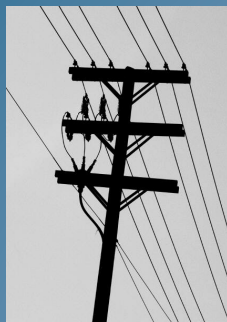
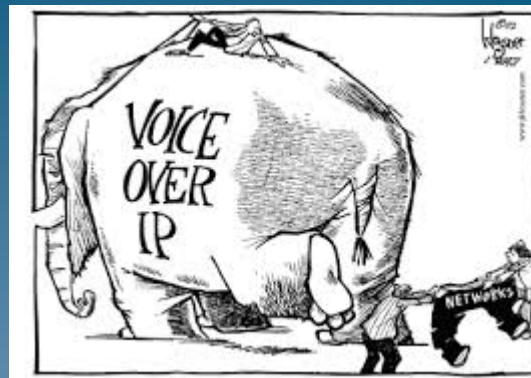




SCHOOLEY MITCHELL

Telecom 101

Presented by Mike Bartoli

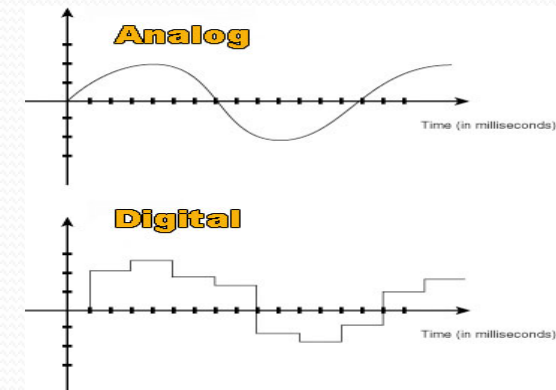
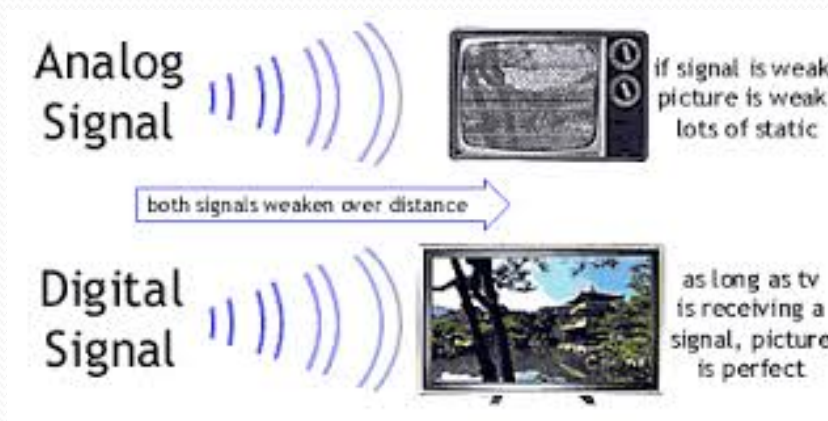


Introduction

- Mike Bartoli – Owner, Schooley Mitchell GA
- Schooley Mitchell
 - Telecom Optimization and Cost Reduction
 - Align needs with best solution at the best rates
 - Money – Time - **Knowledge** – Security
 - 80% = 35%
 - 28%

Analog vs. Digital

- Analog technologies create a signal on the wire that is analogous to the source (voice, fax)
- Digital translates information into binary format (zero or one) where each bit is representative of two distinct amplitudes.
- Analog is continuous waveforms, digital is discrete levels, (digits)



ANALOG Signal (POTS Lines)

What is it?

- Single pair of copper wires, 1 transmits, one receives
- Voice usually, but sometimes data (dial up web, fax)
- Sometimes mandated for alarms, fax, insurance
- Usually, long-distance charges are extra
- Since it is powered by phone company, it is immune to power outage
- Each POTS line or trunk can carry ONE voice call at a time



DIGITAL Signal (Cable, T1, Fiber,...)

What is it?

- High Speed (Broadband) data service
- Can be asymmetrical or symmetrical
- Can provide large bandwidth at competitive costs
- Reliable and scalable solution for data, voice, video
- Connecting the company LAN to the rest of the world
- Internet explosion

What Is VoIP?

- **V**oice **o**ver **I**nternet **P**rotocol (VoIP)
- Traditional phone system relies on phone lines connected to Public Switched Telephone Network (PSTN) on circuits operated by Private Branch Exchange (PBX)
- VoIP transmits your Voice over the Internet as data and requires a digital circuit
- VoIP is scalable, reliable, flexible, and cost effective

VoIP Adoption

- VoIP is growing in popularity year over year
- Some statistics:
 - In 2013 there were over 30 million business VoIP users
 - Industry expected to increase by 15.3% each year through 2017
 - Mobile VoIP users (cell phones, tablets) was 288 million at end of 2013 and projected to be 1 Billion by 2017.

Why Is It So Popular?

- Easy to install
- Can provide great cost savings
- Helps to improve Client Relationships with higher availability (Forwarding to wireless devices)
- It is a feature rich solution (Caller ID, Voice to text/email, Soft Phones, 3 way calling, configurable)
- Retain your existing business number when and if you move locations.
- Phones are portable. Plug IP phone in to any internet connection.

Why Is It So Popular?

- Single number reach – make and receive business calls through any device, wherever you are
- Mobile VoIP apps, allows for Mobile workers (work from home), able to forward calls to Mobile devices
- Low/No charge for Long Distance in US & Canada and low International Rates
- Low/No charge for features like Call Forwarding, Auto Attendant, 3 Way Calling
- Technology can be hosted – low capital expense

Tid-bits



Your Welcome!

- When determining amount of bandwidth use 100kb per phone call.
- Voice Spam is called SPIT (spam over internet telephony)
- The mob is in love with VoIP
- First VoIP call was made in? **1974**

a voice sample was sent between two computers over the secured network (ARPANET) by the researchers at Information Sciences Institute and Lincoln Lab.

VoIP Summary

- Voice over IP (VoIP) has rapidly become the communications medium of choice for today's businesses, small, medium, or large.
- VoIP is **reliable, scalable, customizable, and cost effective.**
- VoIP is just one of many options (not for everyone)
- How can a business determine if VoIP is the right solution for them?



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Thank You!

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