



Agilent Improves SAP Stability and Reliability with Operations Control Center

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About the Speakers

Gaurav Sharma

- Sr Manager, Global SAP Operations
- 22 years of IT, SAP and Management experience
- Enjoy swimming, working out in gym, and spending time with family & friends

Raman Arora

- Manager, SAP Operations
- 27 yrs of Finance, SAP and management experience
- Love travel, exploring new places and spending time with family and friends

Lee Zucker

- Solution Director, SAP Digital Business Services NA
- 14th Year at SAP, 4th Year working with Agilent under MaxAttention engagement
- Love boating, the beach, and playing with my 7 year old son

Key Outcomes/Objectives

1. Understand why Agilent decided to leverage SAP MaxAttention to build an SAP Operations Control Center (OCC)
2. Operations Control Center Overview and Value delivered
3. OCC enabled SAP Operations transformation and Future OCC Roadmap

Agenda

- Introductions
- Agilent Company Profile and Business Overview
- SAP Landscape Evolution at Agilent
- SAP Operations : Main Drivers and Action plan
- Agilent SAP OCC
 - Overview
 - Details - 2000 alerts, Procedures etc
 - Operational model
 - Already Realized Benefits
- Agilent SAP Operations : Before and After OCC
- Agilent SAP OCC Roadmap



Agilent Delivering Trusted Answers

Comprehensive and integrated workflow solutions:

Scientific instruments, software, services, consultancy, consumables and teams with deep market knowledge helping customers achieve superior scientific and economic outcomes



Our focus

- Enabling our customers to improve the quality of life by providing trusted measurements and workflow solutions



Our customers

The world's analytical, research and diagnostics laboratories



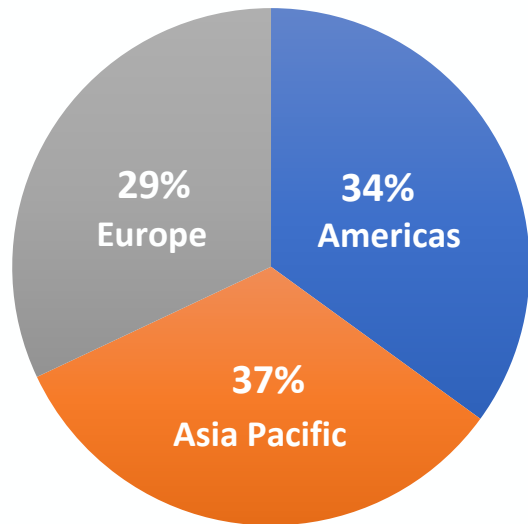
Our passion

Helping our customers solve critical challenges in their laboratories as they seek to improve the world

ASUG

Agilent at a Glance

Approximately
15,300
Employees



\$4.90 Billion in FY18

OUR FOOTPRINT

Customers in 110 countries

- AMERICAS**
 - Santa Clara, CA (HQ)
 - Wilmington, DE
 - Carpinteria, CA
 - Cedar Creek, TX (FDA)
 - La Jolla, CA
 - Sao Paulo, Brazil
- EUROPE**
 - Waldbronn, Germany
 - Glostrup, Denmark
 - Turin, Italy
- ASIA PACIFIC**
 - Shanghai and Beijing, China
 - Tokyo, Japan
 - Singapore
 - Penang, Malaysia
 - Melbourne, Australia
 - Manesar-Gurgaon, India
- LOGISTICS CENTERS**
 - Memphis, TN
 - Waldbronn Germany
 - Singapore
 - +9 regional hubs

SAP Landscape Evolution at Agilent

Till 2013

- ECC (Order Mgmt, Direct Purchasing, Production Orders, FI Subledger)
- CRM (Lead, Oppty, Accounts, Contacts)
- BCM (Call centers)

2014

- Company split : Agilent and Keysight
- Agilent adopts SAP ERP
- Service Business moves to CRM

2016

- Full Finance moves to ECC
- Indirect procurement moves to Ariba

2017

- Manufacturing moves to SAP MES (6 plants)

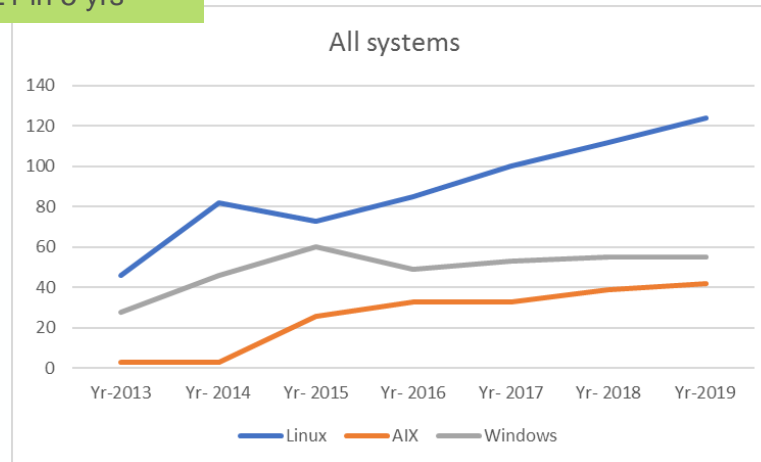
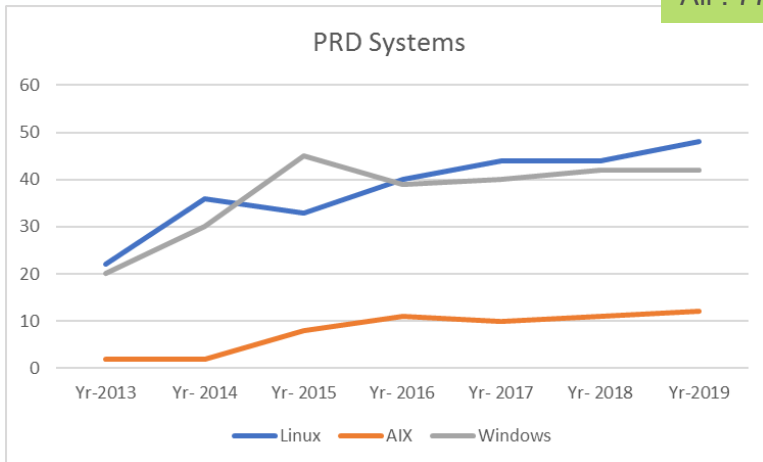
2018

- Global Trade moves to SAP GTS

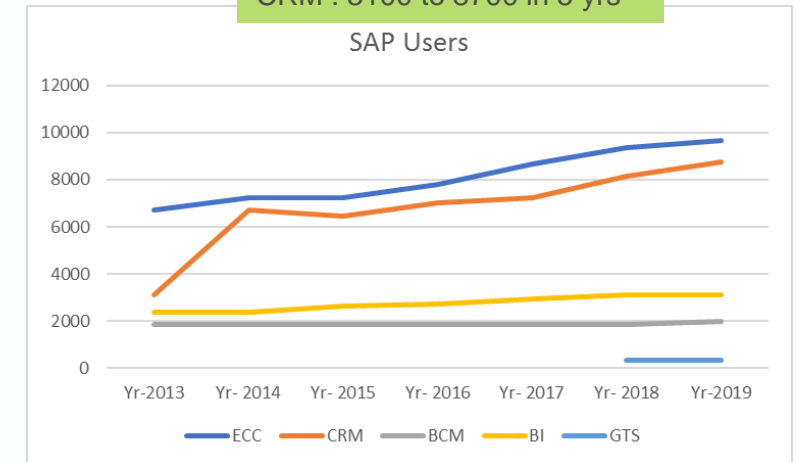
2019 and beyond

- More SAP on-premise and cloud applications

PRD : 44 to 102 in 5 yrs
All : 77 to 221 in 5 yrs



ECC : 6700 to 9700 in 5 yrs
CRM : 3100 to 8700 in 5 yrs



Rapid expansion and multi fold increase in complexity of SAP landscape

SAP Operations : Main Drivers and Action plan

Main Drivers

- Effectively manage rapid growth in size and complexity of SAP landscape
- Manual and minimal system monitoring making Business operations vulnerable to system disruptions
- CIO Strategy of digitizing IT in order to provide agile IT infrastructure for Business capabilities & growth, and achieve efficiencies of scale
- Scale SAP Operations without proportional increase in headcount and budget

Action Plan

- Leverage technology innovations to increase breadth and depth of SAP systems monitoring
- Establish framework to scale system landscape without corresponding headcount increase
- Create knowledge base and standard procedures to handle system issues reducing dependence on individuals
- Establish the culture of continuous improvement in SAP Operations team

Agilent SAP OCC Overview

Operations Control Center



Operations Phase: After go-live

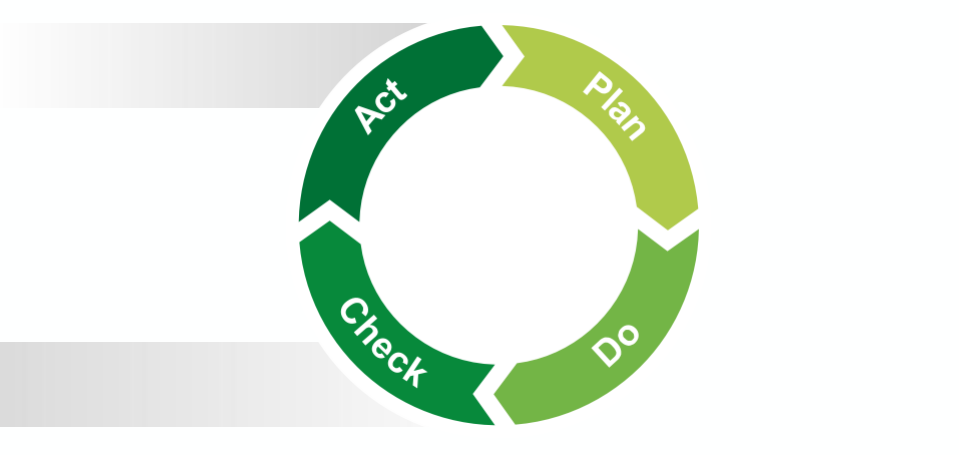


Status Core Business

Status Business Users

Status of Technical

Alert Inbox



Change Management



- Operated by a small team of IT Operators, who **work on the alerts** in a **guided way** (event management)
- Provides **monitors and dashboards**, which report the status of the business processes and related IT landscapes Alerts **24 * 7 without manual efforts**
- These alerts are bundled in **Alerts Box**
- Includes a **Continuous improvement process**, which optimizes the overall operational setup depending on newly identified business requirements. Guiding principle is to demonstrate value.

Agilent SAP OCC Details

Live

180 unique parameters

Measured 24 *7

by 1694 Alerts across 17 systems, 42 servers and 23 database

Monitoring Object	Parameters /Alerts	Apr'18	May'18	Jun'18	Jul'18
SAP Applications - Availability, Performance, Exception, Configuration	45 /339	4/17			
All BW Process Chains	1/38			6/4	
All BW reports	1/19			6/4	
Critical Billing Redwood jobs	1/45			6/4	
Logistics Redwood jobs	1/152			6/4	
Polaris Interface jobs	1/1			6/4	
All CRM Queues	5/5		5/7		
All ECC → Fusion idocs	4/32		5/7		
Both ECC& CRM Webdispatchers	2/4		5/7		
All Cross System Interfaces, RFCs(ECC-CRM-BW-APO-Taxware-XiPay-Ariba-Fusion-EHS-MES-Gateway)	12/30		5/7		
Database – Oracle, MaxDB	22/155			6/11	
Host – AIX, Linux, Windows (SAP systems)	13/701			6/11	
Database – HANA & SLT	71/120				7/9
Host – HANA & SLT	12/54				7/9
Total	180/1694				

SAP Applications(Server)

ECC(6), CRM(8), BI(2), APO, MES(8),GTS(4), TREX (1), SolMan, IDM(3), NW Gateway, Taxware, XiPay, HANA, SLT, SSO, Redwood, Process Weaver

1. Host Performance

Alert if CPU & Memory Utilization is more than limit

3. Appl Performance

High Dialogue response time, High work Process Utilization, High Gateway & ICM usage

5. Application Exception

Alert if error logs, short dumps, stuck idocs, update termination is more than limit

6. Db ,Host Exception

Alert if tablespace is offline, tablespace usage > limit, file system usage > limit, datafile mis-match, live cache error.

7. Configuration

Alert if Certificate expiring within range, Client parameters, Max db log config incorrect.

SAP Applications – Sep18 Go-Live

BCM, GTS, MES(APAC), Content Repository, QUIX

2. Report Performance

Alert if Start Delay, End Delay, Total Run Time more

4. Availability


Alert if App/Host/Service/db is not available / down

Agilent SAP OCC Operational Model



OPERATIONS CONTROL CENTER


- Improve business processing
- Solve problems of operations
- Improve business continuity
- Reduce total cost of operations



OCC Leadership & Operators, incl. PM

MISSION CONTROL CENTER

- Integrate and align with SAP Deployment and Development
- Ensure best practice implementation
- Mitigate risk during operation



Support Consulting Development
Custom Development Education Etc.

Business Hours



ALWAYS ON 24/7 WORLDWIDE

Operations Control Center: co-located, centralized

- Event Management
- Critical Incident Management
- Problem Management

Mission Control Center: SAP Support, world-wide follow the sun

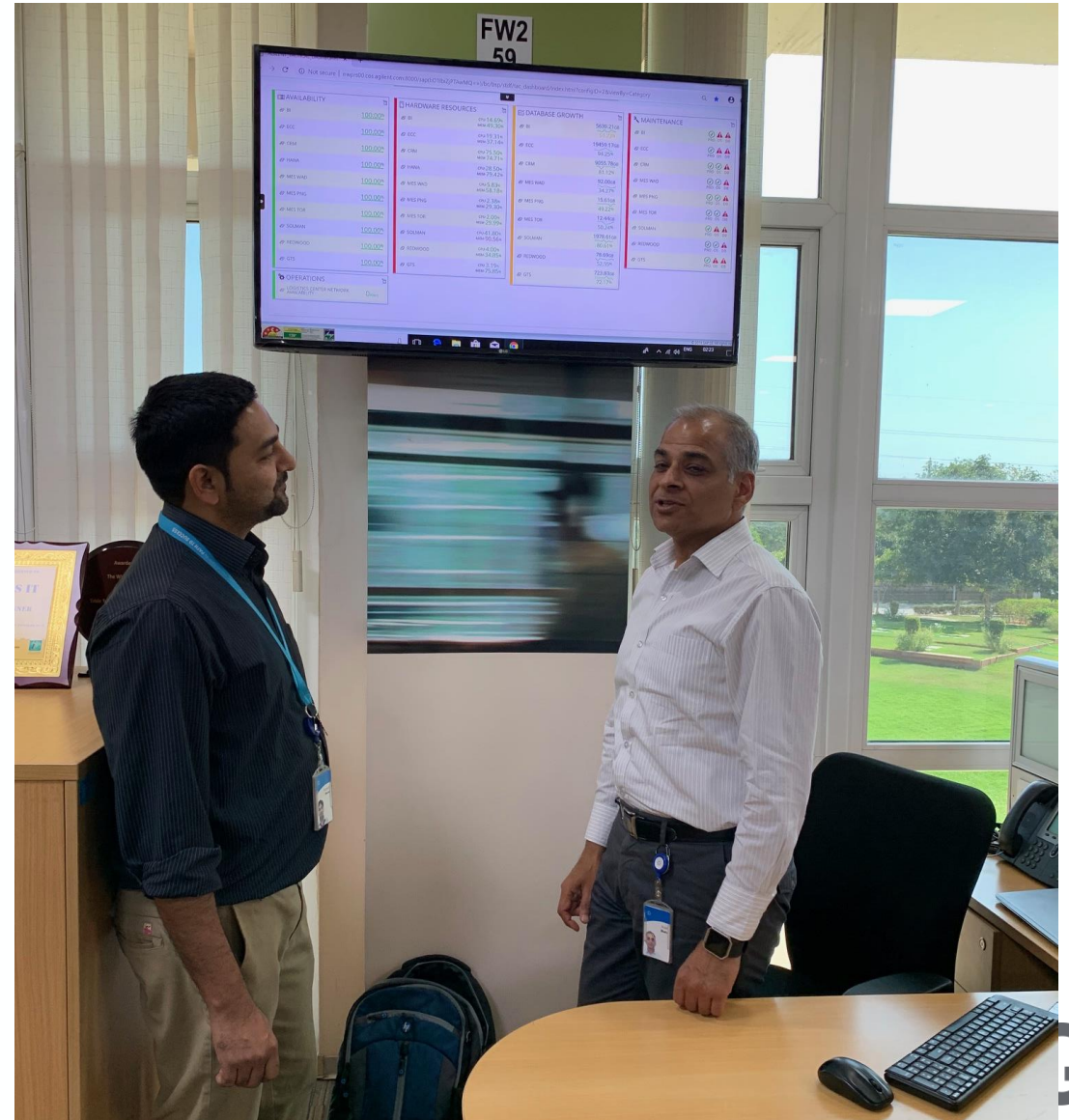
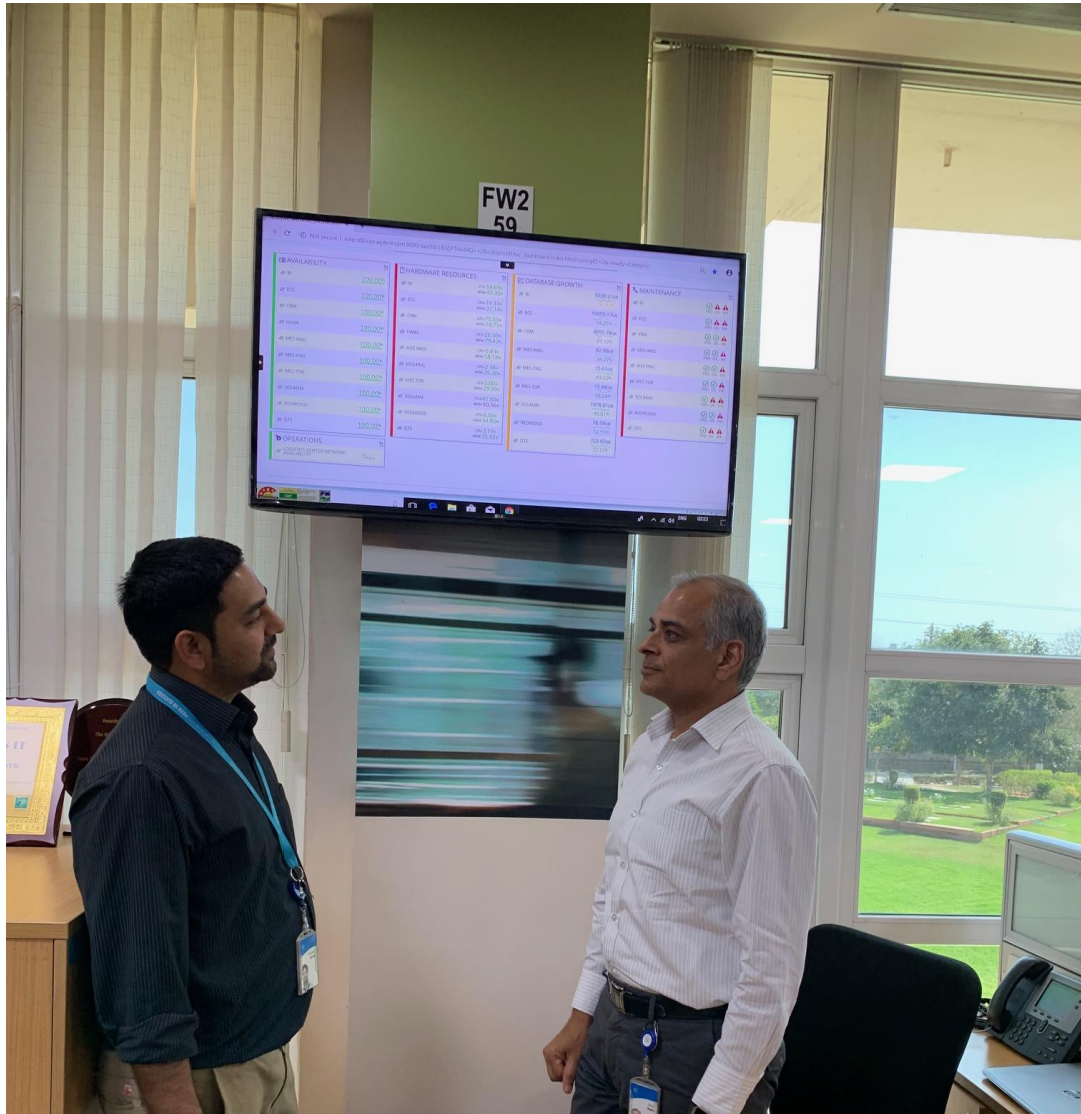
- Project Support
- Troubleshooting and Improvement
- Sparring and Co-Development



Already Realized Benefits with OCC

- **15 P1 issues/Business disruptions avoided** in the last nine months **due to proactive monitoring**
- **378 incidents** opened/production issues **addressed in the last four months** with **full transparency**
- **100% elimination** of system queue related issues
- **5 times increase in scope of system maintenance activities**, without any additional FTE
- **Reduced unplanned downtime by 50%** with help of proactive monitoring
- **Real time monitoring of system KPIs** using Focused insight dashboards
- **11% reduction in Job and BW process chain monitoring efforts** with monitoring Automation

Agilent SAP OCC in Action



Agilent SAP Operations : Before and After OCC

FROM

Manual Monitoring

- Monitoring and alerting not consistent
- Reporting partially implemented
- No Event management

Adhoc Analysis

- Tools and procedures partially available and in-sufficient for SAP landscape
- Alert handling and escalation paths not well defined

Reactive Issue Resolution

- Issues addressed on receiving calls from users
- Housekeeping tasks neither centrally managed nor sustainably organized

Sporadic Improvement

- No standard and methodical approach to system optimization
- Lack of alignment between technical and functional teams

TO

Central, Automation-supported Event Management

- Proactive, transparent and relevant event management supported by automated data collection and correlation
- Comprehensive and consistent system monitoring, alerting, reporting and dashboards
- Faster alert resolution by procedures and documentation

Consistent Event, Incident and Problem management

- Guided procedures for L1/L2/L3 as well as technical administration
- Mature knowledge externalization and feedback into OCC

Proactive Issue Avoidance

- Issues addressed on incoming automatically triggered events
- Landscape centrally maintained by technical administration calendars and procedures

Continuous Improvement

- Sustained availability and almost No disruptions of systems and components
- Higher system availability for transactional processing i.e. higher thru put especially during period end close

Agilent SAP OCC Roadmap

- Increase Breadth and depth of Technical Monitoring
 - New alerts, Optimize current alerts
 - Expand scope of monitoring to HW, OS level KPIs
 - Integrate more systems into OCC (SAP and Non SAP – Boundary Apps)
- Implement Business Process Monitoring
 - Order creation process (multiple channels)
 - Delivery and Shipment processes
 - Finance processes

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Presentation Materials

Access the slides from 2019 ASUG Annual Conference here:

<http://info.asug.com/2019-ac-slides>

Q&A

For questions after this session, contact us at [email] and [email].

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