

Trying to understand the nature of the evolving ICT world

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Telecom economics:

- worldwide telecom revenues: \$2,000 billion
- at \$1 per Mbps transit pricing, worldwide IP traffic: under \$10 billion
- worldwide ad spending: around \$500 billion

Collapse of traditional telecom cost structure:

- old Bell System estimate: 1/3 access, 1/3 switching, 1/3 long distance
- now: switching and long distance almost in the noise
- Amazon's cloud at \$17 B/yr could do all the switching for world telecom industry of \$2,000 B/yr
- giant CDNs and Cloud players building out networks almost to the edge

Truly highly capital intensive cases from history:

year	industry	revenues	growth	capex
1922	Bell System	\$547 M	11%	\$194 M
1857	UK railways	£24 M	9%	£10 M

Ratio of book value to revenues was over 3 for the Bell System in 1922, and over 13 for British railways in 1857.

Today's telecom: capex under 15% of revenues, some Wall Street analysts hoping cable can get down to 10%

The uncertain future:

- key action increasingly hidden in opaque clouds/networks
- those clouds likely to marginalize traditional networks
- saving graces: (i) connectivity, not content is king and (ii) value inversely proportional to volume