From Competition to Collaboration

Why Open Approaches Will be Successful

Georg Becker, Christian Schäfer
History: Closed Gardens → UNIX in TELCOS

Closed Garden

UNIX /GNU

OpenX
Current Status: From OS to Open x
Motivation and Enablers

**Time-to-Market**
- Low investment at the start
- Broad resource of developers

**Economy-of-scale**
- High number of contributors
- Competing commercial offers for the same project → increased quality

**Broad Community**
- Increases acceptance of OS solutions
- Accelerates maturing cycles

**Proven Success**
- Open Source paradigm successfully applied since early 90’s

**Nerdy-ness**
- Communities need hands-on spirit/deep dive contributors

**Strategic industry decisions**
- Re-use products close to end-of-life
- Position company in growing segments

**Altruism of individuals**
- Give back to the community
- Share experience
The Industry Role: ETSI ISG NFV after 4 Years

- Call for action 10’2012
- 1rst draft 10’ 2013
- 40+ POCS 12’2015
- Alliances,
- players with different roles
- Reference architecture adopted by large TELCOS
Best Practices and Pitfalls

Best Practices
• Assure large Community
• User-driven projects
• Win-Win situation from start

Pitfalls
• Only one strong player
• „Open-washing“
• Lack of project differentiator
• Underestimate lifecycle costs of OS
7P Use Cases: TELCO Core → Data Center

CSP 2000/1 PUE ~ 1.8 -1.9

Google Data Center today
PUE ~1.05 -1.10
7P OS-Use Cases: OpenSource MANO

2012
• ETSI NFV ISG established
• First MANO definition

2015
• OpenMANO, first MANO reference implementation
• Telefonica as single player

2016
• OSM released at MWC
• Re-use openmano
• More stakeholders

SEVEN PRINCIPLES will use OSM for reference implementation of os-ma-nfvo interface
7P Use Cases: OpenStack for NFV Orchestration

SEVEN PRINCIPLES used OpenStack in 2015 FUSECO Showcase for: Orchestration → Heat Networking → Neutron Compute → Nova
Outlook

Call to action: „Growing market needs smart heads“

Market will consolidate comparable solutions/projects
→ Better identify the potential winner!

From simulation/emulation to R&D on „real“ virtualized networks

Chances for the agile and fast in this dynamic market

IOT / 5G will boost OS project relevance

Security and BI are still an issue