

Topic: Story of a person who was/is innovative

Duration: 6 minutes

Topic: Story of a person who was/is innovative

Duration: 6 minutes

1. Background

Origin Problem / Opportunity:

- In the late 1980s and early 1990s, computer systems were slow, expensive, and closed-source.
- Linus Torvalds, a young computer science student in Finland, wanted an operating system that was fast, free, and open for everyone to use and improve.

Environment / Situation:

- He was studying at the University of Helsinki and using Minix (a small Unix-like system).
- Frustrated by its limitations, he began developing his own system — initially called “Freax,” later renamed **Linux**.

2. Who He Is

Key Facts:

- Born in **Finland, 1969**.
- Started programming at **age 10**.
- Studied **Computer Science** at the University of Helsinki.
- Created **Linux (1991)** and **Git (2005)**.

What Makes Him Different:

- Unlike most inventors, he didn’t want profit or fame — he wanted **freedom and collaboration**.
- His focus was on **community-driven innovation** instead of competition.

3. The Innovation – Linux

How Linux Works:

- Linux is **open-source software** — anyone can access and modify the code.
- The main part is the **kernel**, which manages how hardware and software communicate.

- Today, only about **2%** of the Linux kernel is written by Torvalds; the rest comes from **global contributors**.

Innovation Value:

- He built not just software, but a **global model of collaboration**.
- Created a community-based innovation process still used today.

4. Applications of Linux

Key Uses:

- Runs **90% of world's servers** (Google, Amazon, Facebook).
- Powers **Android smartphones, smart TVs, cars, and robots**.
- Used in **NASA** and **SpaceX** projects.
- Supports **AI research, cybersecurity, and supercomputing**.

Impact:

- Linux is the **foundation of modern technology** — from personal devices to space exploration.

5. Comparison: Linux vs. Microsoft

Main Points:

- Microsoft Windows: commercial, easy to use, expensive.
- Linux: free, customizable, and secure.
- Although Windows dominates personal computers, **Linux dominates servers and the Internet**.

Key Idea:

- You might not see Linux on your laptop, but you use it **every time you go online**.

6. Personal Strategy & Impact

Personal Strategy:

- Believed in **openness and simplicity**.
- Famous quote: *“Talk is cheap. Show me the code.”*
- Encouraged developers to share ideas, not hide them.

Biggest Impact on Society:

- Changed **how the world builds technology together**.

- Created a **global open-source community** that continues to grow.
- Inspired millions of developers to contribute to free technology.

Conclusion:

- Linus Torvalds didn't just create Linux or Git —
He created a **culture of collaboration and innovation** that changed the world.

Final Line:

“He didn't build a company — he built a community.”