Cultural Transition: Open Source across Telecos, Suppliers, and Hyperscalers

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Disclaimers

- Open Source discussed as a software development model, not a licensing model.
- Patent encumbered standards are specifically excluded from the discussion.
- Examples that may be used in the discussion may reflect real world events, names will not be disclosed.
- Posits are based on academic research references included in the materials.

Agenda

- Philosophical Basis
- Terms/Definitions
- Operator, Supplier, Hyperscaler Culture & Origins
- The “Clash” of cultures
- Creating Common Cultural Constructs based on Open-source Practices
- Benefits to the Industry
- Open-Source Reference Models

Philosophical Basis

"Technology is easy, people are hard." – CIOs everywhere.

- (23) Technology is easy, people are hard. | LinkedIn– Stephanie Grimbly
  - Deloitte
  - Gallup
  - Computer Weekly

Terms & Definitions

CULTURE

- The manner in which employees complete their work and how they interact with one another within the organization. "How we do things around here"
    - Joel, E. (2021)
- Every organization has their own culture based on the values, belief, **laws and regulation**, procedures, ideologies and knowledge.
    - Santos et. al. (2014)

ETHICS/ETHICAL BEHAVIOR

- Ethics: the modeling of honesty, integrity, fairness, responsibility, and trust.
    - Mayer et al., (2012)
    - Brown et al. (2005)
- Ethical Behavior: Do no harm

OPERATOR/SVC PROVIDER

- Organizations that operate communications networks/serve the end customer.

SUPPLIER

- Organizations that provide operational software based systems to Telcos/Hyperscalers to deliver services to consumers.

HYPERSCALER

- Organizations that offer Cloud services to other organizations/individuals.
- Capable of larger investments in R&D and CAPEX

Operator Culture & it's origins

CULTURE DESCRIPTION

- Structured
- Low tolerance for failure
- Continual service availability
- High expectations of suppliers
- Multiple levels of Approvals
- Leadership styles: Messiah/Transactional
  - Western (2013)

ORIGINS

- Gov. Regulation
- Performance/cost mgmt. controls.
- Security requirements
- Generational imbalance tends toward Boomers

Supplier Culture & it's origins

CULTURE DESCRIPTION

- Structured
- Zero tolerance for failure
- Cater to Operators expectations
- Multiple levels of Approvals
- Leadership styles: Messiah/Crucible
  - Western (2013)

ORIGINS

- Operators Expectations
- Paid for Performance/Cost mgmt. controls.
- Gain/Preservation of market position
- Generational imbalance tends toward Gen X-Y

Hyperscaler Culture & it's origins

CULTURE DESCRIPTION

- Organized Chaos
- Fail fast to get to the success
- Next goal more important than last delivered feature.
- Leadership styles lean toward Messiah-Transformational
  - Western (2013)

ORIGINS

- Competition with other hyperscalers.
- "Ask for forgiveness, not permission" mentality
- Generational imbalance tend toward Millennials, Gen Z and Gen C

The Clash (no, don't queue up "Rock the Casbah")

"CONFLICTS"

- Work Styles – fail fast vs hi reliability
- Leadership Styles Transactional/Crucible/ Transformational
- Communications methods and tooling – email and documents vs blogs and wikis
- Privacy/Security needs
- Generational differences – Boomer vs Gen X-Y vs. Millennial-GenZ focus

"CONSISTENCIES"

- All need to satisfy Stakeholders.
- Mutual success is a requirement
- Status Quo is no longer a path to success
- All sides "need" each other for the long term
- All can suffer from pro-organizational ethics issues

Choosing a Path Forward

The past is a history lesson, not a roadmap.

- Scot Steele, MSc. Organizational Development

Creating Common Cultural Constructs based on Open-Source Practices

Communication Strategy

Crucial Conversations Model

Open, Authentic dialogue (all contributors have a say).

Establish Trust Based Relationship

All parties model integrity

A common goal (to which the community commits)

Max Societal Benefit over Max Profits

Supporting ALL Stakeholders, not just the Shareholders

The overall industry benefits, not just a few players.

Teaming Timeline (Tuckman, 1965)

The "why", "what", and "when" are defined.

The players are introduced and learn about each other. The Sizing Up process happens.

Team members come together, agree on the "who", and the "how".

The After Party.

Celebration of successes and retrospectives for lessons learned.

Who is in charge? Players jockey for position based on the Sizing Up process and personal needs/desires.

The team executes and delivers.

Industry Benefits of Open Source

- Interoperability
  - Common building blocks
    - Almeida, F; Oliveira, J; & Cruz, J. (2011)
- Reduced Cost Structures
  - Dev/Test/Deploy time
- Higher Quality Code/Service
  - Fewer bugs, Less down time, reduced support costs
    - St. Amat, K & Still, B. (2011)
- Improved time to revenue for new service offerings

Open-source and open community reference models

	Anuket*	ONAP*	CNCF**	5G Super Blueprint **
Architecture	Yes	Yes	Yes	Yes
Specifications	Yes	Yes	Yes	Yes
Conformance Testing	Yes	Yes	Yes	No
Operational Code	Yes (sub proj)	Yes	No	No

* Operator Initiated / limited Hyperscaler Participation
** Active Operator/Hyperscaler Participation

Summary

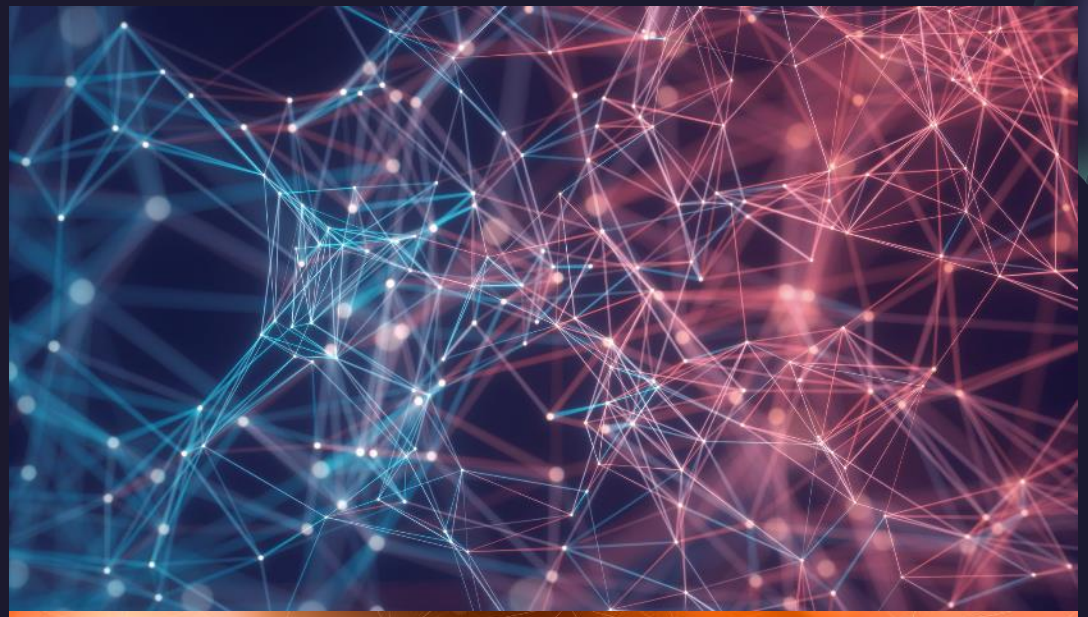
Operators, Suppliers and Hyperscalers working together can be a catalyst for Telecom Industry growth and stability.

The cultures of the relationships between Telcos, Suppliers, and Hyperscalers will be crucial in the level of success.

All sides of the relationship need to consider both their own needs and the needs of their partners.

Open Source models are an excellent way to support the Operator/Supplier/Hyperscaler relationships

Questions/Comments



Thank You

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