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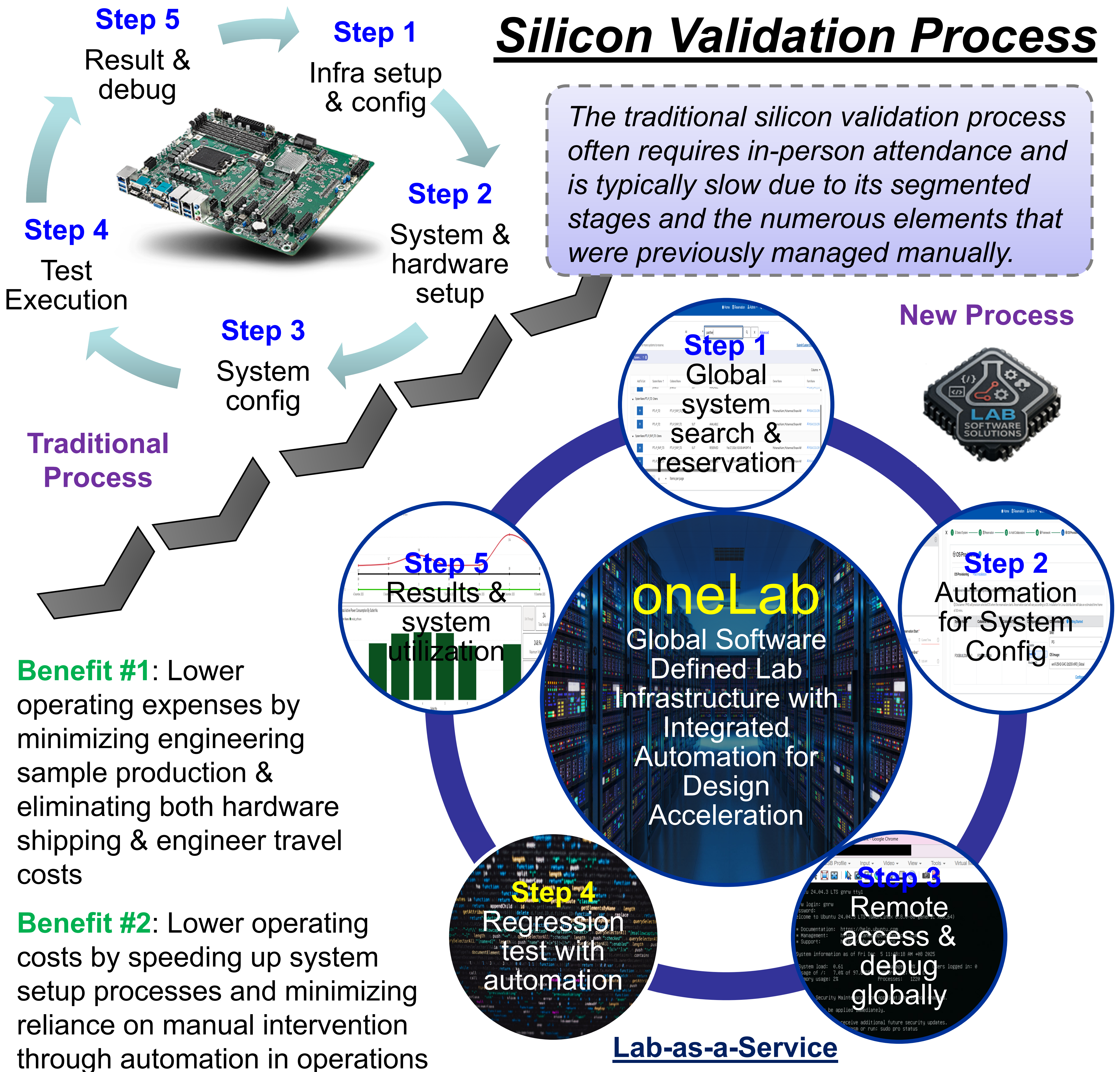
# Archive

DoubleTree by Hilton  
Mesa, Arizona  
March 1-4, 2026

# Cloud-Centralized Lab-as-a-Service for Semiconductor Design Acceleration

Ooi, Seong Guan & Ching, Sing Chow  
Intel Corporation

## Silicon Validation Process



**Benefit #1:** Lower operating expenses by minimizing engineering sample production & eliminating both hardware shipping & engineer travel costs

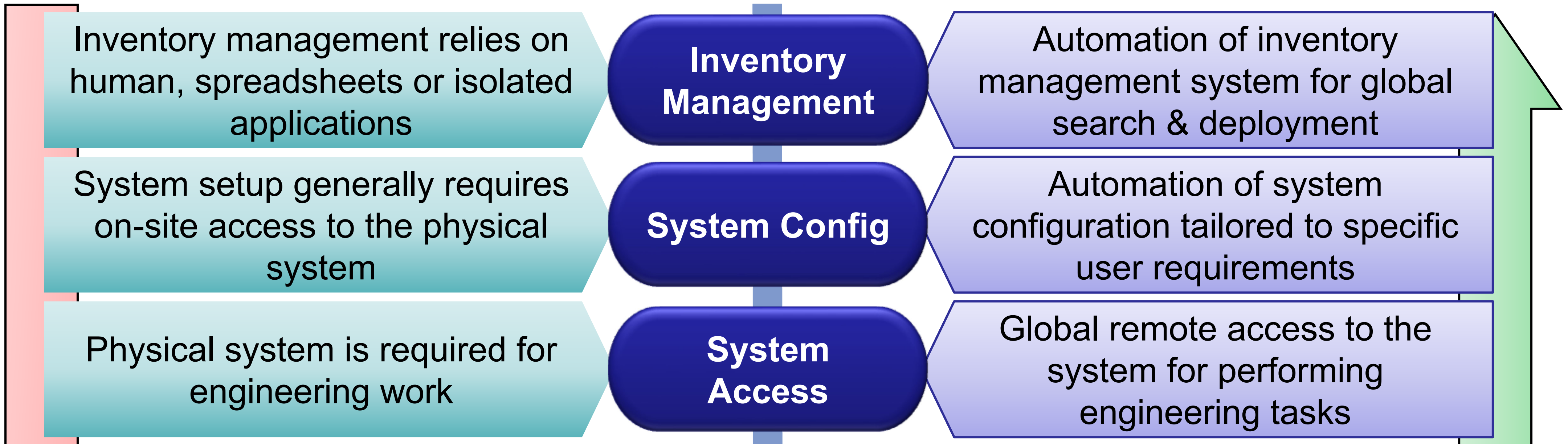
**Benefit #2:** Lower operating costs by speeding up system setup processes and minimizing reliance on manual intervention through automation in operations

**Benefit #3:** Accelerate product design by using automation to conduct silicon testing across various configurations and conditions

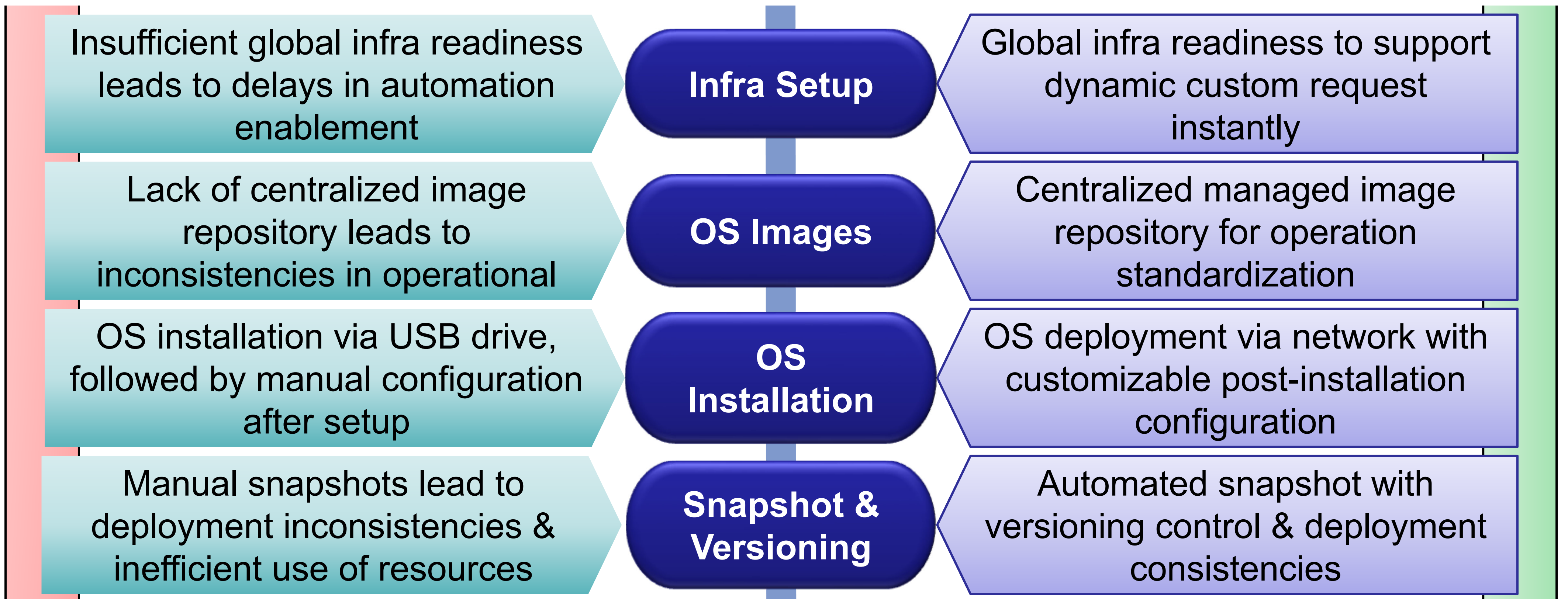
**Benefit #4:** Establishes standardized metrics to enhance operational efficiency and supports faster decision-making.



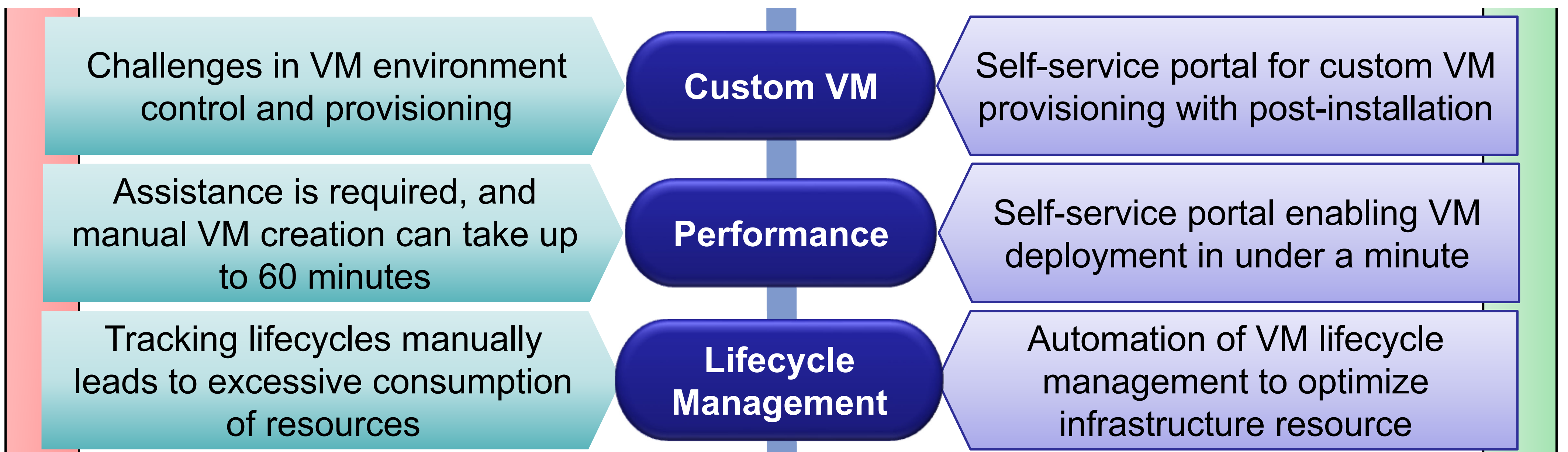
## System Setup & Configuration



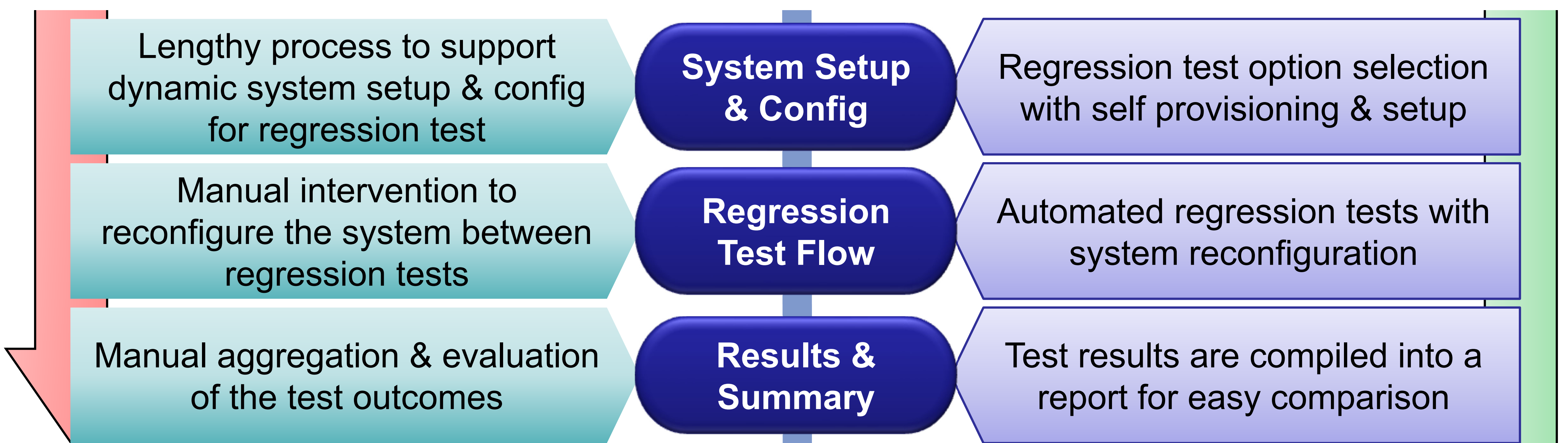
## BIOS & OS Configuration



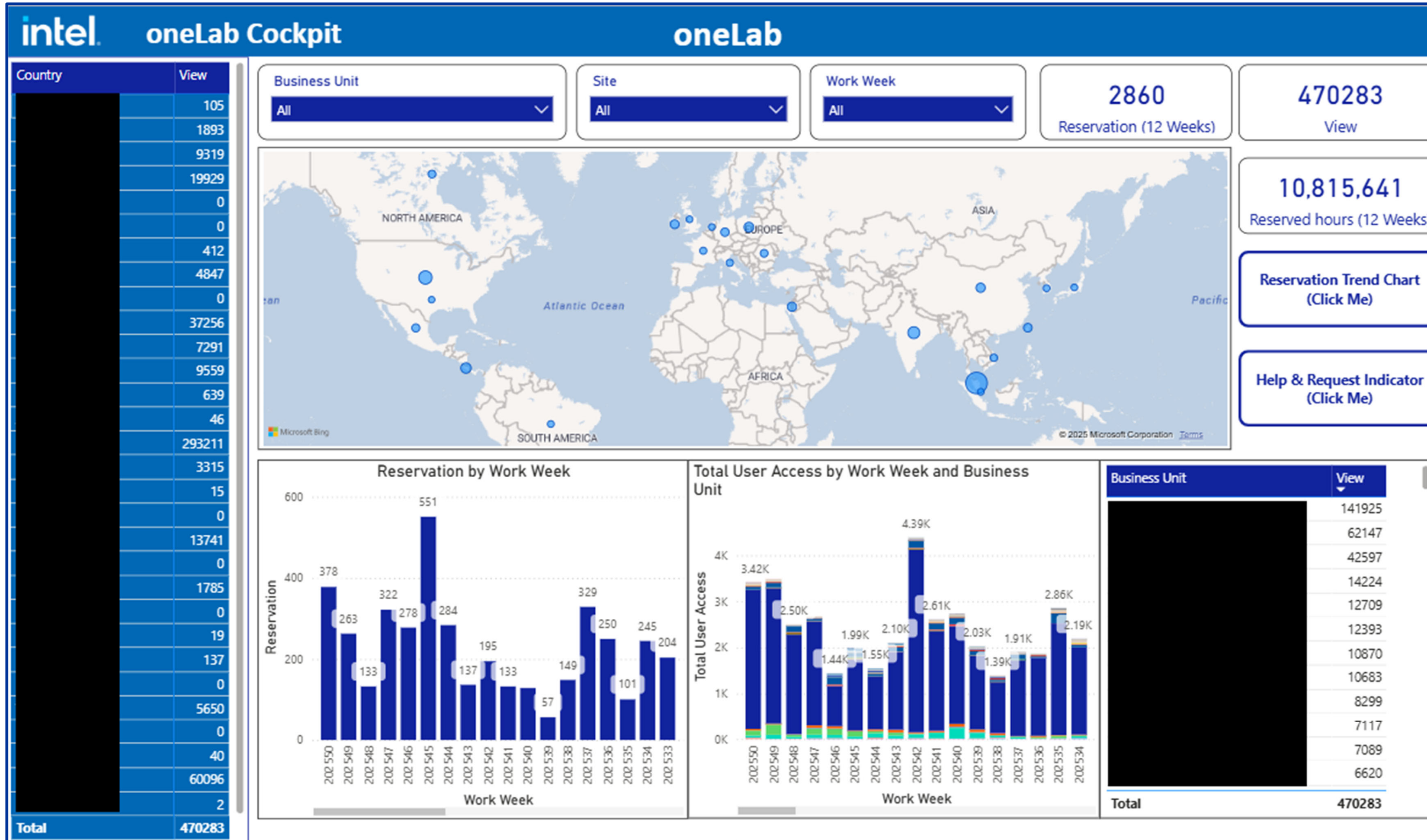
## Virtual Machine (VM) Creation Process



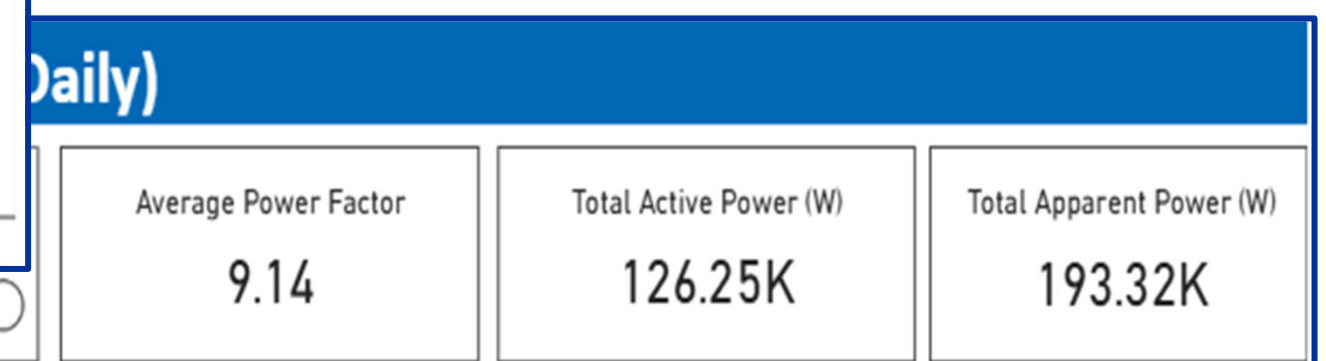
## Regression Test



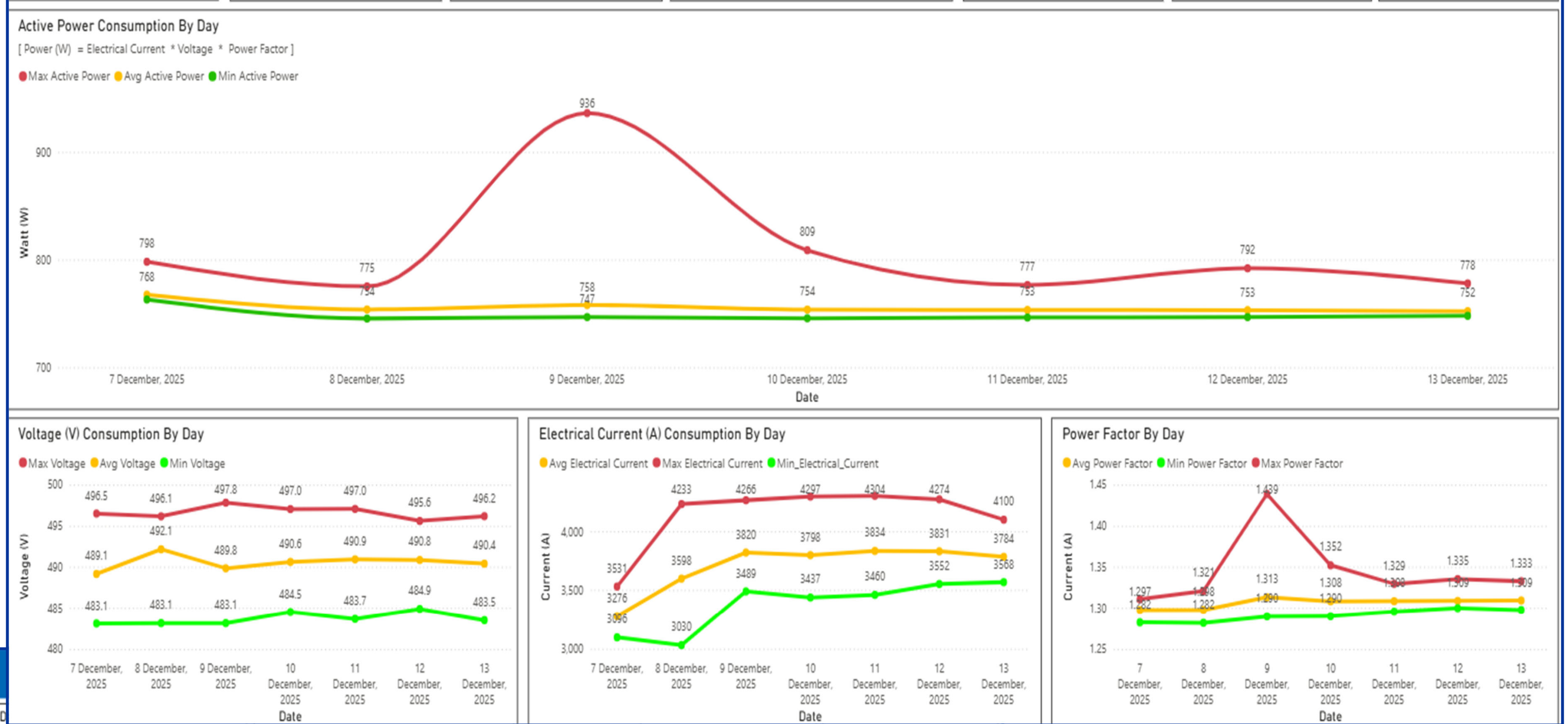
# System Utilization



Picture 1: Global Utilization Data



Picture 2: PDU Utilization Data



Picture 3: KVM Utilization Data



## Summary & Conclusion

Lab-as-a-service streamlines the entire silicon validation process by offering a simplified user interface that enables easy access to all necessary resources for engineering tasks during silicon validation. It has reduced infrastructure setup time by over 90%, facilitates global resource sharing anytime and anywhere, and lowers operating costs by more than 30%.

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