A holistic view on Cloud Native



Cloud Native Telecom Operator Meetup 2019 November 29th 2019, Tokyo, Japan

Peter Wörndle

Expert Network Function Virtualization Ericsson Digital Services





"Cloud Native is more than the adoption of container technology."

Application Design & Development

1

- Cloud-native design principles and design rules
- Microservice architecture
- State optimized application design
- Reuse of microservices across applications
- Flexible grouping of microservices and Network Functions
- Adoption of CI/CD pipelines for microservice and application development
- Deployable on any CNCF-certified Kubernetes environment



Technology & Infrastructure

=

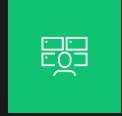
- Container on virtual machines (IaaS) and baremetal
- Kubernetes with support for container and VM workloads
- CNCF ecosystem for infrastructure and applications
- Enhanced workload isolation through gVisor, katacontainer and others
- Service Meshes
- SmartNIC, FPGA and accelerator support



Management & Orchestration

1

- Simplification by delegation of complexity down to Kubernetes
- Management of multi-site and multi-cluster deployments forming a distributed cloud
- Smart workload placement of in a distributed cloud environment
- Management of hybrid networks with container and VM workloads
- Analytics and insight generation for enhanced cloud-native workloads



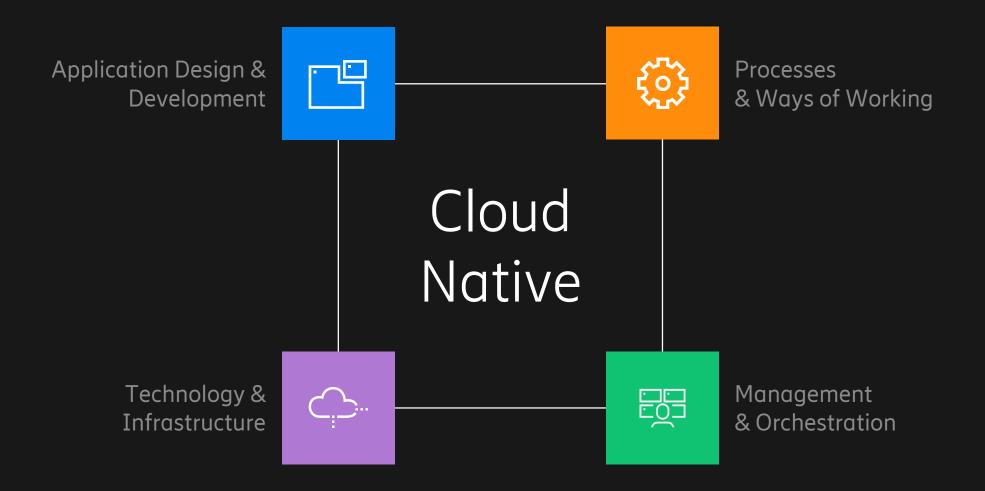
Processes & Ways of Working

=

- Adoption of CI/CD principles in an OSS/MANO context
- Frequent low impact updates with canary testing
- Automated acceptance testing
- AI assisted operations and delegation to autonomous systems
- Leverage agility and speed enabled by cloud native to drive new business in 5G









www.ericsson.com/en/digital-services/trending/cloud-native