

Life Cycle Management of Multi-Function Embedded Systems

A Case Study of the “Inner Loop” in Action

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What is a Multi-Function System?



Commercial



Military

EW
RADAR
COMMs
PNT
ISR

Multi-Function System Lifecycle

2007

2015



iPhone 2G



iPhone 3



iPhone 3GS



iPhone 4



iPhone 4S



iPhone 5



iPhone 5S/5C



iPhone 6

1955

2015



Korea



Viet Nam

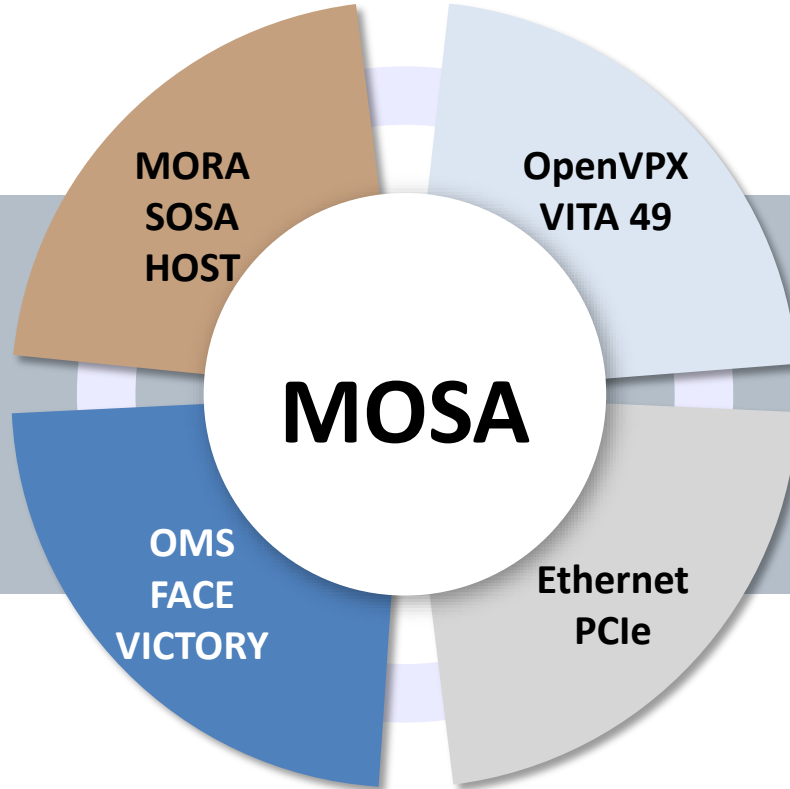


Iraq



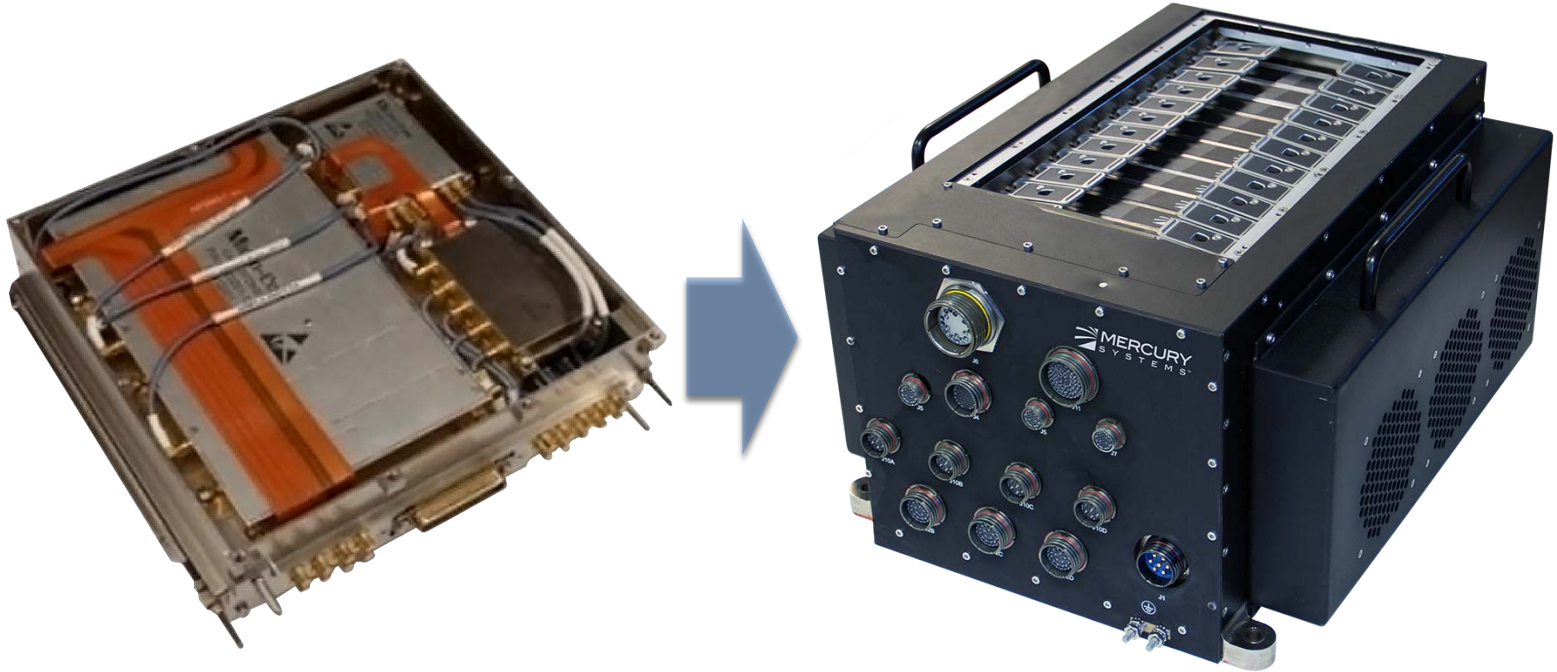
Afghanistan

OSA Moving in the “Left” Direction?



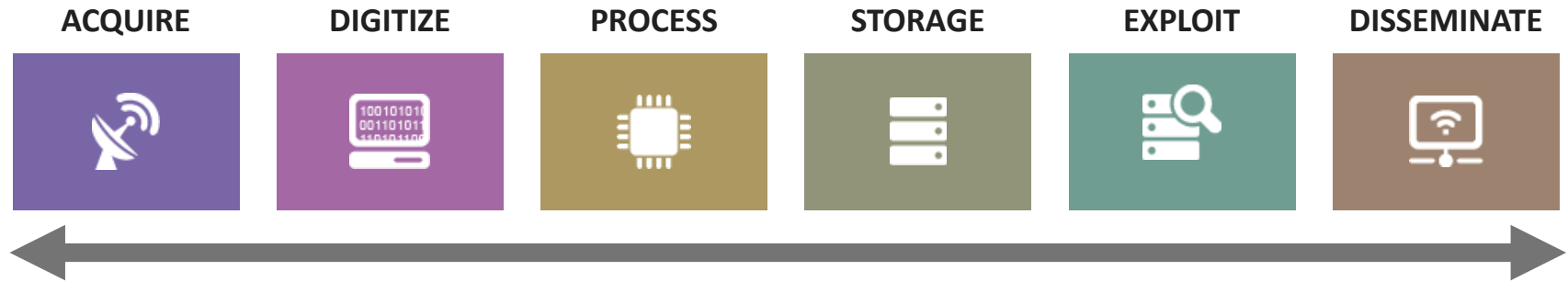
What is the “Inner Loop Cycle”?

Case study of an *“Inner Loop Cycle”* upgrade



Summary

- Move to the left and right along embedded sensor processing chain
- Forward-looking systems engineering is a key element
 - HW, FW & SW Modularity, Interop and portability
 - Systems, module, protocols, middleware & applications



“Inner loop cycle” requirement pushes us to think differently in all dimensions

Thank you!



INNOVATION THAT MATTERS™

