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DEC 18 1997 December 18, 1997

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Ms. Magalie Roman Salas  
Secretary  
Federal Communications Commission  
1919 M Street, N.W., Room 222  
Washington, D.C. 20554

EX PARTE OR LATE FILED

Re: Notice of Ex Parte Communication;  
Broadband PCS C and F Block Installment  
Payment Restructuring; WT Docket No. 97-82

Dear Ms. Salas:

On behalf of NextWave Telecom Inc. ("NextWave" or "Company"), Mr. James Madsen, Mr. Michael Regan, and Ms. Charla Rath met December 17, 1997 with Walter Strack, Pieter van Leeuwen, Pamela Megna, and Cindi Schieber of the Wireless Telecommunications Bureau to discuss wireless market conditions. The presentation made by the Company's representatives is reflected in the attached materials, which were distributed at the meeting. Although the merits of issues in the above-captioned proceeding were not discussed, the Company respectfully requests that the attached materials be added to the record of the proceeding.

NextWave Wireless Inc.

In accordance with the Commission's rules, an original and two copies of this letter and attachment are being filed today. Please direct any questions concerning this matter to me, at 202-347-2771.

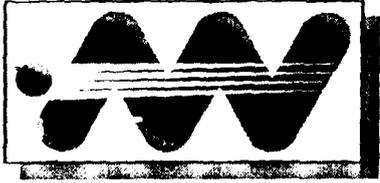
Sincerely,

Michael R. Wack  
Vice President, Regulation

cc: Walter Strack (w/o attachment)  
Pieter van Leeuwen (w/o attachment)  
Pamela Megna (w/o attachment)  
Cindi Schieber (w/o attachment)

Attachment

072

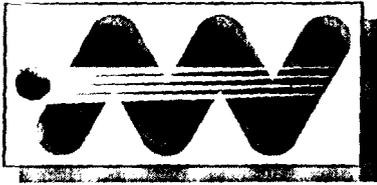


# **Telecommunications Briefing**

**Washington DC  
December 1997**

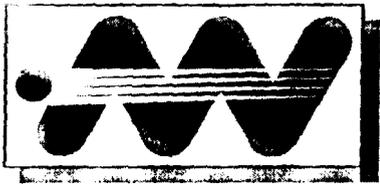
**James Madsen**  
Co-founder & Senior Vice President  
*NextWave* Telecom Inc.  
[jmadsen@nextwavetel.com](mailto:jmadsen@nextwavetel.com)

[www.nextwavetel.com](http://www.nextwavetel.com)



# Key Messages

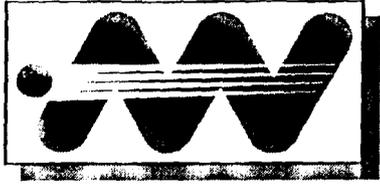
- **Lessons from the Computer Industry**
- **Interesting Changes in Telecom Landscape**
- **CDMA as a Competitive Weapon**
- ***NextWave* , a 21st Century Business Model**



# **Information is Exploding**

- **A weekday of *The New York Times* contains more information than the average person was likely to come across in a lifetime during 17th-century England**
- **There has been more information produced in the last 30 years than during the previous 5,000.**
- **The information supply available to us today doubles every 5 years.**

**- Richard Saul Wurman**



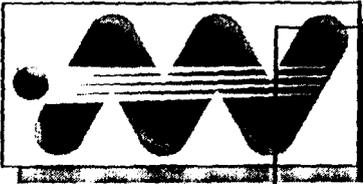
# A New Era

## 20th Century

- › Industrial Age
- › Molecules
- › Real Estate
- › Factories

## 21st Century

- › Information Age
- › Bits “1’s and 0’s”
- › Spectrum
- › Networks



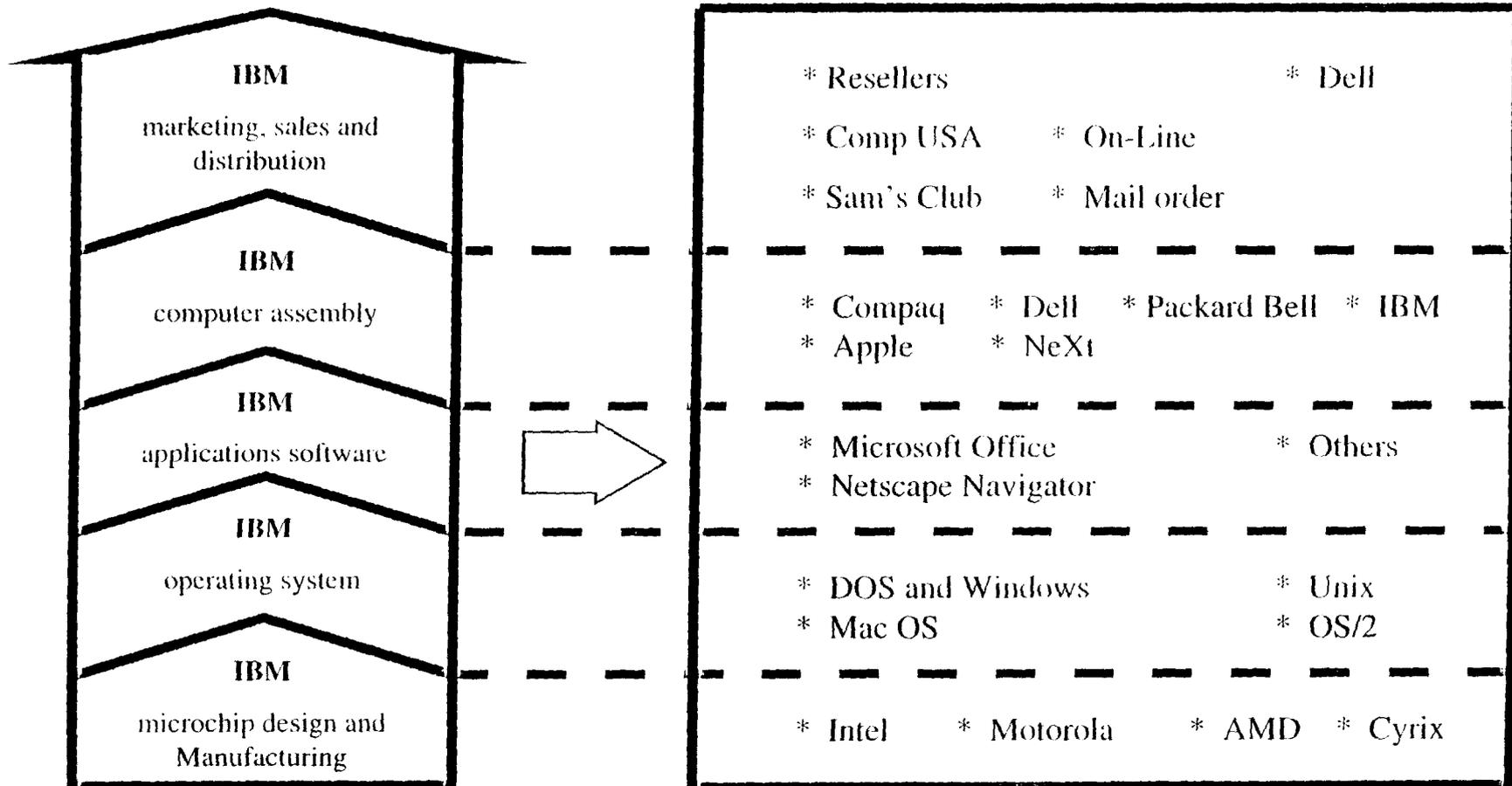
# The Computer Industry is the Harbinger for Telecom

**Vertical**

1985

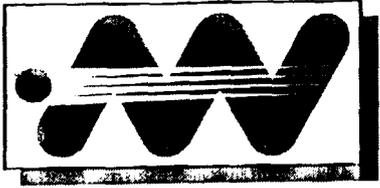
Today

**Horizontal**

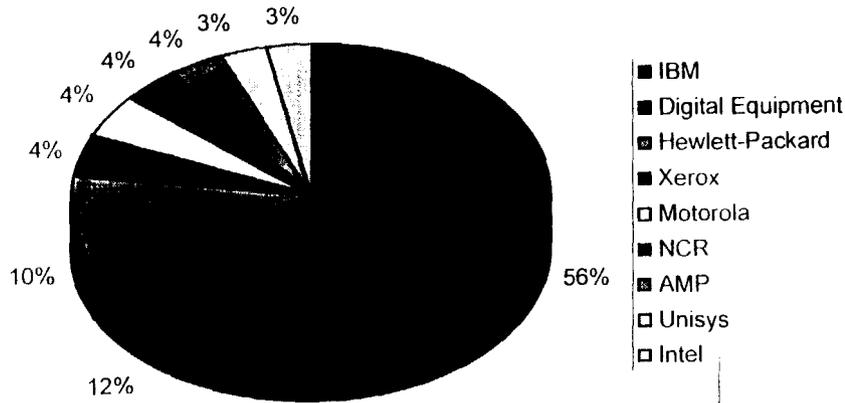


Source: The Boston Consulting Group

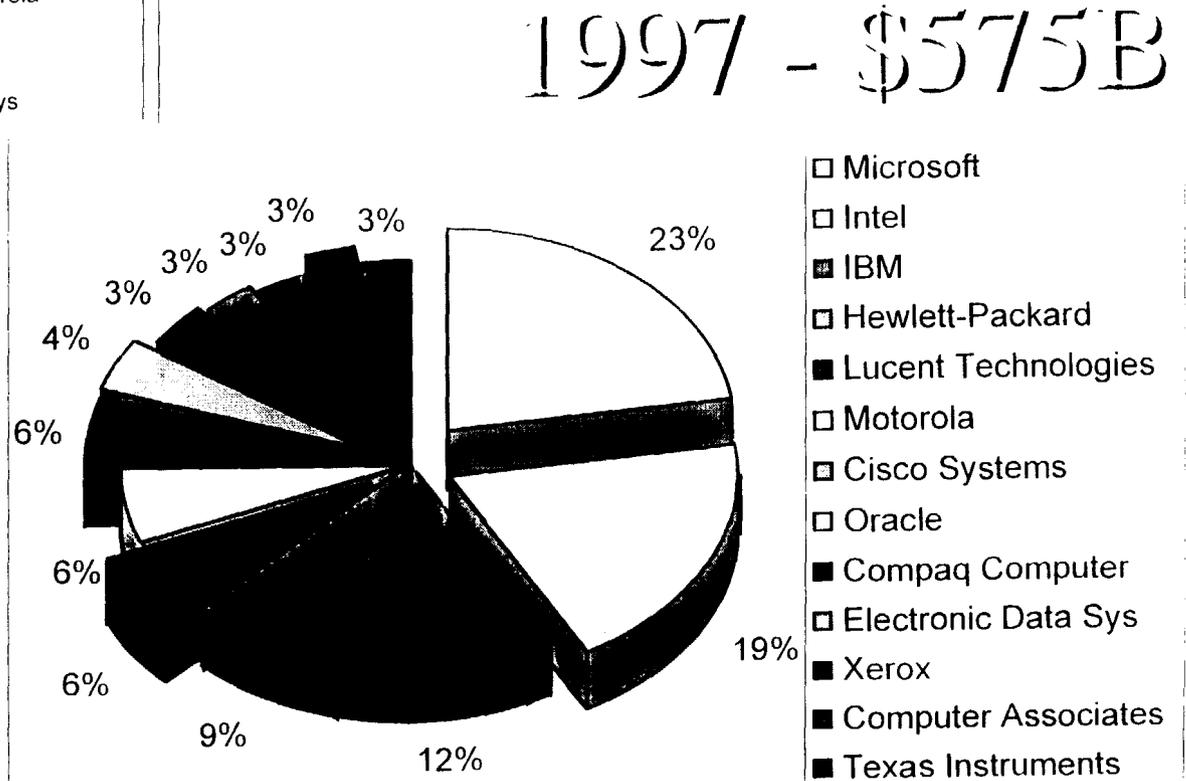
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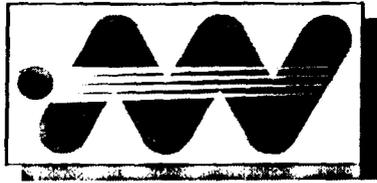
# \$300B+ Growth of Computer Industry Value has Come from New Entrants



1987 - \$245B

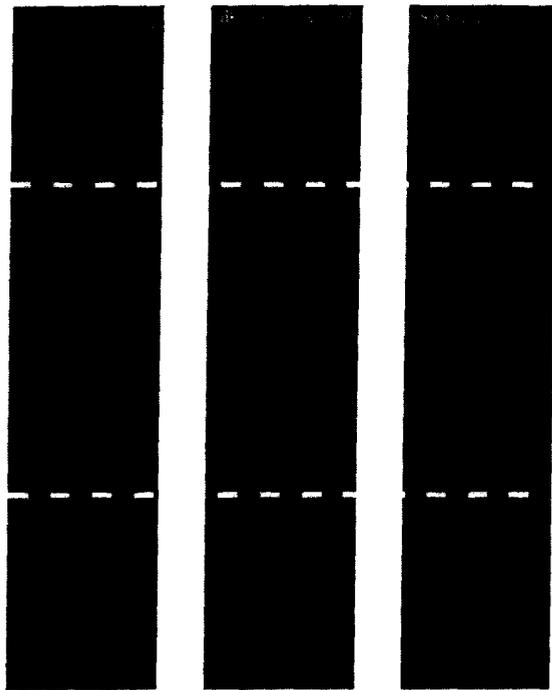


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# Sweeping Forces are reshaping Telecom...

## Vertical



1      2      3

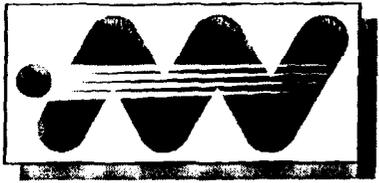
Telecom Providers

## Horizontal

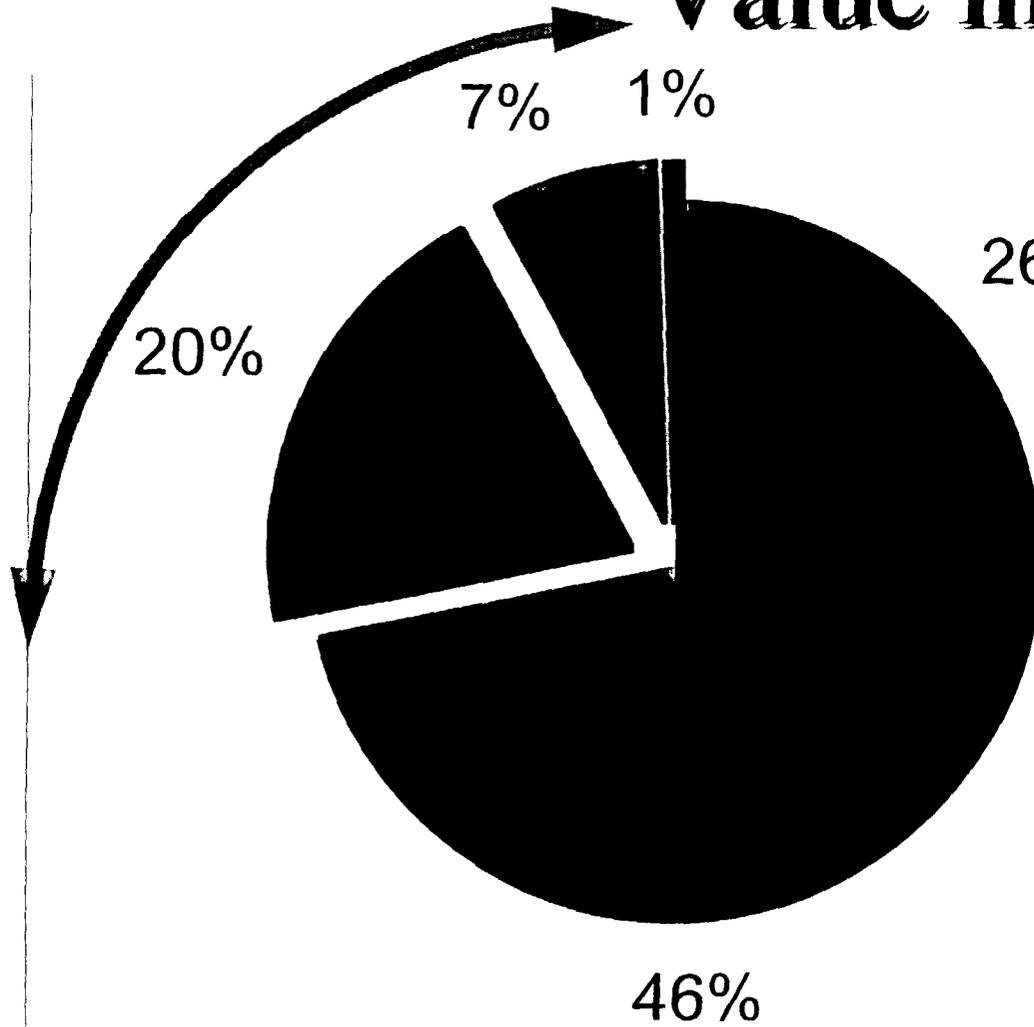
Retail	Agents MLM	Internet	VAR Retail
Applications/ Content/	Voice Recognition	GPS JAVA	AMR PointCast
Enhanced Services	Pre-pay	WIN	One-Number NC SMS
Network	 Paging Landline		

...& new value will be created

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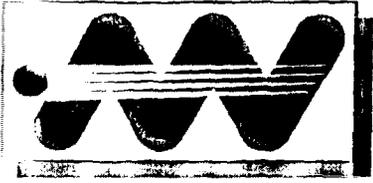


# Wireless in USA has created \$120B of New Shareholder Value in just 10 years

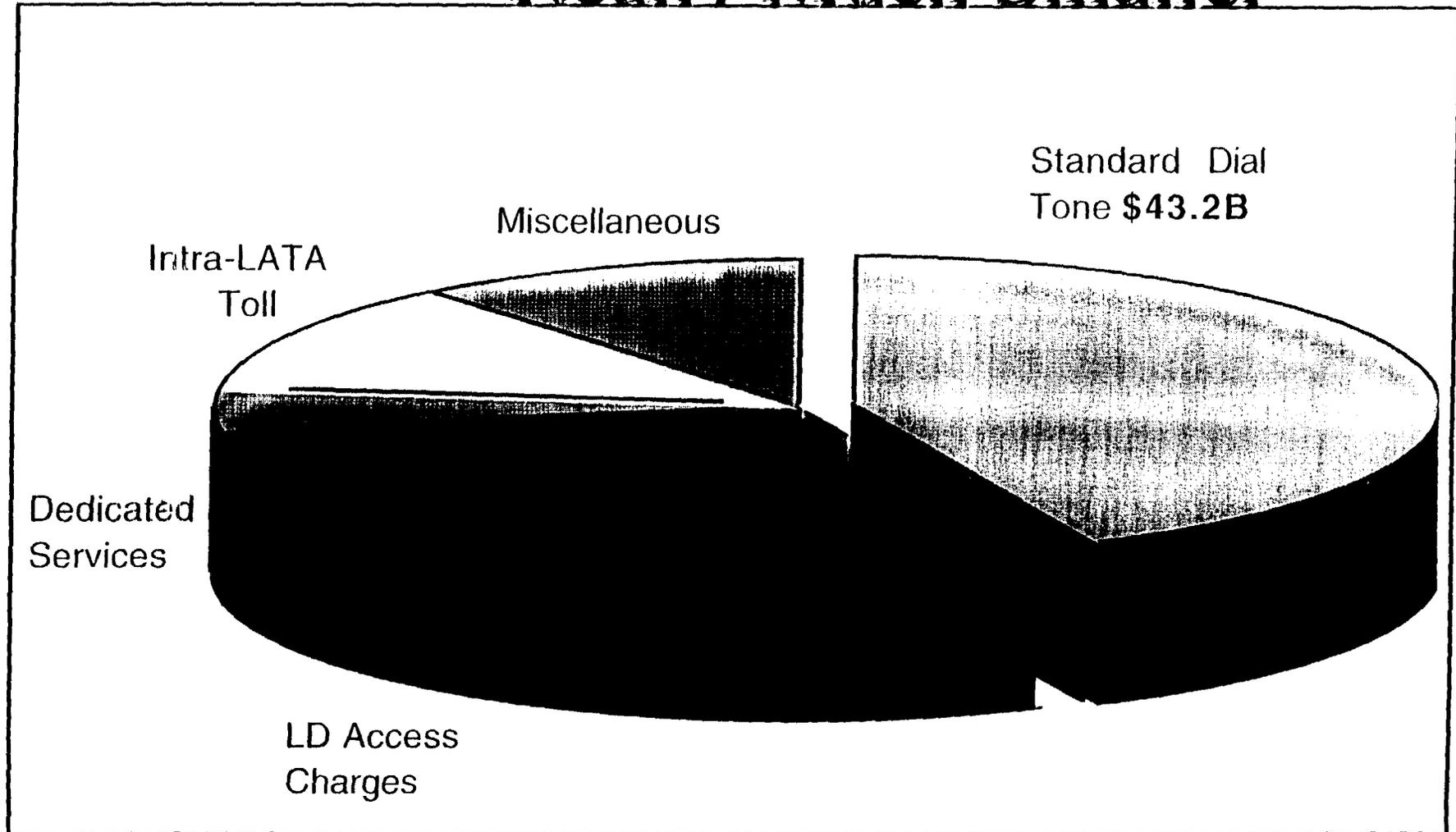


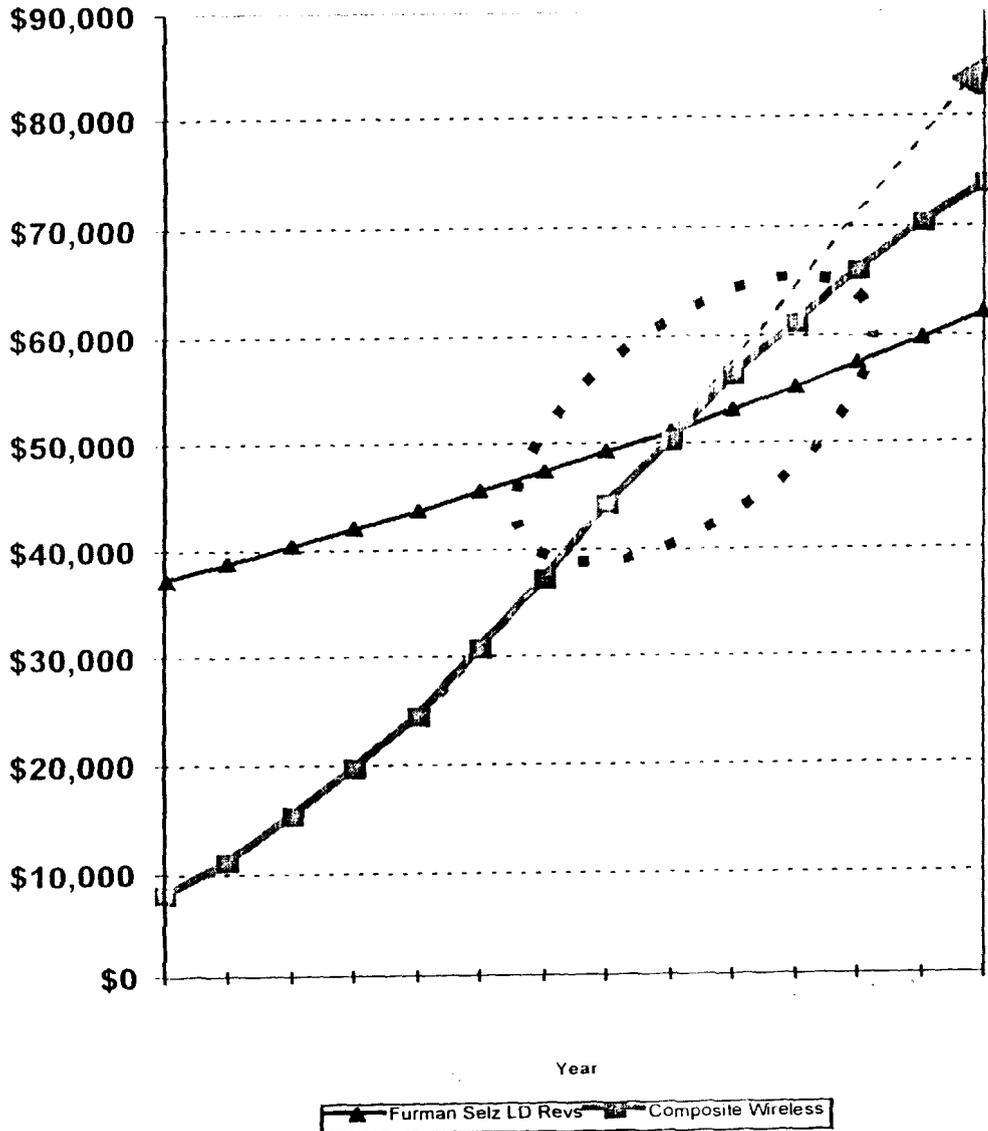
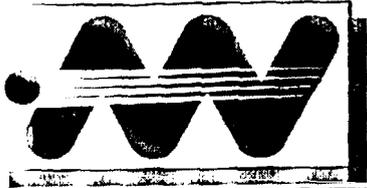
Total Telecom Industries Market Cap.  
(1996)

- Total LD Market Cap.
- Fixed
- Wireless Owned By Fixed
- Independent Wireless
- Paging



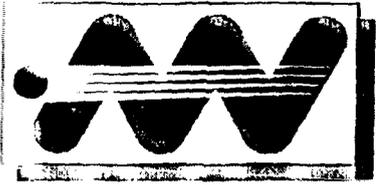
# The so-called \$100B Local Telephone Resale Business is Really Much Smaller





**Within 3  
years,  
Wireless  
revenue will  
pass Long  
Distance!**

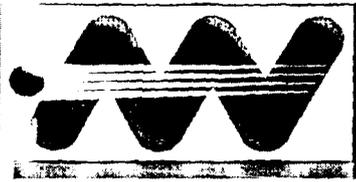
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# 1996 Significant Telecom Milestones

- ✓ **Other Long Distance carriers surpass AT&T's market share**
- ✓ **In 1996, for the first time, worldwide growth of new wireless lines equaled fixed lines, and**
- ✓ **In 1996, for the first time, absolute value of Wireless revenue growth surpassed fixed**
- ✓ **In 1996, Worldwide fixed service revenue grew <7%; for wireless, revenue growth was 43%**

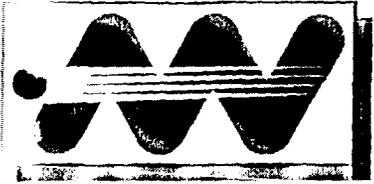
Source: ITU "World Telecommunications Development Report"



# A Fundamental Shortcoming

**After almost a full century of development  
and \$300 billion investment, the telephone  
still has a very fundamental shortcoming:**

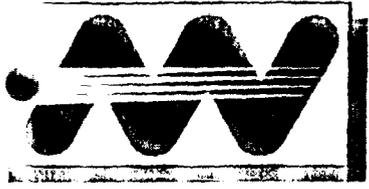
**Telephone wires don't move. People do.**



# The Exploding Wireless Market

<u>U.S. Industry</u>	<u>Years to 25M Customer</u>	<u>50M</u>
Landline Phones	68	77
Pagers	45	N.A.
Cable TV	31	N.A.
Radio	N.A.	34
TV	N.A.	24
Wireless	11	14

Yet even today, two-thirds of the world's population has never made a phone call.



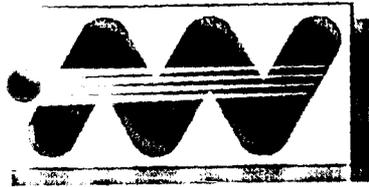
# Fixed & Wireless PCS

## Fixed

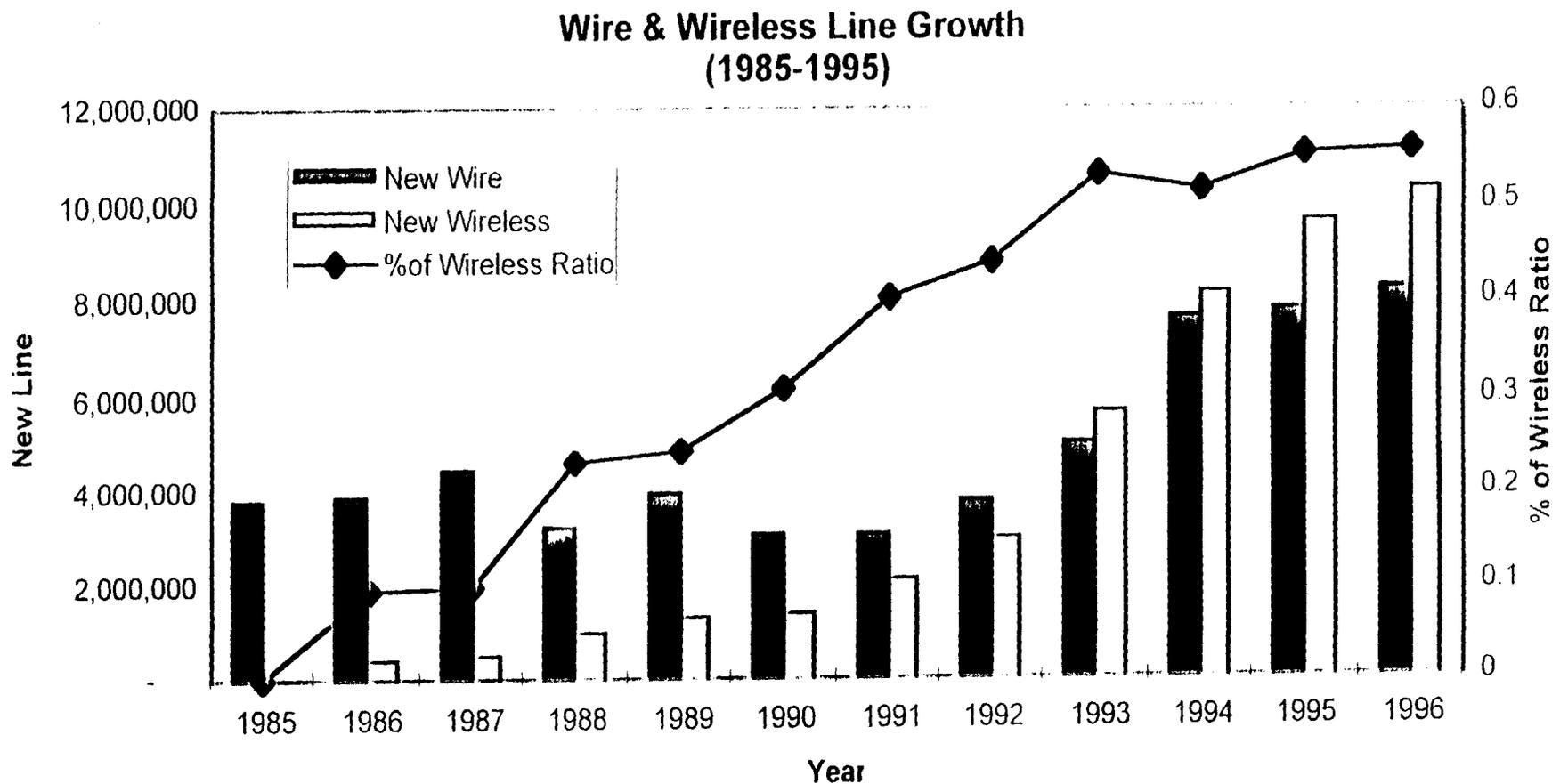
- Here yesterday
- monopoly
- inflexible
- \$1500/line + phone
- high maintenance
- Sexy Enhanced Service (3-way calling)

## PCS

- Coming today
- competition
- flexible
- \$500/line + phone
- much less maintenance
- Sexy Enhanced Service (on-line restaurant guide, personal voice mail, personal messaging)

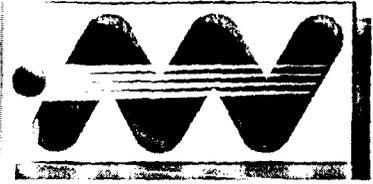


# New Wireless lines exceed Fixed for 5 straight Years!



Source: FCC & CTIA

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# Wireless

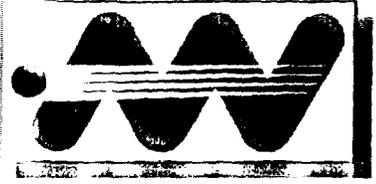
## -what was and will be-

### Analog Cellular

- › Analog
- › Expensive
- › Luxury
- › Complicated
- › Fraud, eavesdropping
- › Poor Quality Voice
- › Battery life in minutes
- › Regional

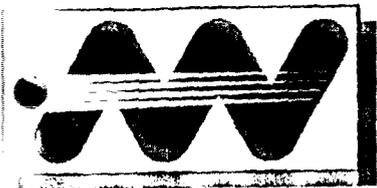
### Digital CDMA-based PCS

- › All digital
- › Affordable
- › Basic, essential
- › Easy to use
- › Secure
- › Clear Voice & much more
- › Battery life in days
- › National

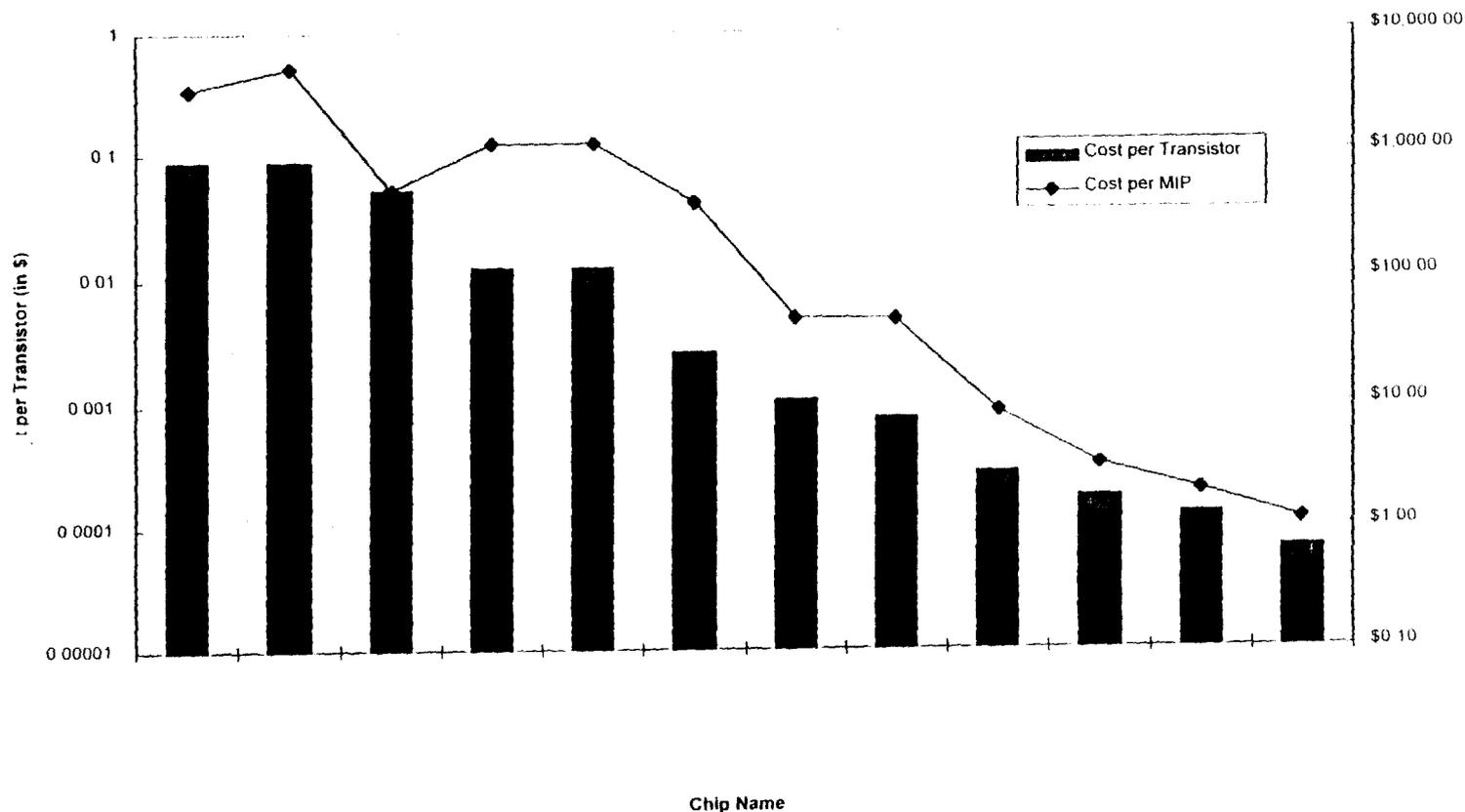


## Computers & Greeting Cards

- Let's say you're going to a party, so you pull out some pocket change and buy a little greeting card that plays "Happy Birthday" when it's opened. After the party, someone casually tosses the card into the trash, throwing away more computer power than existed in the *entire* world before 1950.

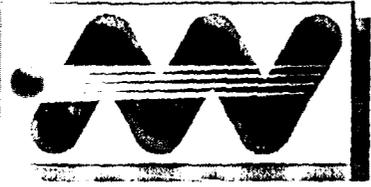


# Moore's Law, the cost of transistors and MIPs



Source: Intel Corp., Dataquest Inc.

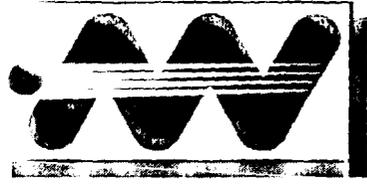
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## **Moore's Law for Cars**

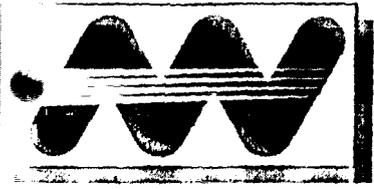
- **If we had similar progress in automotive technology, today you could buy a Lexus for about \$2. It would travel at the speed of sound, and go about 600 miles on a thimble of gas.**

**-John Naisbitt**



## Computers are now your CDMA Phone

- A CDMA PCS phone has more transistors than an Intel 486 computer. In 1989, would you have believed that your desktop computer in 1997 would weigh 140g., fit in your hip pocket, bring the Internet to you, and let you talk to anyone in the world...all for 5% of the cost of your 1989 desktop?
- In the coming 8 years, now imagine what the *next wave* of technologies is bringing!



# Technology as a Competitive Weapon

**“Choosing technology strategies is akin to taking a quantum leap. You’re standing on the precipice. If you don’t jump, you have to have faith and you have to be right. You have no choice but to anticipate change and make your bets.”**

**Eric Schmidt  
Chairman & CEO, Novell, Inc.  
Former CTO, Sun Microsystems**

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# NextWave Telecom Inc.

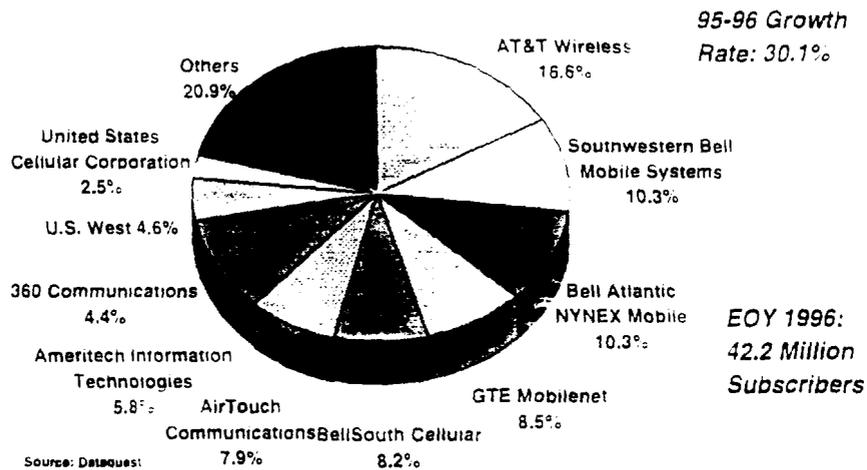
Founded in 1995 to take advantage of 4 Major Trends:

- › Unlike US Long Distance Industry in 1984, no Dominant Wireless Company in 1997
- › Wireless minutes, only 1.4% market share
- › USA an analog market
- › The marriage of wireless (ubiquitous access) with Internet (ubiquitous information)

[www.nextwavetel.com](http://www.nextwavetel.com)



## 1996 Wireless Service Market Share --No Dominant Player--

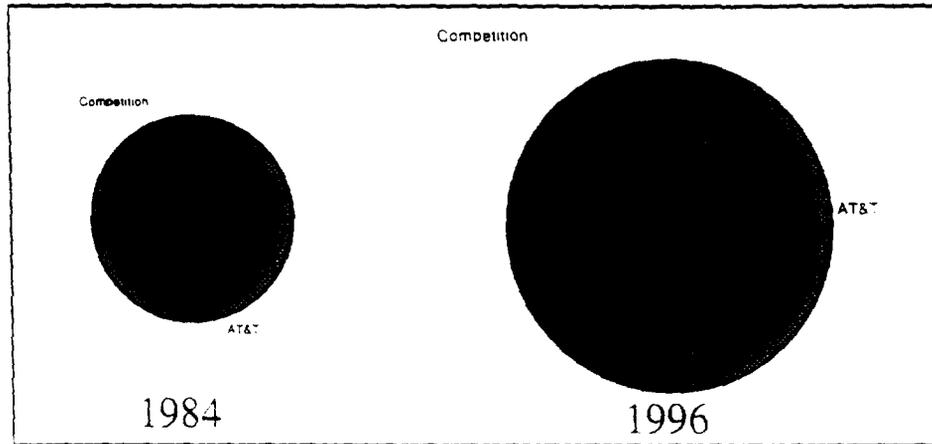


**Cellular Analog/digital 2-way wireless market dominated, available by cable, optical fiber**

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## Long Distance Incumbency did not Guarantee Success

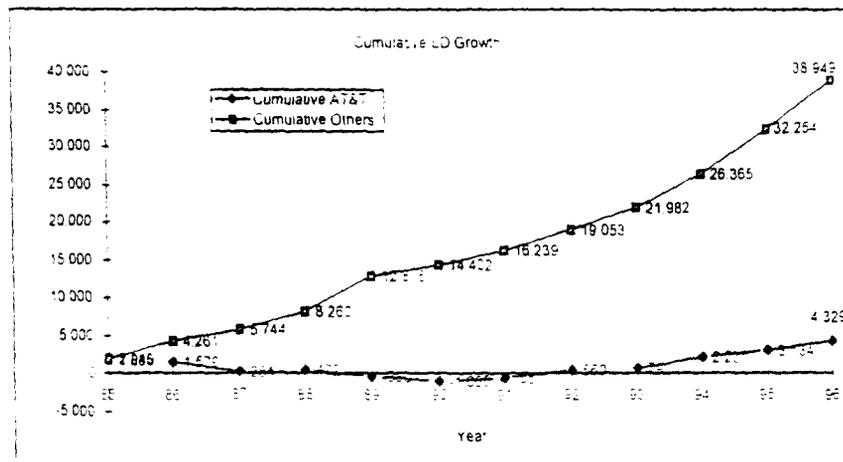


Areas correspond to revenue

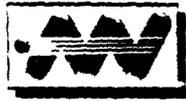
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## Benefits of Market Growth Accrue Disproportionately to New Market Entrants



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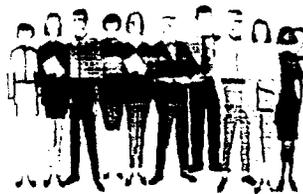
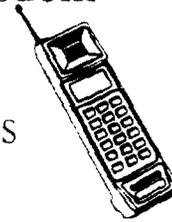


## US Wireless Market Today

21% Wireless Penetration  
is Conventional Wisdom

55 Million Phones  
for

262 Million People



[www.nextwavetel.com](http://www.nextwavetel.com)



Keep your eye upon the doughnut and  
not upon the hole!

**3.1 Trillion annual  
minutes of use**

-----  
**Wireless has less than 2%!!  
& Digital Wireless less  
than 1/2500**

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