

# VOIP vs. POTS

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# Why VOIP Thinks it Wins

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- **Free is a darn good price**
  - We'll make up the profits on volume...
  - That \$50 broadband bill doesn't count
- **Our protocols can beat up your protocols**
  - It's the Internet, baby!
  - Those Bellhead engineers just don't get it
- **Regulatory arbitrage - it's a beautiful thing**
- **Consumers will throw money at all those sexy new applications and features**
  - Such as, er, ummm...

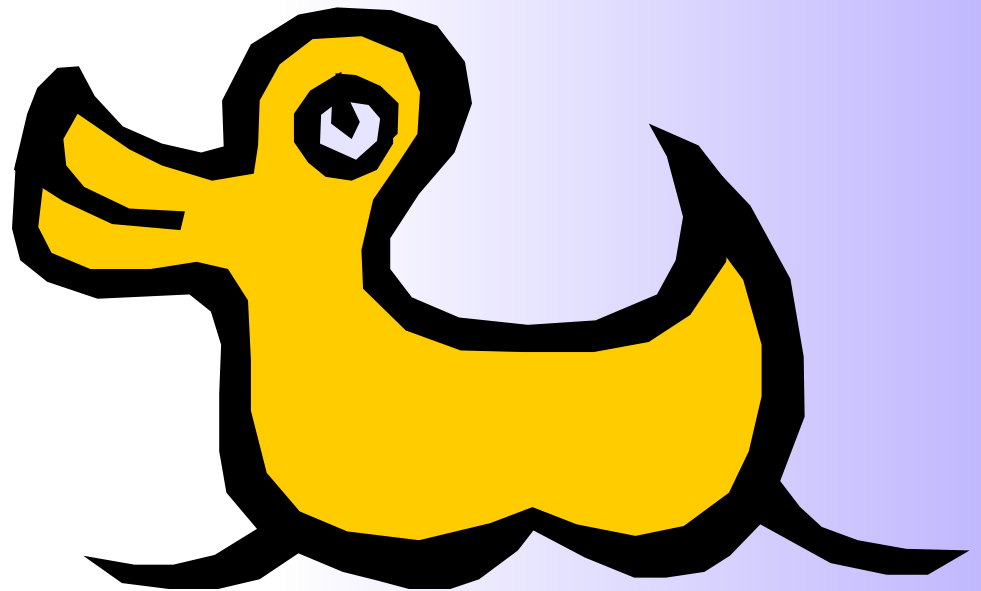
# Why POTS Thinks it Wins

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- **2 billion phone users can't be wrong**
  - 100+ years of network optimization
- **Transport is already close to free**
- **We have the power**
- **Carrier-grade services are hard!**
  - Scaling, reliability, interoperability, billing, security
- **We own the network... and the brand... and the cashflow... and the customers...**

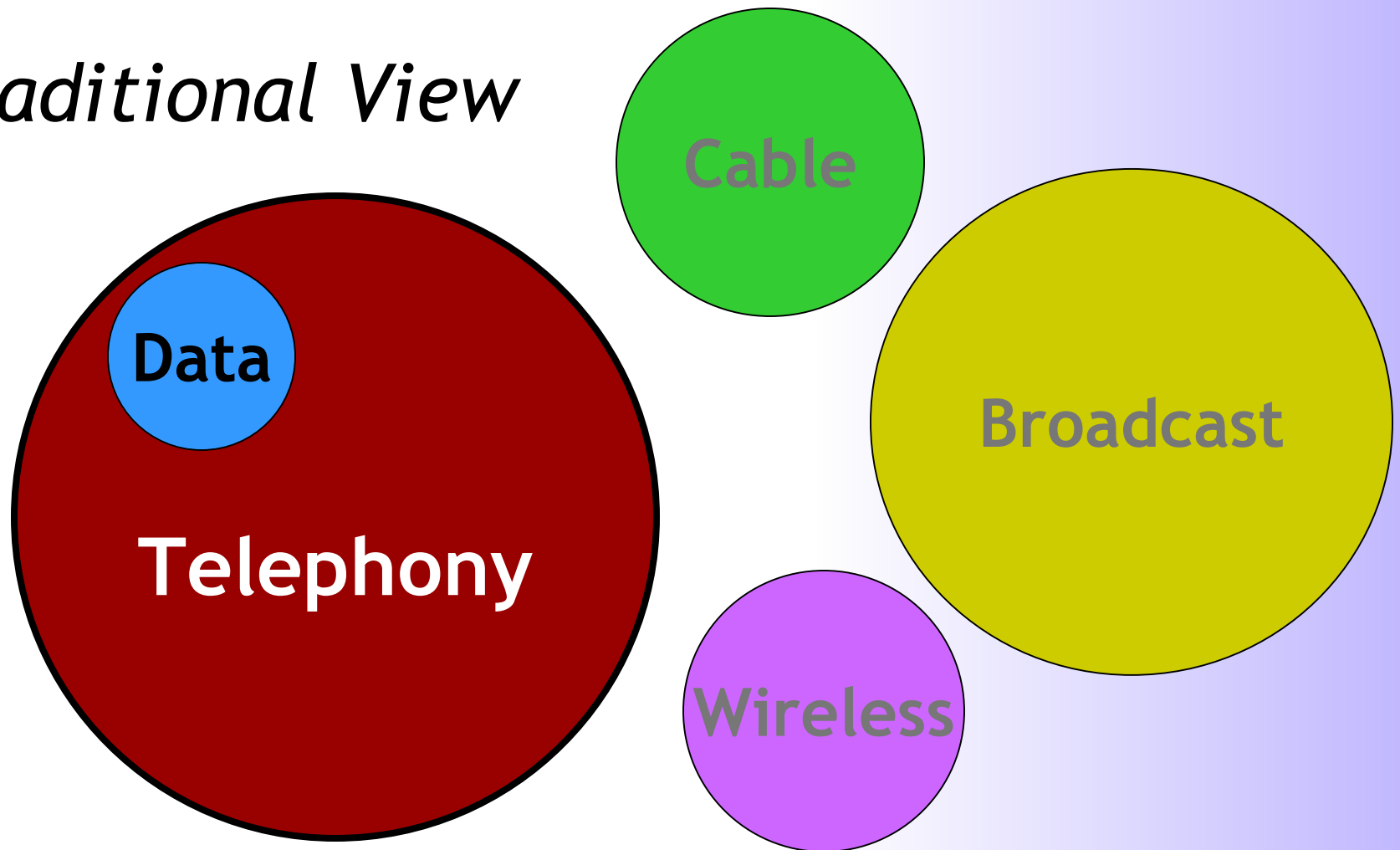
# What's Wrong With This Picture?

**QUACK!**



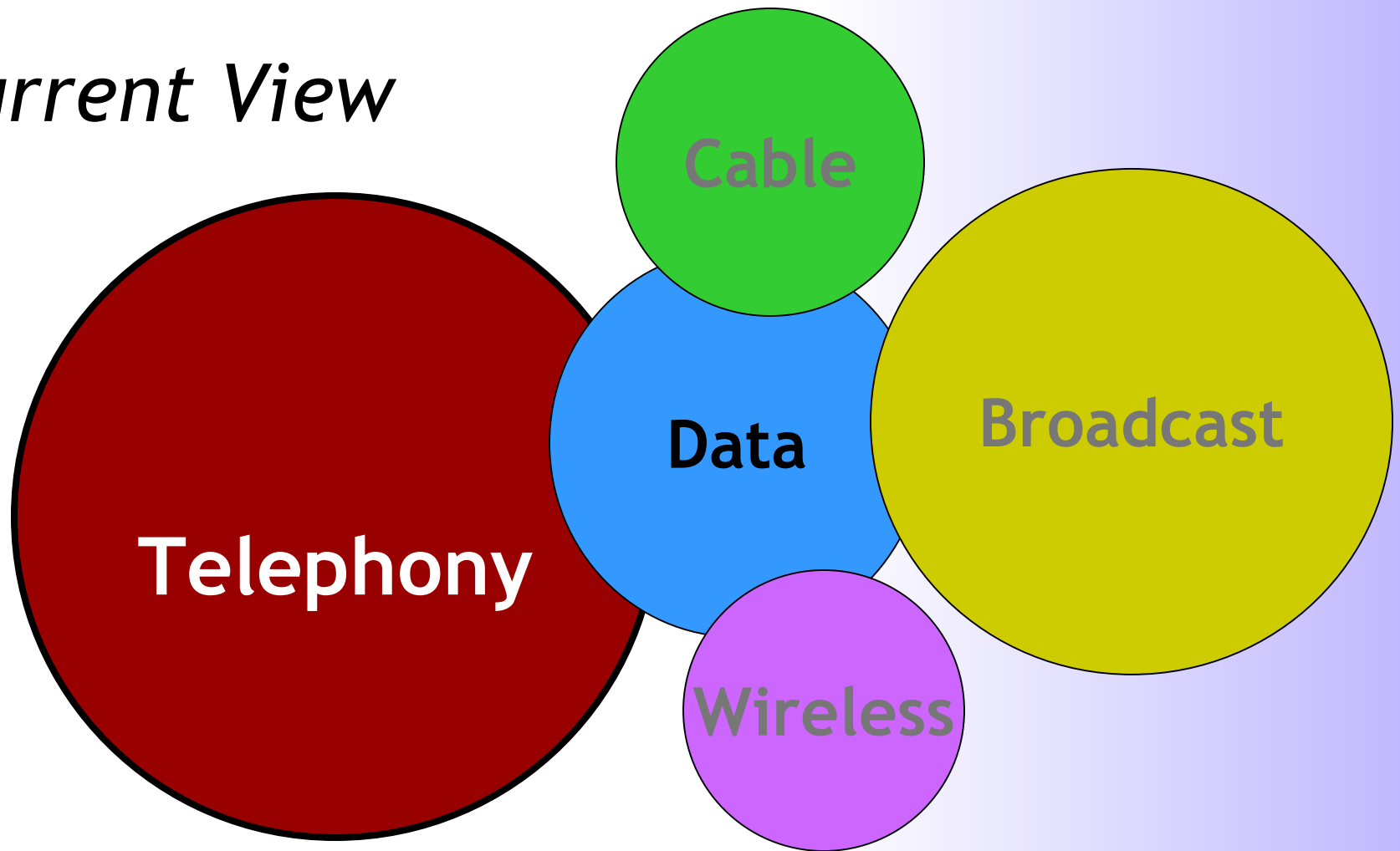
# A Change of Perspective

*Traditional View*



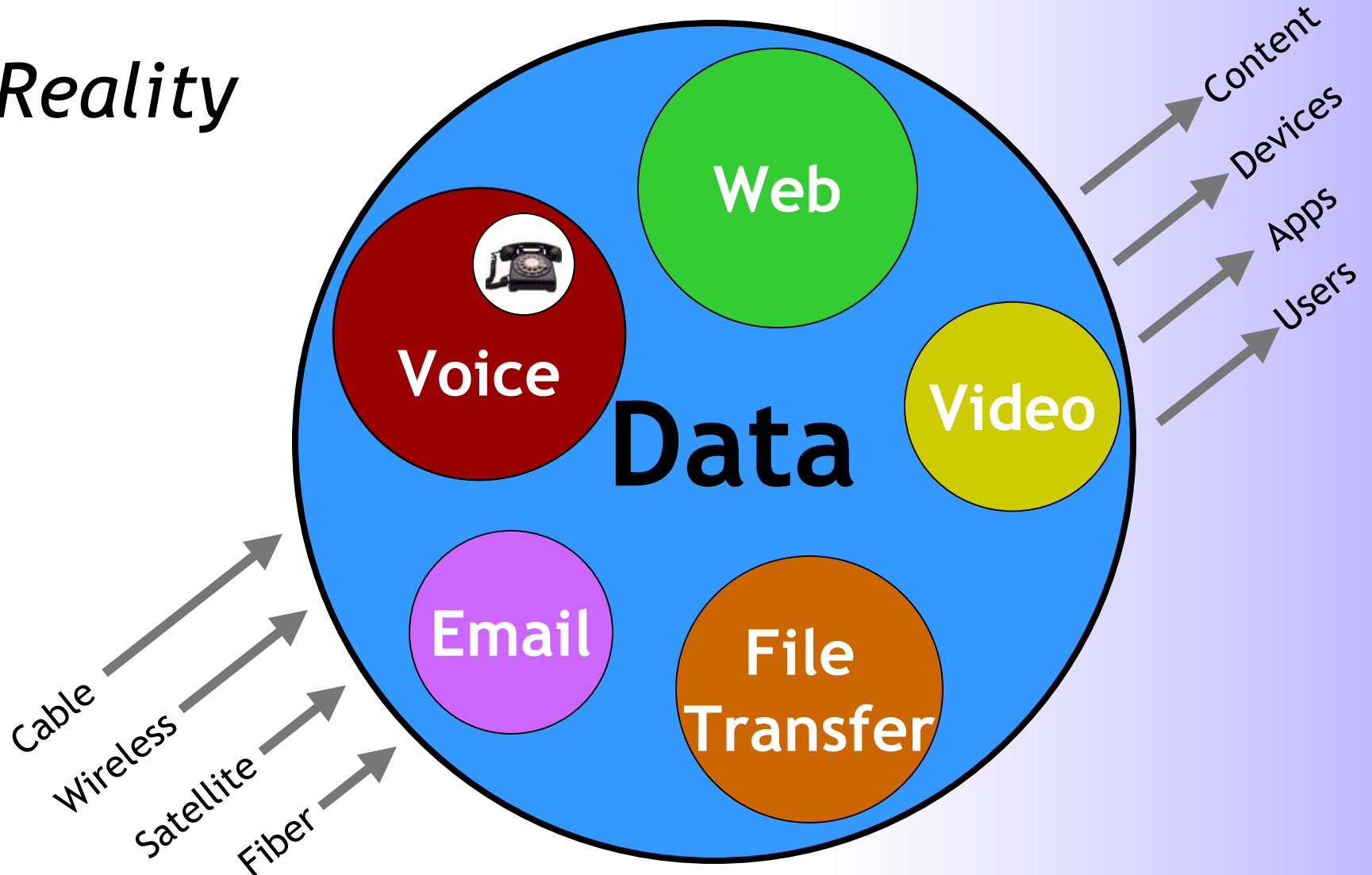
# A Change of Perspective

*Current View*



# A Change of Perspective

*Reality*



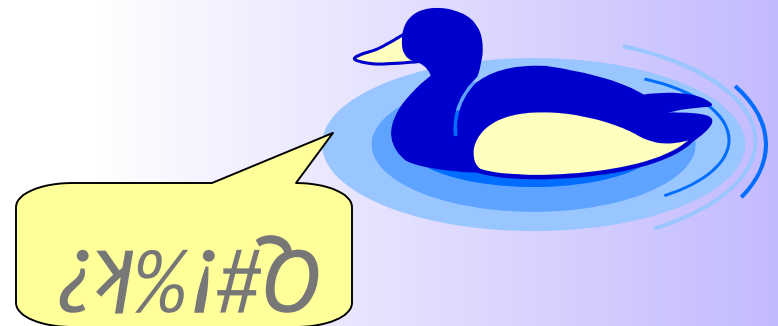
# IP is What Really Wins

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- **One platform for all digital communications**
  - Don't underestimate value of freedom from legacy
- **Leverages economies of open, standards-based development model**
  - Network equipment (Moore's Law)
  - End-user devices
  - Voice application software
- **Incentives and ability for edge innovation**
- **Breaks the regulatory camel's back?**

# Markets Turn Upside Down

- Consumer voice gradually migrates from a baseline service to a broadband application
- An increasing percentage of voice usage orthogonal to POTS
  - Online multiplayer gaming
  - Instant videoconferencing
  - Wireless push to talk
- VOIP vs. POTS becomes a distinction without a difference
  - The PSTN evolves into an IP network



# But...

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- **Who pays for the network?**
  - Can you say “stranded plant”?
- **How is addressing managed and regulated?**
  - Keep an eye on ENUM
- **Can the pipe owners restrict applications?**
- **Are we still getting ahead of ourselves?**
  - Significant usage shifts take time

# Quack You Very Much

- Email: [kevin@werbach.com](mailto:kevin@werbach.com)
- Blog: <http://werblog.com>
- Supernova 2004
  - June 24-25, Santa Clara, CA
  - <http://www.supernova2004.com/>

