

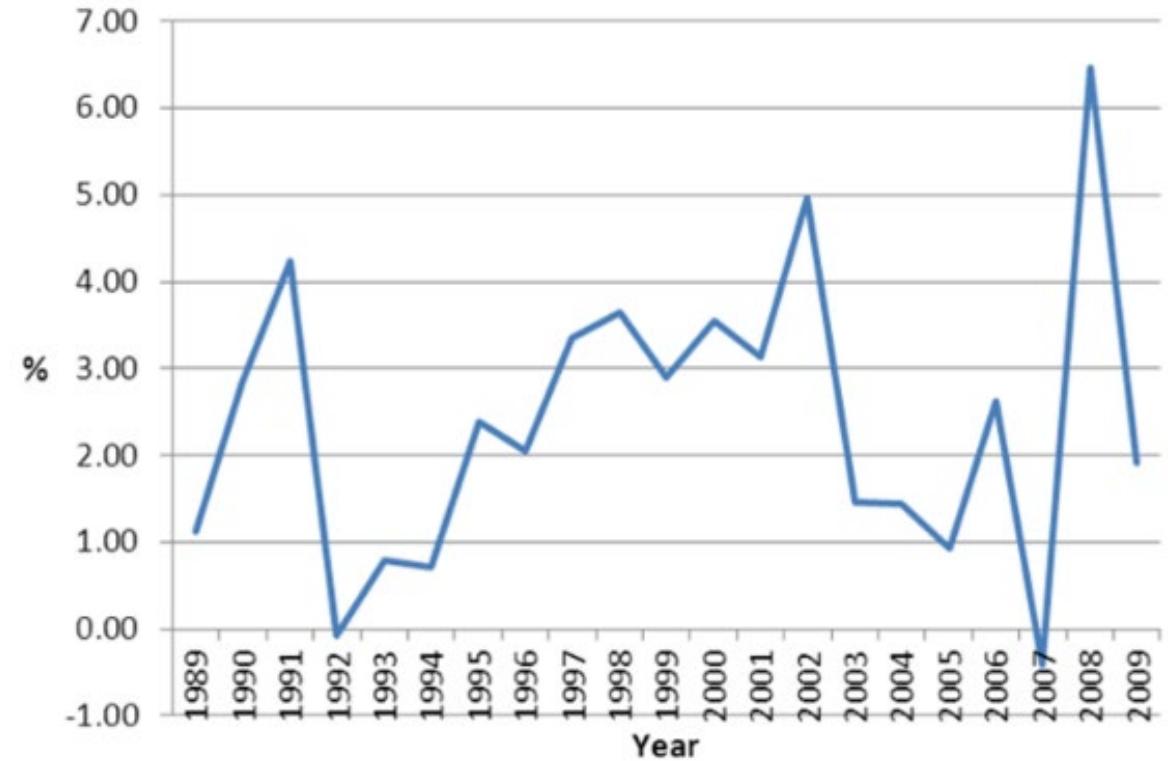
Measuring Broadband Impact: Challenges and Opportunities

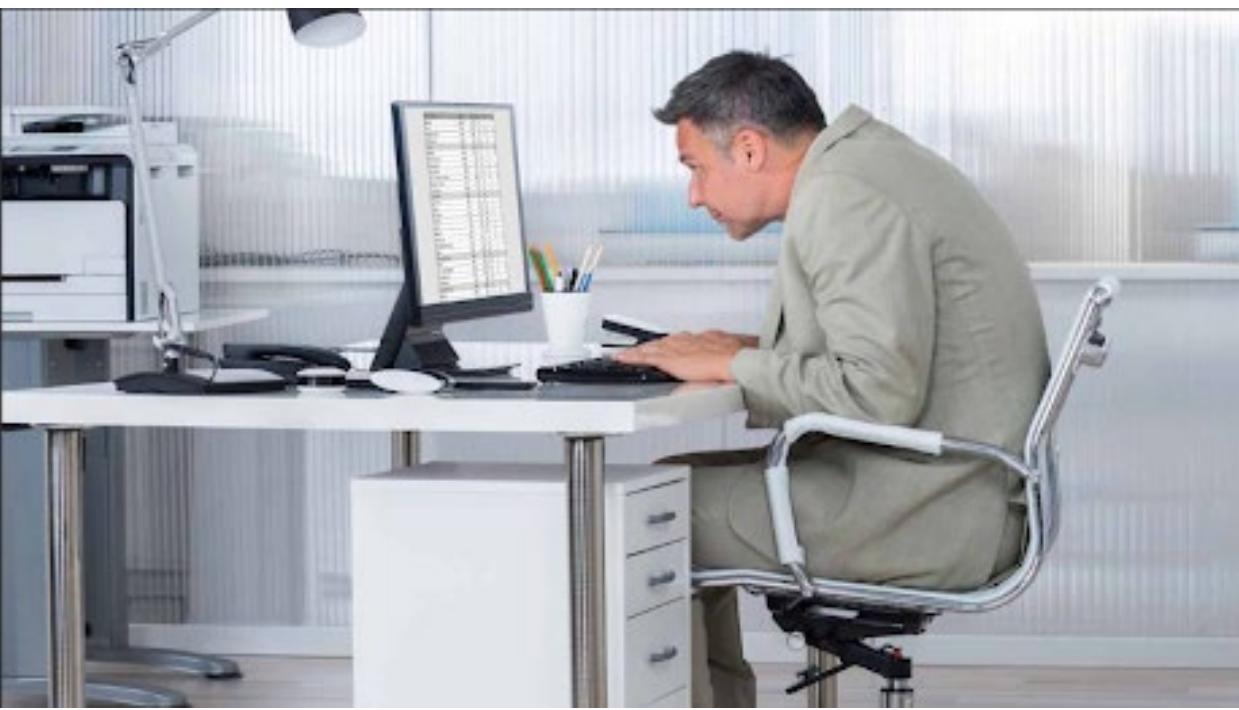
The background of the slide features a dark, abstract graphic. It consists of a central, glowing blue and white tunnel that curves and spirals towards the bottom center. From the center of this tunnel, several thick, black, curved lines radiate outwards towards the edges of the frame, creating a sense of depth and perspective. The overall effect is futuristic and dynamic.

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December 3, 2025

Economic Impacts of Broadband

- **Productivity:** (Gallardo et al 2021)
- **GDP:** (Holt and Jamison, 2009; Koutroumpis, 2019)
- **Jobs:** (Galperin et al., 2022)
- **Income:** (Whitacre et al., 2014)





Negative Impacts of Broadband

- Fake news (Jo et al., 2022)
- Technostress (Ayyagari et al., 2011)
- Digital addiction (Allcott et al., 2022)
- Mental health impacts (Braghieri et al., 2022)
- Physical health impacts (Rosen et al., 2014)



The Road to Measuring Impact: Broadband Metrics

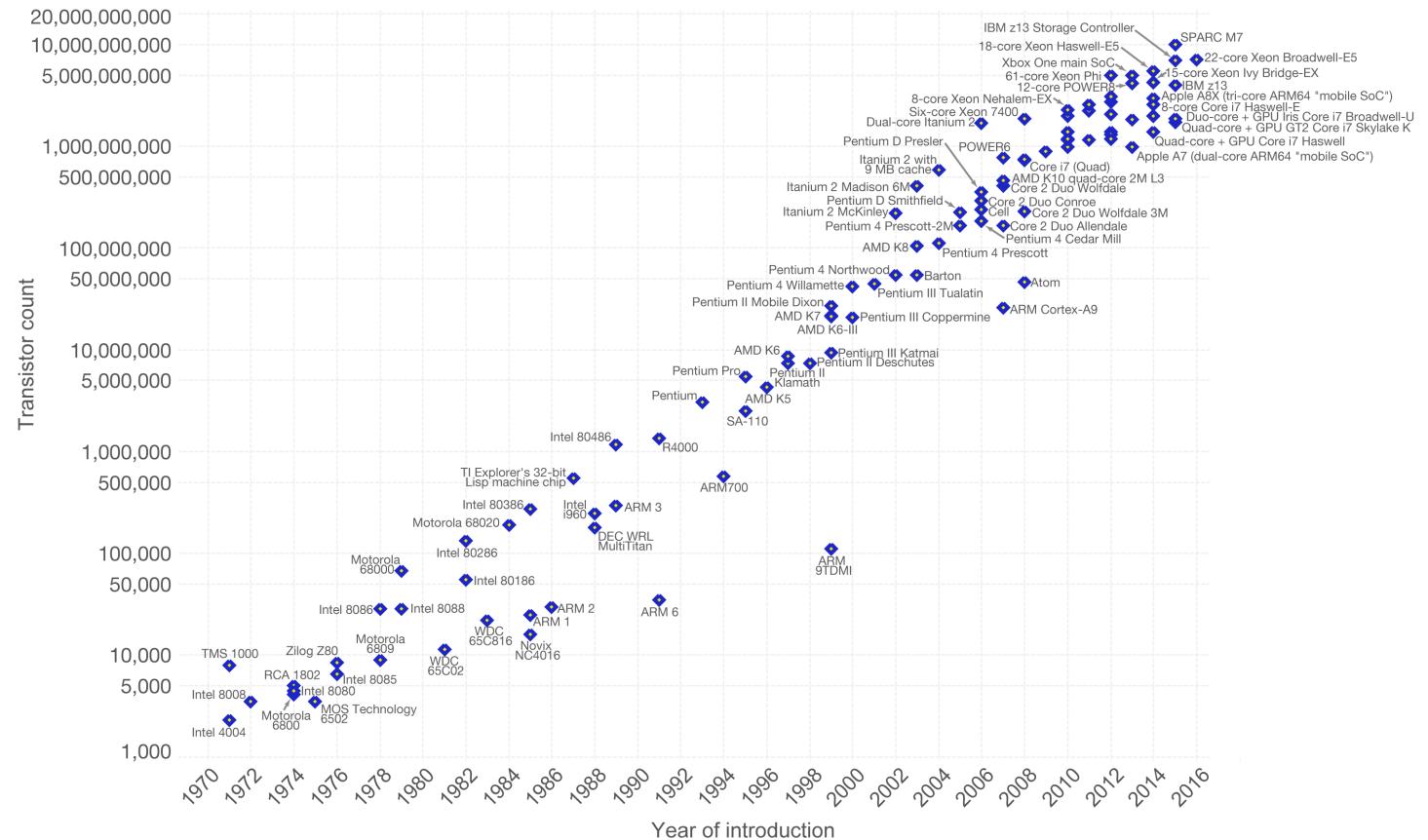
- Device access*
- Internet access*
- Access quality: speed, latency, reliability
- Internet and device use
- Digital skills

Evolving Technology Landscape

- Device ownership
- Speed frontier
- Possible uses of information technology
- Digital skills

Moore's Law – The number of transistors on integrated circuit chips (1971-2016) Our World in Data

Moore's law describes the empirical regularity that the number of transistors on integrated circuits doubles approximately every two years. This advancement is important as other aspects of technological progress – such as processing speed or the price of electronic products – are strongly linked to Moore's law.



Data source: Wikipedia (https://en.wikipedia.org/wiki/Transistor_count)
The data visualization is available at OurWorldInData.org. There you find more visualizations and research on this topic.

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Considerations Moving Forward



- Varied data availability across countries
- Availability of data for use metrics
- Archiving of data
- Parties Involved in Data Provision