesn't have wireless.

We are constantly connected at every moment, now to our e-mails, phone calls, even Word documents and Xcel spread sheets.

Wireless use has skyrocketed. About 71 percent of America's 108 million households own at least one cell phone, according to Forrester Research Inc.

More than 25 million households now own laptop computers. And 5.3 million households have wireless Internet access, up from zero a couple of years ago.

We live in world where rabbit ears and tuners have been replaced with extenders and adapters.

We are faced with new challenges in etiquette and law enforcement. The Miss Manners of today needs to tell us to turn our phones to vibrate when we go to dinner, and take it outside if we get a call we need to take. The new Wyatt Earp's and Elliott Ness's are behind the scenes, behind computer monitors, at the Federal Bureau of Investigation and in big city police forces. In fact, communication has never been more important or faster or more immediate. And how does it change our history? Our world?

4. Global Reach

Our Wireless Society is global. Teenagers in Mexico text message each other from bright colored phones that hang from their necks. In Africa, a 45 year old farmer who used to need to find a pay phone to call the markets to price her fruit, now links up with customers and brokers from between her piles of watermelons in the market in the capital city of Nairobi.

And she is one of an estimated 100 million of the 900 million Africans who are wired. The uses are as varied as the continent. Cell phones are used to track the comings and goings of elephants, tracked through the bush and the jungle. Not counting the elephants, nearly 75 percent of African phone subscriptions were cell phones last year, according to the U.N.'s International Telecommunication Union.

Why in one of the poorest places in the world? Wireless Society is not affected by poor maintenance, natural disaster, civil unrest or theft of copper cables. It is an equalizer, a communication service that is not dependent on GNP, but can thrive in spite of it.

There is, of course the downside. One Togolese mother recently despaired that both her school-age daughters have cell phones. "I do not know how they got

them. I do not mind," she says. "But the persistent noisemaking, constant ringing, has become a nuisance."

And if this mother is annoyed now because of the constant ringing, imagine her dismay when her daughters begin receiving "inappropriate" content on their mobile phones via pornographic spam, images or video streams.

5. The New Etiquette

The new etiquette is part of the way the world is changing in a Wireless Society. And, perhaps one of the co-authors of "The Etiquette Grrls: Things You Need to Be Told," has the best overarching advice: "Just because it's there at your disposal, doesn't mean you have to use it 24/7."

But can we resist?

Possibly not.

It's changed the way we do our chores on Sunday: Nextel commercial clip.

It's parceled public space – parks, restaurants, planes and trains – into what Lew Friedland, a communications professor at the University of Wisconsin-Madison, notes are a series of "small, private spaces."

6. Newsgathering

There is no great mystery when it comes to reporting the news. When I was a street reporter covering cops in New York City, the goal was to get to the scene and call back in to the rewrite person what you saw and heard. We used pay phones back then. A pocketful of quarters or an updated calling card was as important a tool of the trade as a press pass and a reporter's notebook.

Now, we use satellite phones and digital newsgathering kits to file from around the world. And sometimes, when cell phones are not working, like in the recent hurricanes, we can still report the news via other devices. When Katrina hit New Orleans, CNN correspondents used Blackberry's to get information back to the desk. And during Hurricane Rita, one correspondent stood on the levees in Galveston, Texas and filed to CNN.com for our hurricane blog.

During the London subway terror attacks in July, the first video was taken by "citizen journalists" – people who happened to be on the train and armed with digital cameras on their cell phones.

Earlier this week, CNN Presents showed videos of executions and beatings in North Korea. Many of these horrific images were captured using digital recording technology.

The new Zapruder is out there, today, and she is carrying a cell phone.

The new distribution of news is also viable in short formats, and wireless devices. The New York Times wrote a story recently that noted that Arab leaders were learning of the latest terror attacks on breaking news alerts from their cell phones. More than two million people learned from a CNN breaking news alert that the governor of New Jersey was proud to be a gay American. And if all you had was a cell phone, during the first days of Katrina, you would have stayed on top of all key developments through the alerts that were sent out from CNN.com's news desk.

(Show on the screen the list of alerts from that week)

7. What is CNN Doing in This Area?

My colleague John Paris, manager of our wireless product development, will share with you some of the things that CNN is doing in wireless news and information.

(John Paris)

CNN Wireless

- First mobile news and information service to be available globally with pan-regional content
- Available today in over 30 countries through 50+ operators to some 400M wireless data subscribers
- Available to 150 M U.S. wireless data subscribers through Cingular, Sprint/Nextel, T-Mobile and Verizon Wireless
- Serving over 65 M page views a month worldwide (50 M in the U.S.), nearly 6% of CNN.com total traffic
- CNN Wireless traffic grew by nearly 50% in 2004

<NEXT SLIDE>

CNN Text Messaging

CNN Wireless first launched in February 1999 as a Text Messaging Service

<NEXT SLIDE>

CNN WAP 1.0

A navigable browser Wireless Web Service (WAP) was launched in August 1999

<NEXT SLIDE>

CNN WAP 2.0

A WAP 2.0 service featuring full-color graphics and images was launched in August 2002

<NEXT SLIDE>

CNN Java Application

A CNN Java downloadable J2ME application was launched in March 2003

<NEXT SLIDE>

CNN Multimedia

In August 2004, a VOD service was launched featuring Now in the News, CNNRadio and approx. 30 CNN NewsPass clips daily

<NEXT SLIDE>

Crossfire slide

In 2003 in the lead-up to the War in Iraq, CNN capitalized on its wireless-savvy audience by embarking on its first SMS vote campaign on Crossfire, as well as with the MTV Generation in the Rock the Vote Democratic Presidential Debate of November 2003.

For these types of campaigns, the initial call to action appeared either on TV or the web, mostly so accusations of SMS spamming could not be made. As you may note in the above screenshot from Crossfire, the viewer is called to dial '2662' on their mobile phone to log their vote for whether or not Iraq should open its borders to U.N. Inspectors.

<NEXT SLIDE>

Two Way Messaging

Once the viewer dialed that number on their mobile, this is what they would see. Since they followed the call-to-action, this clearly is a *solicited* text message.

From the start, operators have tightly controlled those text messaging gateways – and enforced very similar policies we employ for unsolicited email. Text messages are a great business model for operators—that’s why the operators are so protective of the application because users have the power to simply cancel that service if it becomes annoying. Operators’ worries increase as wireless services cross the chasm from annoying to insecure.

<NEXT SLIDE>

CNN Wireless: The Future? (Slide 1)

For our existing wireless news products, we basically began reformatting websites and shoehorning them into phones. Whereas we are beginning to see the medium maturing. The above prototype is developed from the ground up with a presentation designed specifically for the medium. Consumption patterns on mobile are very different from the web, and we finally have enough history to accumulate some data. Mobile users are looking for a quick gulp, and here we show a quick synopsis of the story. We can’t just give wireless users MORE. We must give them immediate delivery of information they can choose and digest.

<NEXT SLIDE>

CNN Wireless: The Future? (Slide 2)

The future of the technology also lies in the convergence of multiple forms of delivery. We are still just beginning to see the convergence like we have on the web with seamless merging of video, images and text. The same can be said of the move to mobile. From a security standpoint, this is really just another website for CNN.com; it’s just formatted differently. For us, the same security concerns apply and the same security precautions are put into place to protect against things like Denial-of-Service attacks so the service will stay up and running for its users.

(Back to Mitch Gelman)

8. The Market and the Need for Security

Is the market there? Yes.

Here are some recent findings of a study many of you may be familiar with. It's the Helsinki Study just completed. It looked at mobile TV and found that more than half of a pilot program's participants believed that mobile TV will become popular. The keys to it being accepted will be good content, easy usability, dependable performance – and the continued performance of the phone. Folks don't want to add new services at the expense of why they have a phone: to talk on.

Oh, and what was the content they said they wanted the most? 63-percent said they wanted news. Even more than cartoons and reality TV!

But what else is necessary to support the business models that will make this and other wireless services work? At least some assurance that information can travel safely across wireless networks. That financial information isn't compromised. That personal photographs will remain personal.

In short: Security.

In order to shift from the communication platform to the meaningful revenue, we need to get beyond the fear of providing personal information over our devices. We need to get beyond the fear that conducting commerce in a wireless environment is tantamount to "leaving your front door open."

There cannot be cost associated with convenience.

Who do you go to for insight on this issue? To the new ethical hackers. Former fugitive Kevin Mitnick has gone straight. He recently spoke to CNN.

And Richard Rushing, a wireless security expert with AirDefense, an Atlanta-based company specializing in wireless LAN security, also talked about this.

In separate interviews, they hit many of the same themes:

- There is ID-spoofing. That was how Paris Hilton's information became public.
- The vulnerability of working on sensitive information in working hot spots
- The fear of "evil twins" in which fake hotspots are set up by cyber crooks.

These are similar fears that we had for the Web in 1996, when people were afraid to provide credit cards online. These are solvable problems.

So, as Dean DeMillo has challenged all of you in his recent column in the Atlanta Journal-Constitution, use this Summit to "propose a plan of action for reining in the security risks of the wild, wireless world," I commend you on the work you have done to-date, and what incredible strides I am confident will be made in the near future.

And I look forward to the upcoming panel of wireless and security experts, which is the type of thinking critical to making our wireless society safe and secure.