

Open EMS Suite

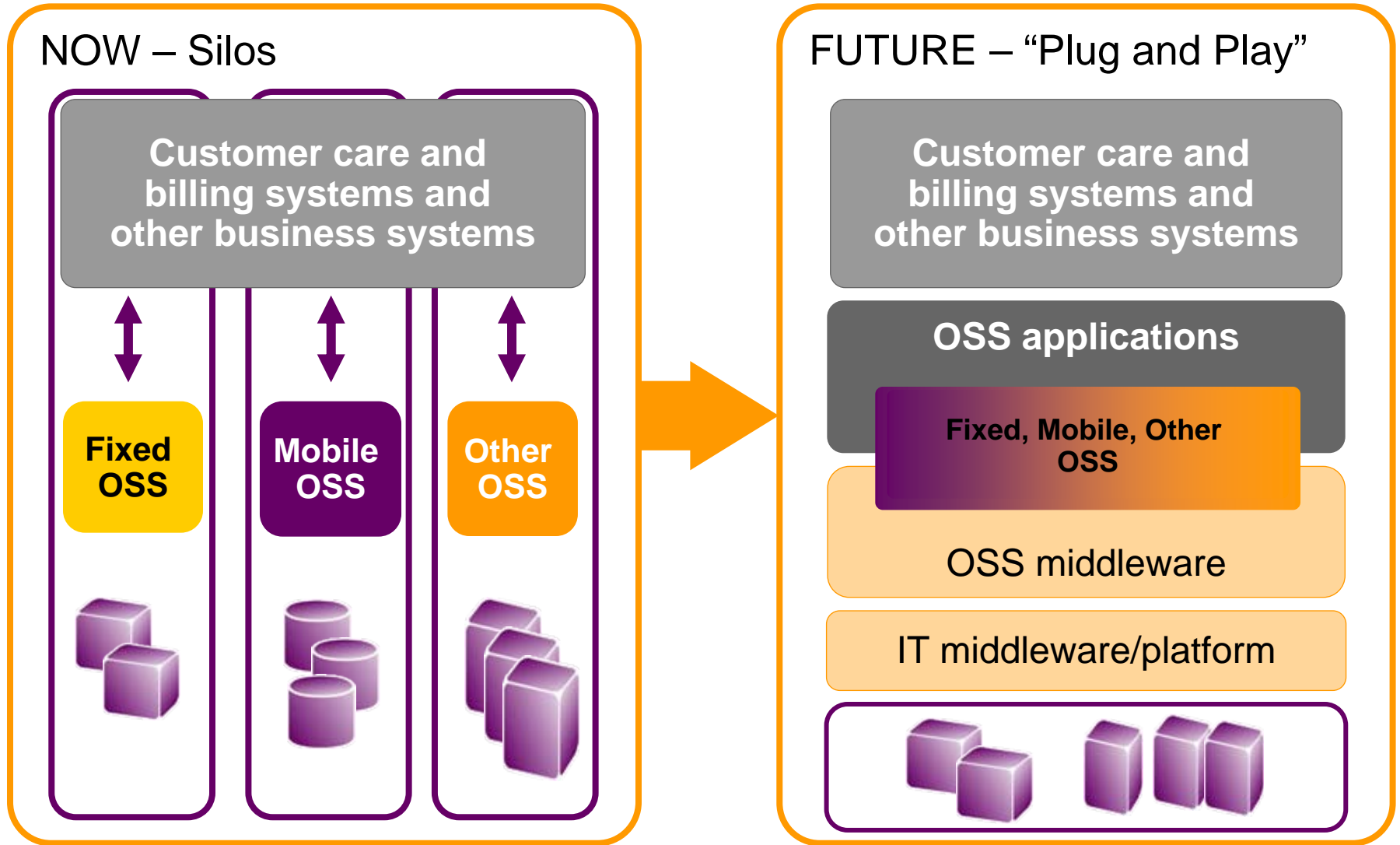
**A software development platform for building
Operations Support Systems**

Open EMS Suite

– Driving forces behind an OSS industry change

- Service providers streamline and harmonize their OSS architecture
- Basic OSS platform does not provide differentiation for service providers
- Network Equipment Providers (NEPs) want to focus their R&D spend on application development in order to increase their differentiated solution value
- Service providers want no longer the current levels of OSS-Network integration tax and vendor dependency

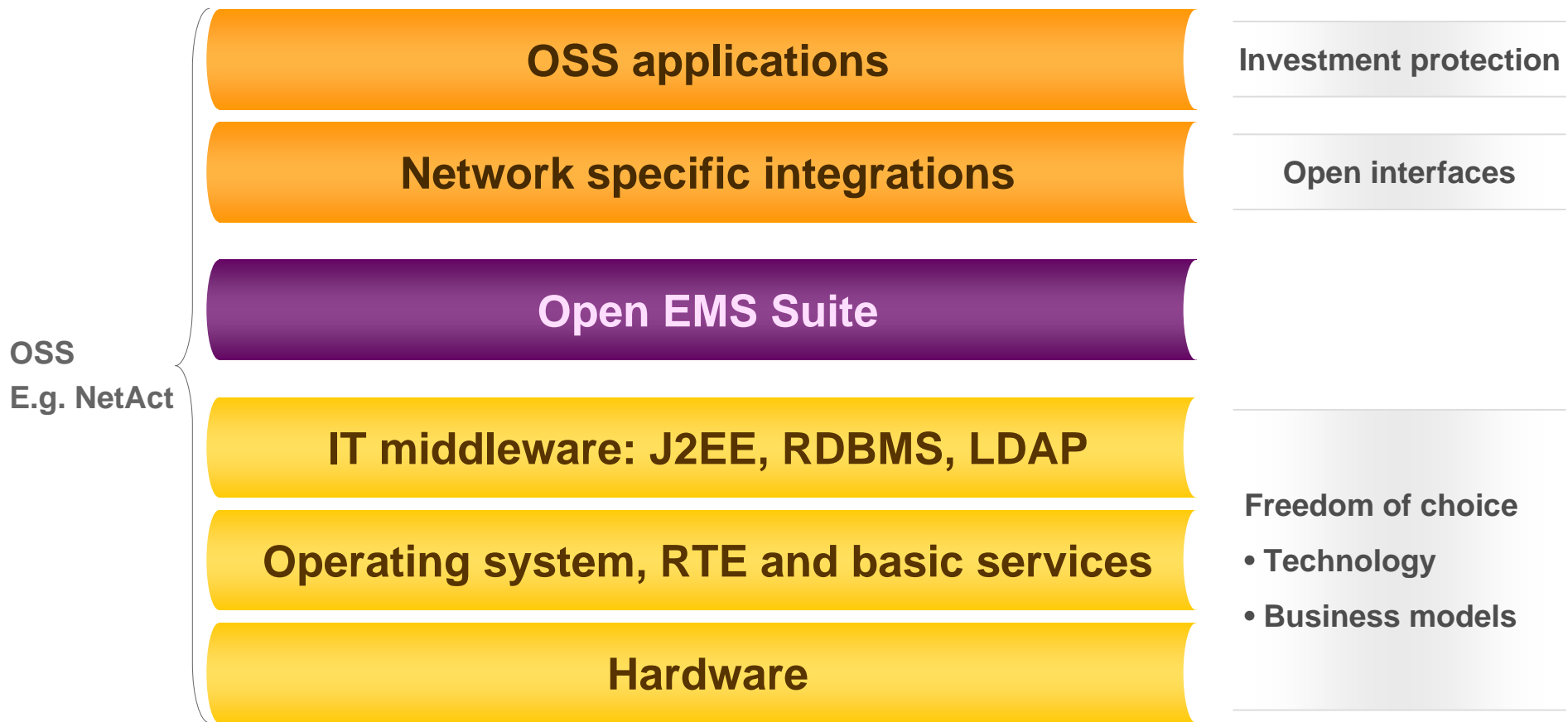
We need to change our thinking



■ Non-differentiating areas

Open EMS Suite

– OSS middleware based on mainstream IT technologies



Open EMS Suite

– Faster time to market with lower R&D cost

- In-built scalability and high availability
- Faster time-to-market
 - Basic applications
 - Efficient integration tools
 - Comprehensive customization capabilities
- Reduce risk in technology choices with open, mainstream IT technologies
- Transfer fixed R&D cost into variable cost:
 - When packaging the EMS/NMS solution for delivery to service provider, volume-based license fees allow you to pay as you grow
- The service providers benefit through lower systems integration cost from open architecture

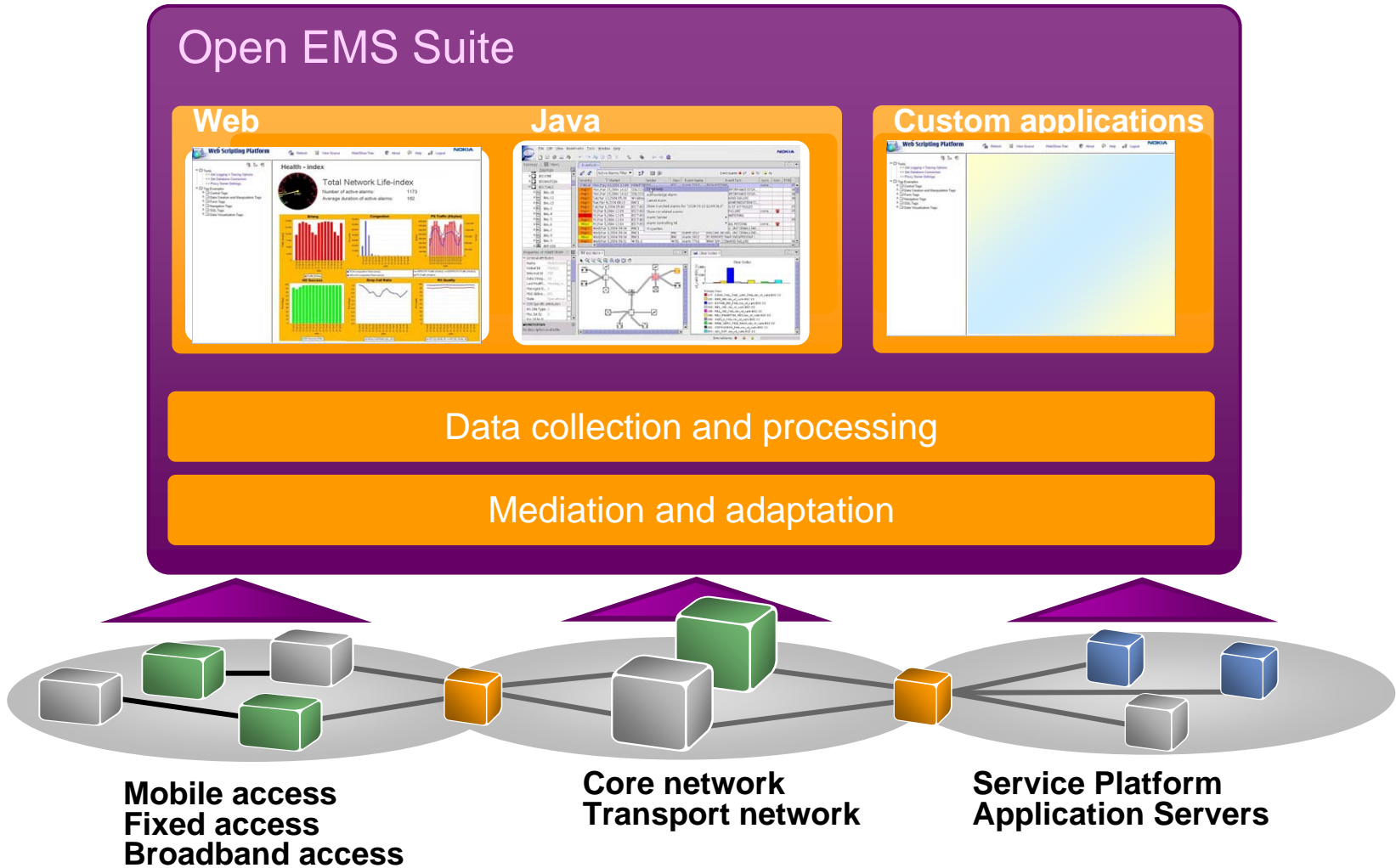
Open EMS Suite

– Designed by NEP

- Reliable and efficient implementation of basic EMS / NMS functionality
- Instant Adaptation architecture helps integrate new network elements in hours, not days or weeks
- The software platform scales from a single server to nationwide network management systems, managing thousands of elements
- A future-proof solution for NGOSS

Open EMS Suite

- SW development platform for converged OSS



Open EMS Suite

– Main building blocks

Developer tools

Software development kits

Customer-developed EMS applications

Customer-developed interfaces

Open EMS Suite applications

FM platform:

- FM engine
- Monitoring tools

PM platform:

- PM engine
- Reporting tools

Mediation Framework

- XML
- SNMP
- OSS/J
- NE3S/SOAP

Application platform

GUI framework (web, Java-rich client)

Application Platform Services

- Topology (MOF)
- Security
- Licensing
- Adaptation management

O&M Agent

O&M interface for NEs and EMSes

Customer references

“**Ceragon Networks** provides solutions for broadband wireless networking and we have implemented Instant Adaptation architecture to our Polyview element management system by using components from Open EMS Suite. The goal for Ceragon was to build a more robust northbound interface for integration to higher level systems. By building the solution with these components, we were able to considerably reduce the R&D effort required.”

Shuki Levy, Director of Product Management, Ceragon Networks



“**Nera Networks** is a world-class provider of wireless point-to-point products for transmission networks, mobile satellite communication and wireless broadband access. We fully support Nokia’s architecture vision and have decided to implement the Instant Adaptation architecture in our NetMaster network management system using Open EMS Suite.”

Eirik Nesse, Vice President, Product Management, Nera Networks



Open EMS Suite

To know more

Common interests. Common platform.

- Sign up for our newsletter to receive regular news and updates at:
www.nokiasiemensnetworks.com/oss_middleware
- Contact Rolf Maste rolf.maste@nsn.com

Thank You.