

Proprietary vs. Open Markets in IT

Apple, Microsoft, Google

Final Presentation

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Conceptual Background

Intellectual Property Rights (IRPS):

- ▶ “the main social purpose of protection of copyright and related rights is to encourage and reward creative work.”

Ownership and licensing:

- ▶ Ownership still belongs to developer
- ▶ Different software licenses → different rights for the user
- ▶ Controversial areas → used software?

Software market attributes

- ▶ Using them to create proprietary markets

Software Distribution Process

Mobile devices

- ▶ Centralized mobile application portals
- ▶ Two-sided markets
- ▶ Tight control → advantage for platform owner → harm competition? (Sotify vs. Apple)

Personal computers

- ▶ Trend of centralization
- ▶ Lack of success yet

Enterprises

- ▶ Volume licensing
- ▶ Bundling
- ▶ Software as Service (SaaS)

Creating Proprietary Markets

Preinstalled operating systems

- ▶ Convenient for users
- ▶ Impact on market freedom
- ▶ Warranty issues

Preinstalled applications

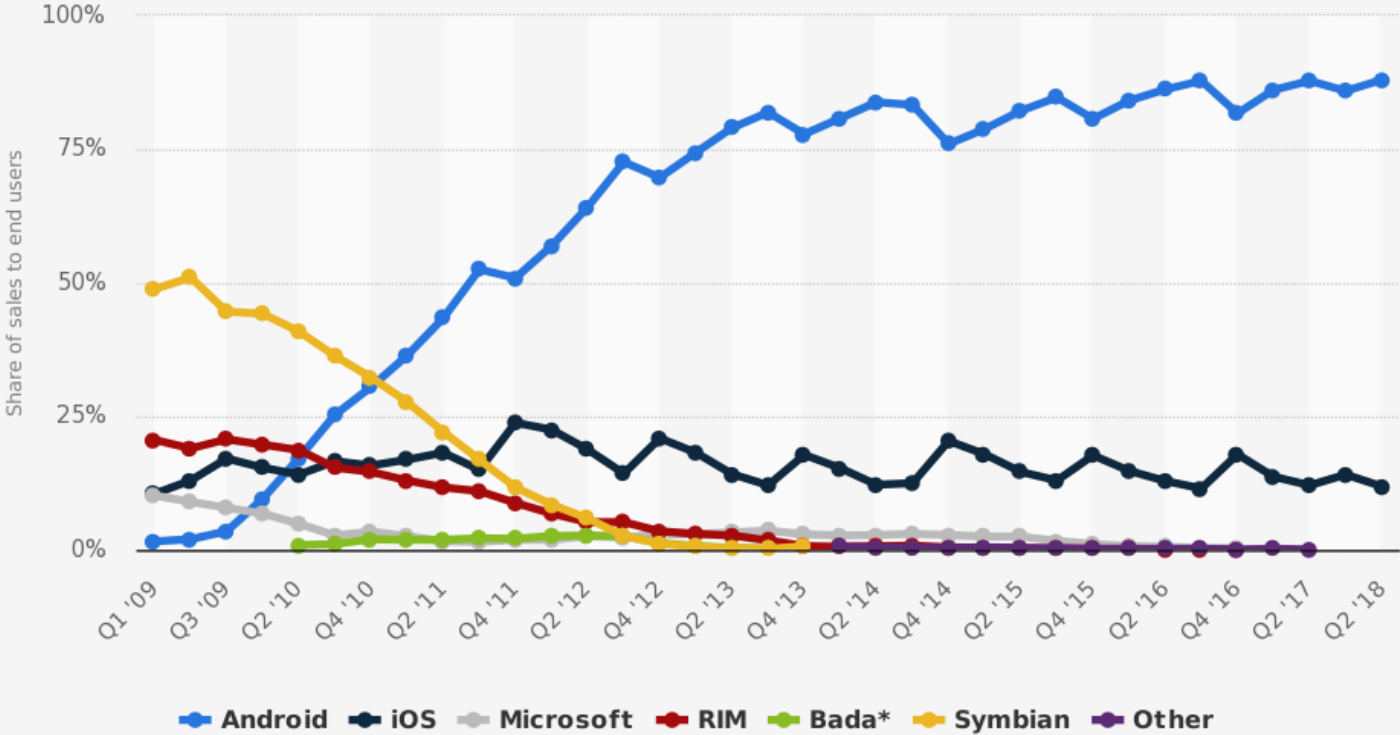
- ▶ Business model
- ▶ Legal cases (Internet Explorer, Google Apps)

Controlled ecosystems

- ▶ Devices
- ▶ Software
- ▶ Services

Impact on Market Openness

Global market share held by the leading smartphone operating systems in sales to end users from 1st quarter 2009 to 2nd quarter 2018

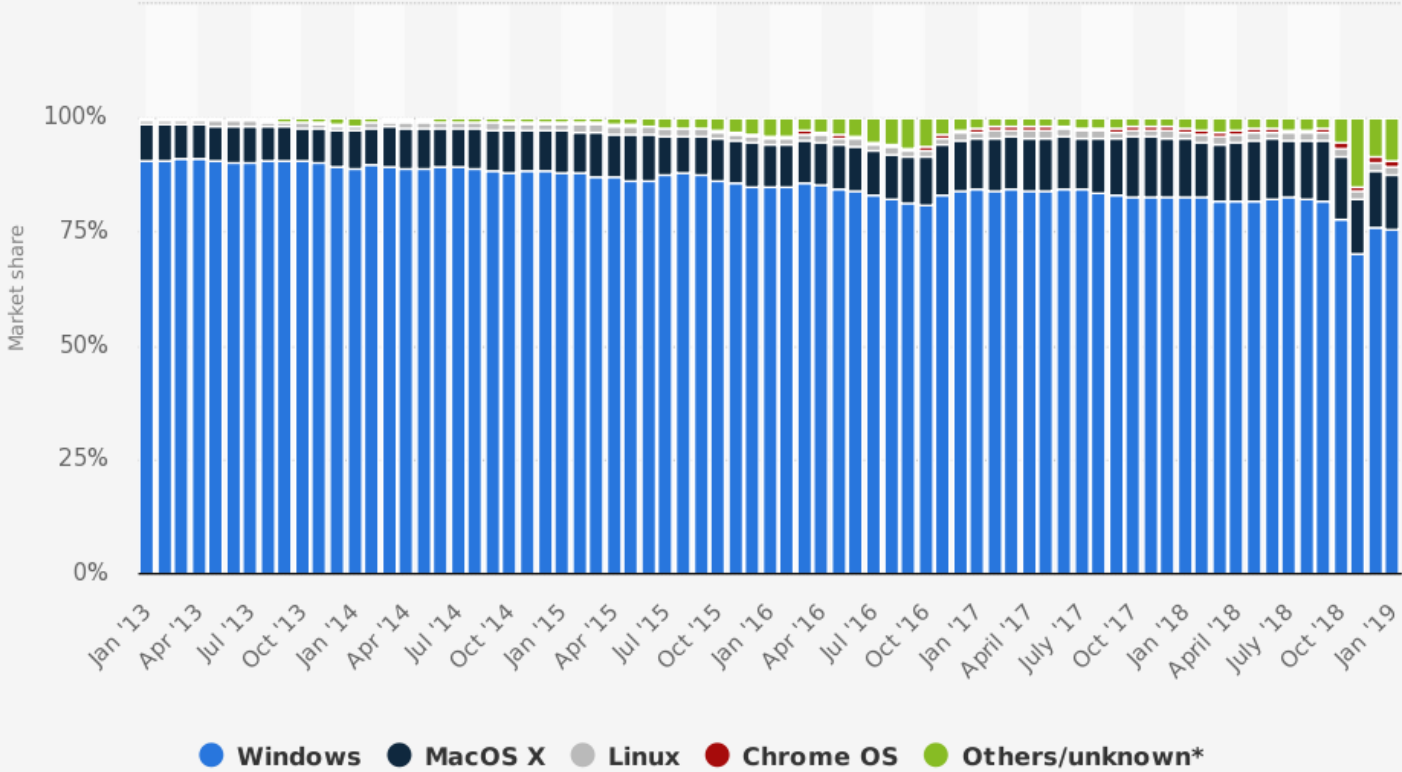


Source: Gartner © Statista 2019

Additional Information: Worldwide; Gartner; 2009 to 2018

Impact on Market Openness

Global market share held by operating systems for desktop PCs, from January 2013 to January 2019



Source
StatCounter
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Additional Information:
Worldwide; 2013 to 2019