

- Reduced cost of 20-55% (Linux Foundation, 2017)
- 40% total cost of ownership reduction by French Gendamerie (Dumond, 2013)
- OSS can save up to 50% cost for public institutions (Osborne, 2007)
- Canary Islands saved 70% virtualisation cost by moving to OSS (RedHat 2013)
- Estonian Enviornment Ministry saved 95% software cost by switching to LibreOffice (Merilo, 2011)
- a 1% increase in the use of non-professional OSS operating system sue leads to an increase in value-added productivity of between 0.002% and 0.008%. This effect is bigger in smaller firms (Nagle 2019a)
- contributing firms capture up to 100% more productive value from usage of OSS than their free-riding peers (Nagle 2017)
- Italian ICT SMEs that develop FOSS solutions are significantly more innovative and technologically more advanced (Lorenzi, Rossi, 2007)
- France encouraging FOSS lead to 6.6%-14% yearly increase in IT related startups; 5%-16% yealry increase in IT related jobs (Nagle 2019b)
- FOSS software has signicantly lower maintance costs (Capra et al 2010)
- FOSS companies receive more funding from VC firms and therefore have more resources (indirect effect) (Colombo et al 2016)
- Italian ICT SMEs that employ OSS in their development have more products (Colombo 2013)

How this would work

(just for demonstration purposes, the math probably makes little sense)

Cost savings

$$C_{io} = S_{io} + E_{io} + M_{io} + L_{io} + H_{io} + T_{io}$$

C is IT cost at firm *i* with *o* open source "uptake of FOSS migration"

= equals

S support costs at firm *i* with *o* open source "uptake of FOSS migration"

+

E exit costs at firm i with o open source "uptake of FOSS migration"

+

M consulting and customisation costs at firm *i* with *o* open source "uptake of FOSS migration"

+

L license costs at firm *i* with *o* open source "uptake of FOSS migration"

+

H hardware costs at firm *i* with *o* open source "uptake of FOSS migration"

+

T training costs at firm *i* with *o* open source "uptake of FOSS migration"

Sales increases

$$P_{io} = (C io + D io) + A io$$

P is profit from IT sales at firm *i* with *o* open source "uptake of FOSS migration"

= equals

C IT cost at firm i with o open source "uptake of FOSS migration" (from previous calc, needs to be negative)

+

D development costs at firm i with o open source "uptake of FOSS migration" (needs to be negative)

+

A profit/sales from IT products at firm *i* with *o* open source "uptake of FOSS migration"

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