

Quality is Everyone's Responsibility

Our Mission

To Make

Quality is everyone's responsibility
- W. Edwards Deming

A Reality in the Organization and the Supply Chain

Agenda

- ❑ Introductions
- ❑ Cross-functional Quality Management and Challenges
- ❑ Workflow Based Approach to Cross-functional Quality Management
- ❑ Demo
- ❑ Q&A

About Cambrian Lab

Mission: To Provide Effective and Practical Solutions for New Product and Supply Chain Development

Team

Supply Chain, New Product Introduction, and Technology Experts from SAP, Samsung, Siemens, GM, Ford, Applied Materials

Expertise

- New Product Development/Introduction, Supplier Development, and Quality Management
- Enterprise and Supply Chain Technology (ERP, SCM, Manufacturing, CRM, Sourcing, Finance)

Industries

Automotive, High-tech, Semiconductor Equipment, Medical Devices, Consumer Products
(From Fortune 100 to Start-ups)



Offerings

ZFlow – Digital Workflow for the Modern Supply Chain

Locations

SF Bay Area, Detroit, Boston, Houston

Panelists Today

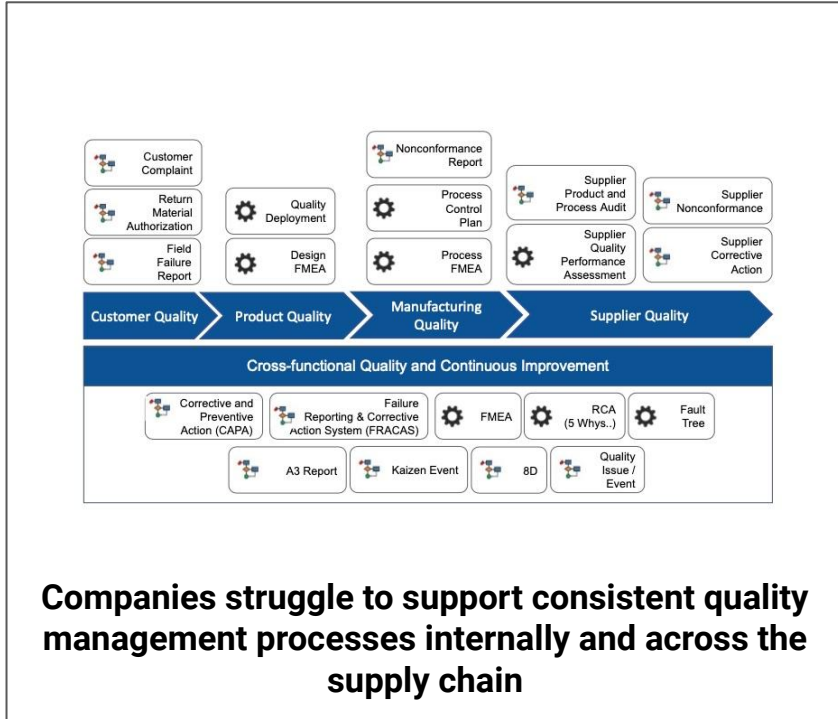
Kris Gorrepati

- 20+ years experience in New Product Development and Introduction and Supply Chain Manufacturing
- SAP, Samsung, Ford, Caterpillar
- Auto, High-tech, Software
- Michigan Tech (Mech Engg.), UCLA

Manish Mathur

- 20+ years experience in PLM, Business Analytics, Software Engineering
- GM, Ford, Siemens PLM, Cap Gemini
- Auto, High-tech, Software
- Michigan Tech (Elec Engg), Walsh College

Making Quality Everyone's Responsibility is a Challenge



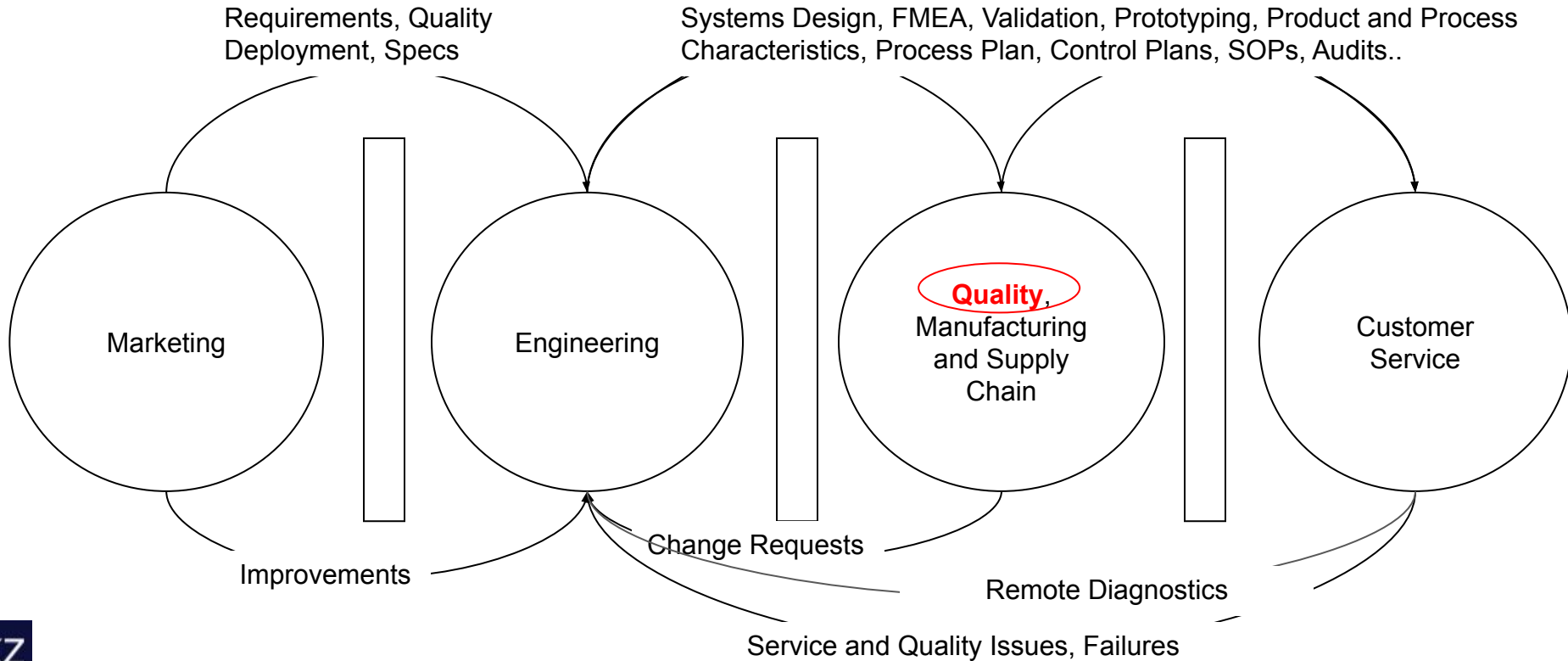
Root cause

- Quality is the responsibility of only quality department
 - No support for cross-functional quality management processes
 - Quality processes are disconnected from key business and supply chain processes
- Quality workflows are poorly supported**

Effect

- | | | |
|----------------------------------|---------------------|-------------------------|
| Poor product and service quality | Reputational damage | High warranty cost |
| Non-compliance | Customer returns | Supply Chain Disruption |
- Uniformly bad consequences**

Process and Information Silos Are Obstacles to Making “Quality is Everyone’s Responsibility”



Many Sources of Quality Events



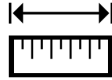
Customer
Complaint



Poor
Customer
Review



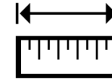
Simulation



Process
Measurement



Inspection



Process
Measurement



Incoming
Inspection

Customer
Quality

Design
Quality

Manufacturing
Quality

Supplier
Quality



Return
Material
Authorization



Field
Failure



Test Result



Nonconformance



Supplier
Nonconformance

Many Systems to Interoperate

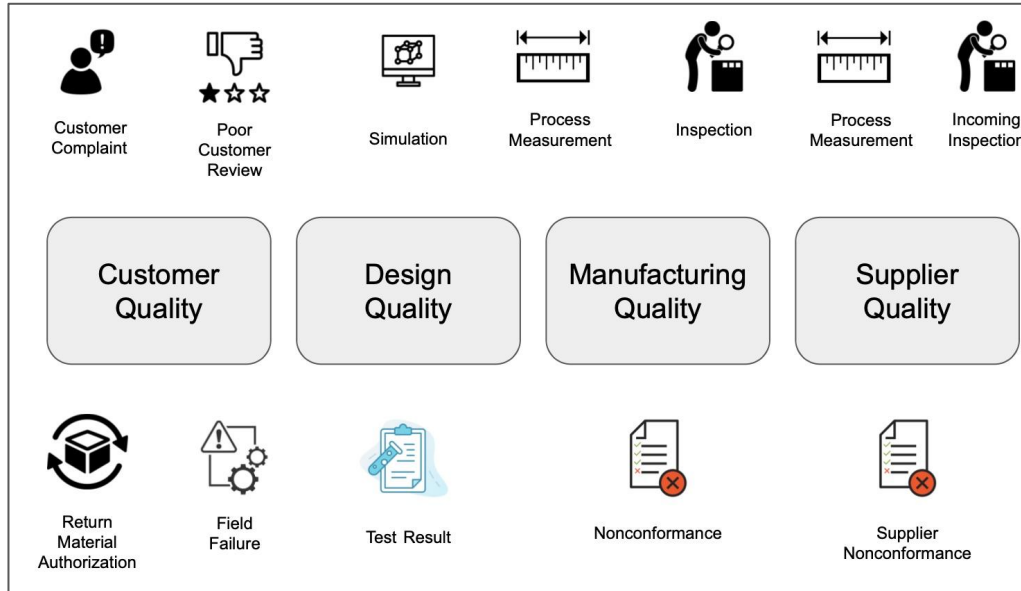
CRM
Systems

E-commerce

Testing
Systems

LIMS

Inspection
Systems



ERP
Systems

Sourcing
Systems

ZFlow - Cross-functional Quality Management Workflows that Promote “Quality is Everyone’s Responsibility”

Quality Workflows that can include and be started by anyone and system

Out-of-the-box Integration to ERP, MES, PLM, Supply Chain systems

Zero-code

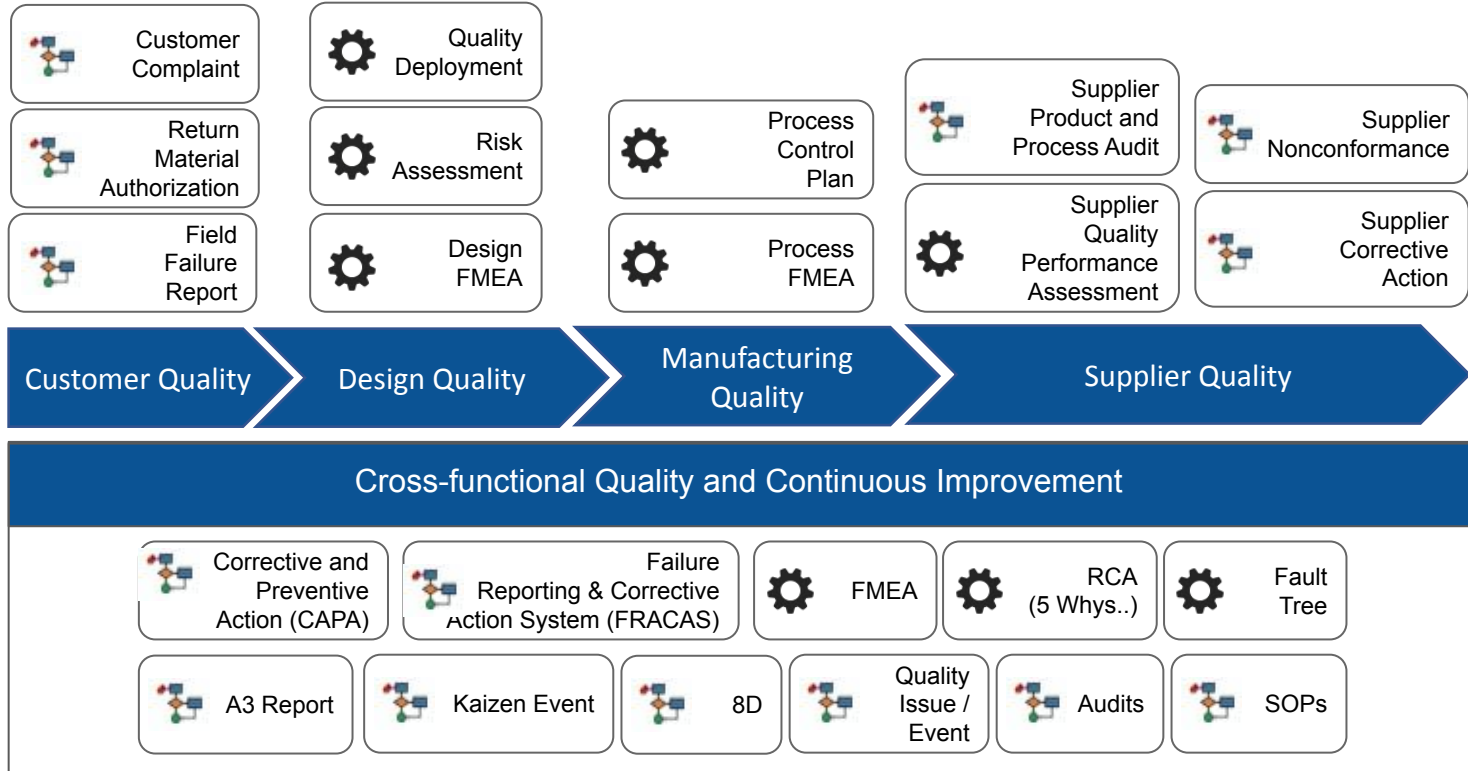


Involves All the Right People at the Right Time

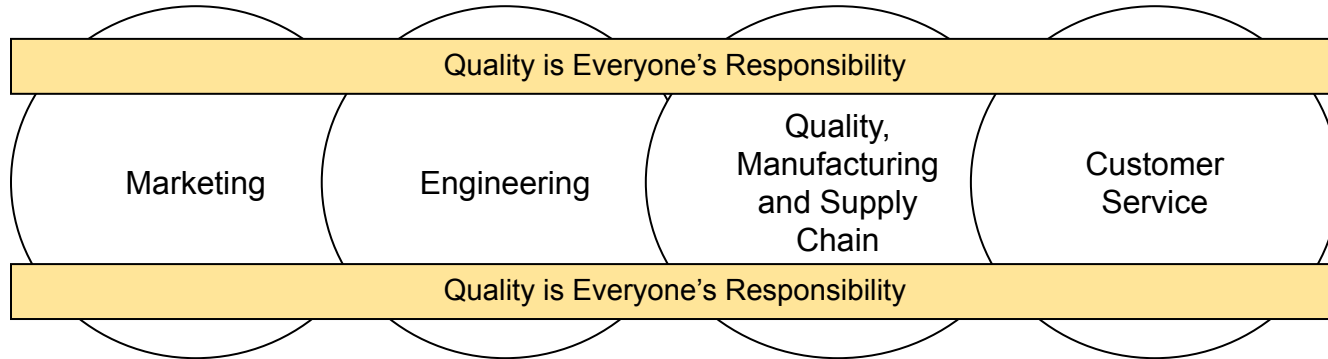
Supply Chain Ready

Integrated and effective quality tools and techniques

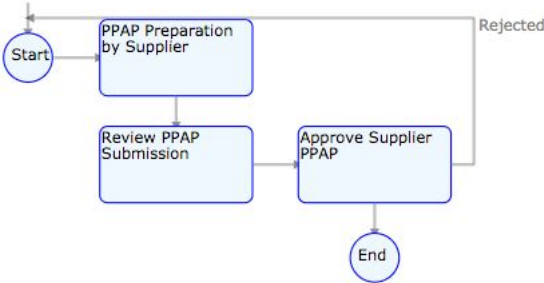
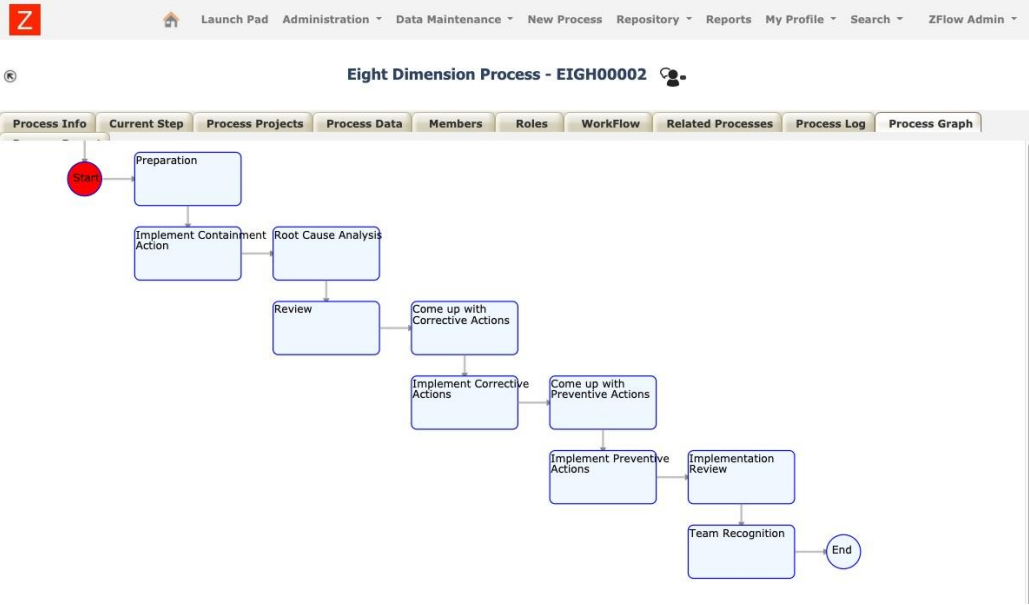
Digital Workflows for Quality Management Excellence



Designed to Promote “Quality is Everyone’s Responsibility”





Powerful Do-it-yourself Workflow Design and Execution





Cross-functional Team Collaboration

Z
Roles - Supplier PPAP
✕


New


Edit


Delete


Update Processes


Role Name
Description
From Org
Privileges


<input type="radio"/> Participant			
<input type="radio"/> Design Engineer	No		
<input type="radio"/> Process Admin			
<input type="radio"/> Purchasing Lead	No		
<input type="radio"/> Supplier Representative	No		


Z
Menu


- Administration
- Data Maintenance
- New Process
- Repository
- Reports
- My Profile
- Search
- ZFlow Admin


Organization Structure - Root



Edit



Add Organization



Add Position



Add New User



Export



Rename



Delete



Delete All



Expand All












Users


Open Org


Report

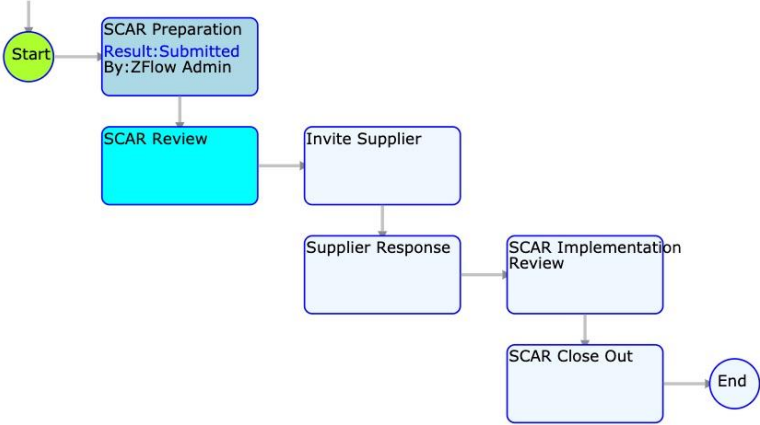

Download


Back

Entity	Type	Person Assigned	Reports To Position
<input type="radio"/>  Root	Organization		
<input checked="" type="radio"/>  ZZ Corp	Company		
<input type="radio"/>  Tezla	Organization		
<input type="radio"/>  CEO	Position	zflow-ceo@mailinator.com	
<input type="radio"/>  VP of Finance	Position	zflow-vp-finance@mailinator.com	
<input type="radio"/>  VP of Manufacturing	Position		
<input type="radio"/>  Fremont Plant	Division		
<input type="radio"/>  Plant Manager	Position		
<input type="radio"/>  Giga Factory	Division		
<input type="radio"/>  Z Lab	Organization		

Easy and Secure Supplier/Customer Integration into Quality Management Workflows

Business Name	Supplier ID	Supplier Relationship Status	Supplier Maturity Level	Supplier Category
<input type="checkbox"/> Avioq Inc.	SAVIOQ	Active	Advanced	Strategic
<input type="checkbox"/> Bosch Sensortec	SBOSCH	Qualified	Advanced	Non -strategic
<input type="checkbox"/> Broadcom	SBRCM	Active	Advanced	Strategic
<input type="checkbox"/> Carrier UTC	Carrier			
<input type="checkbox"/> Cirrus Logic	SCIRRUS			
<input type="checkbox"/> Genco Contractors	Genco			
<input type="checkbox"/> Generac	Generac			
<input type="checkbox"/> Honeywell	Honeywell			
<input type="checkbox"/> Huizhou Desay	SHUIZHOU		Basic	Non -strategic
<input type="checkbox"/> Intel Corp	SINTC	Preferred	Integrated	Strategic
<input type="checkbox"/> Jabil	JABIL	Preferred	Integrated	Strategic
<input type="checkbox"/> Lattice Semiconductor	SLATTICE	Qualified	Advanced	Non -strategic
<input type="checkbox"/> Lennox International	Lennox			
<input type="checkbox"/> MetalDyne	MetalDyne	Active	Basic	
<input type="checkbox"/> Murata Manufacturing	MURATA	Active	Advanced	Routine
<input type="checkbox"/> Northern Tool and Equipment	NorthernTE			
<input type="checkbox"/> NXP Semiconductor	NXPSEMI	Preferred	Advanced	Non -strategic
<input type="checkbox"/> Qorvo Inc	QORVO	Qualified	Advanced	Non -strategic
<input type="checkbox"/> Qualcomm Inc.	QCOM	Restricted	Advanced	Strategic
<input type="checkbox"/> Skyworks Inc.	SKYWORKS	Active	Advanced	
<input type="checkbox"/> TDK Corp	TDKCORP			



Integrated and Effective Techniques as part of Quality Workflows

Design FMEA - Delta Eclipse XZ

Design FMEA
 Delta Eclipse XZ
 Maintains designed level of low pressure
 Desired vacuum level not maintained
 Contamination of test environment
 Leak due to o-ring failure
 Continuous measurement
 New o-ring
 Vacuum system failure
 Continuous measurement
 Controls movement of IC test beds
 Maintains temperature

Form Identifier: Delta Eclipse XZ DFMEA
Status: Work In Process
Created By: admin@zflow.io
Last Update: 2020/12/14 8:37:54

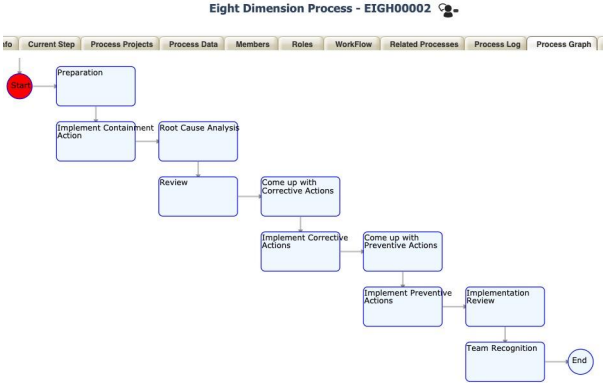
Part Number: Delta Eclipse XZ
Rev.: A
Creation Date: 2020/12/14 8:37:54
Updated By: admin@zflow.io

Description: Delta Eclipse XZ DFMEA
Rev.Status: Pending

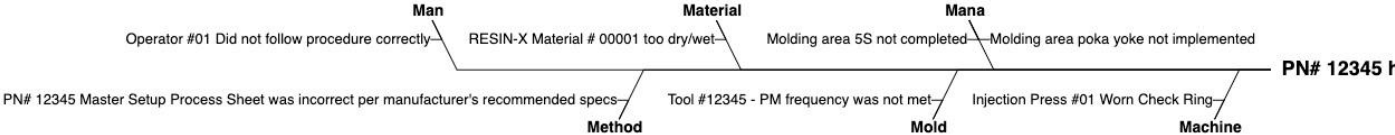
Design FMEA Function

#	System	System Interface
<input type="checkbox"/> 1	Vacuum Chamber	
<input type="checkbox"/> 2	Motion Controller	
<input type="checkbox"/> 3	Thermal Controller	

FMEA



8D



Fishbone

Quality Workflow Status Visibility and Metrics

Supplier Corrective Action - Processes - Total Records: 6

Approval Status ▾

Completed Rejected Approved Other



Process Status ▾

Not Submitted Running - Work In Process



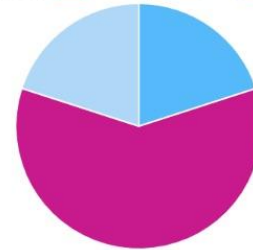
Issue Type

Field Failure Nonconformance Return Customer Complaint Poor Quality



Recommended CAR Type

Design Change Process Change Training Inspection

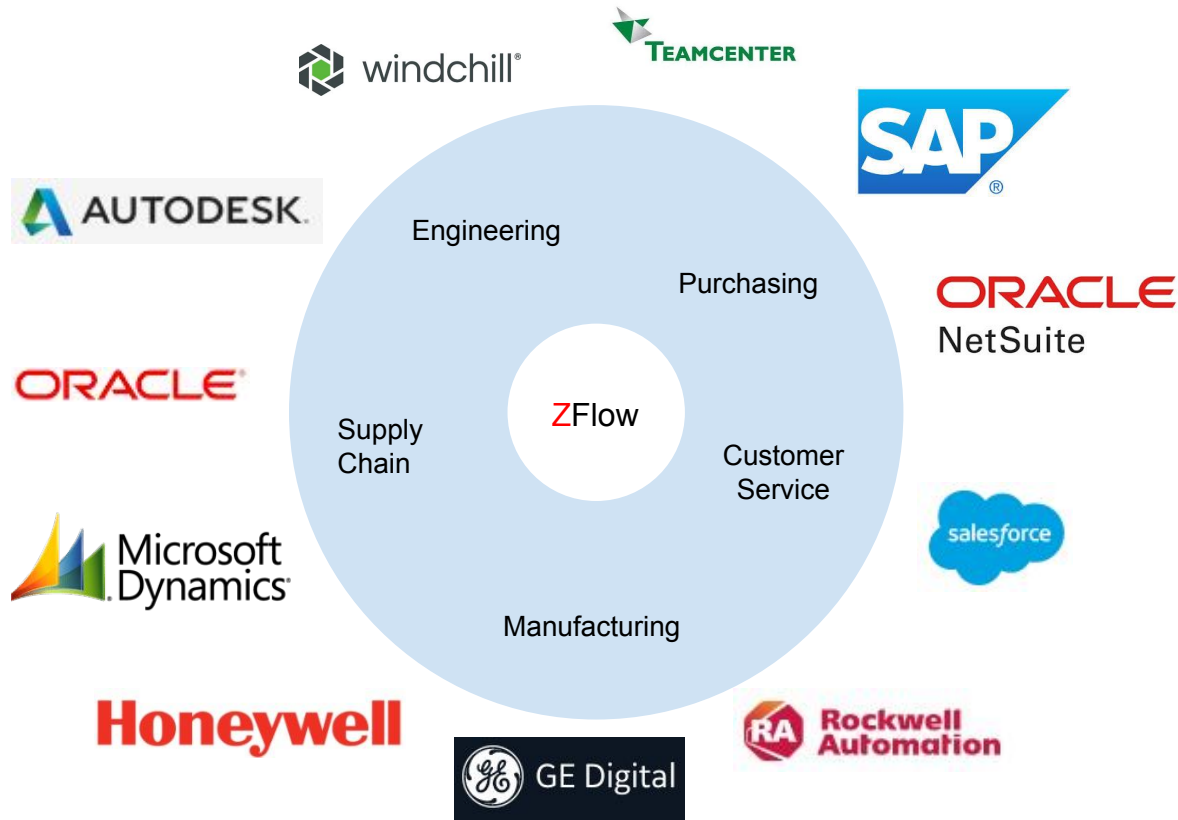


Root Cause Type

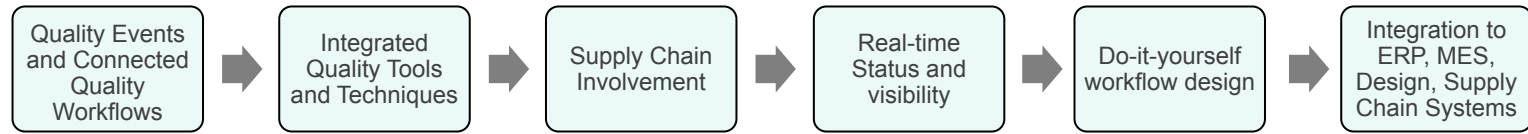
Part Process Training Quality Control



Rich Capabilities for Integrating to ERP, Engineering, Manufacturing and Supply Chain Applications



Demo



ZFlow Architecture

Runs on



Cross-functional Quality



Design Quality



Manufacturing Quality



Customer Quality



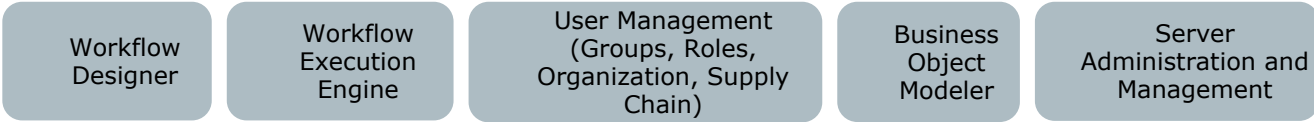
Supplier Quality



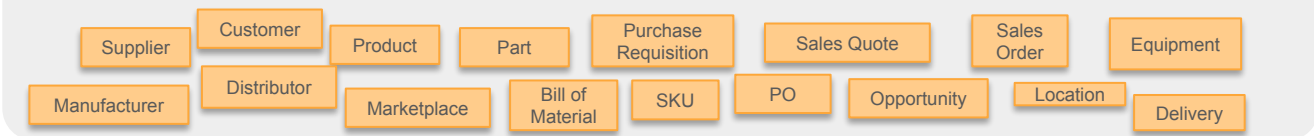
Continuous Improvement



Cross-functional Business Processes



KaizenKit Product, Process and Supply Chain Object Models



KaizenKit Integration and Synchronization Framework



Summary

- ❑ *Proven success in many industries*
- ❑ *Easy to adopt and loved by users*
- ❑ *Easy to get started*

[Test Drive ZFlow](#)

[Free Proof-of-concept](#)

For More Information

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