

Master Data Management for Supply Chain Excellence

Kris Gorrepati and Hiren Shah

About Cambrian Lab

WHO WE ARE



Team & Mission

Founded by Supply Chain, New Product Development and Enterprise Technology Experts from SAP, Samsung, Siemens, GM, Ford, Applied Materials to provide **Effective and Practical Solutions for the Modern Supply Chain**



Expertise

- New Product Development/Introduction (NPD/I), Supply Chain Management and Logistics
- High-tech, Automotive, Semiconductors, Medical Device..
- Enterprise and Supply Chain Technology (ERP, SCM, Manufacturing, CRM, Sourcing, Finance)

WHO WE SERVE



Industries

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



Our Offerings

- **ZFlow** – Digital Workflow for the Product Supply Chain
- **Cogence** – Collaborative Product Development for High Quality, Safety and Reliability

WHERE WE ARE



US Locations

SF Bay Area, Boston, Detroit



Implementation and Referral Partners

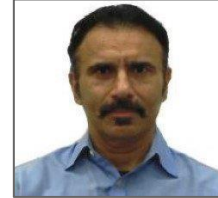
United States | Asia-Pacific

Panelists



Kris Gorrepati

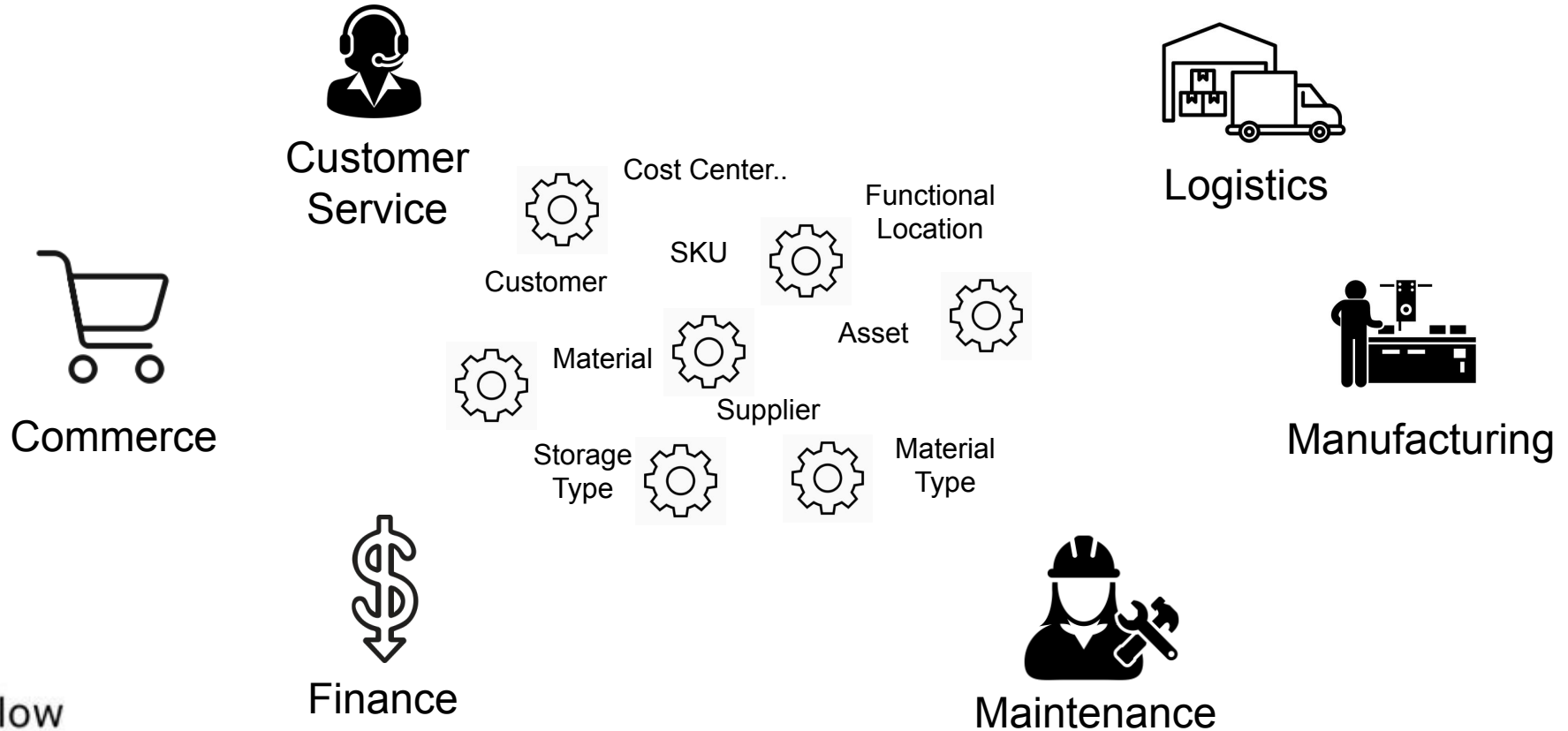
- 20+ years experience in New Product Introduction and Supply Chain
- SAP, Samsung, Ford, Caterpillar
- Auto, High-tech, Software
- Michigan Tech (Mech Engg.), UCLA



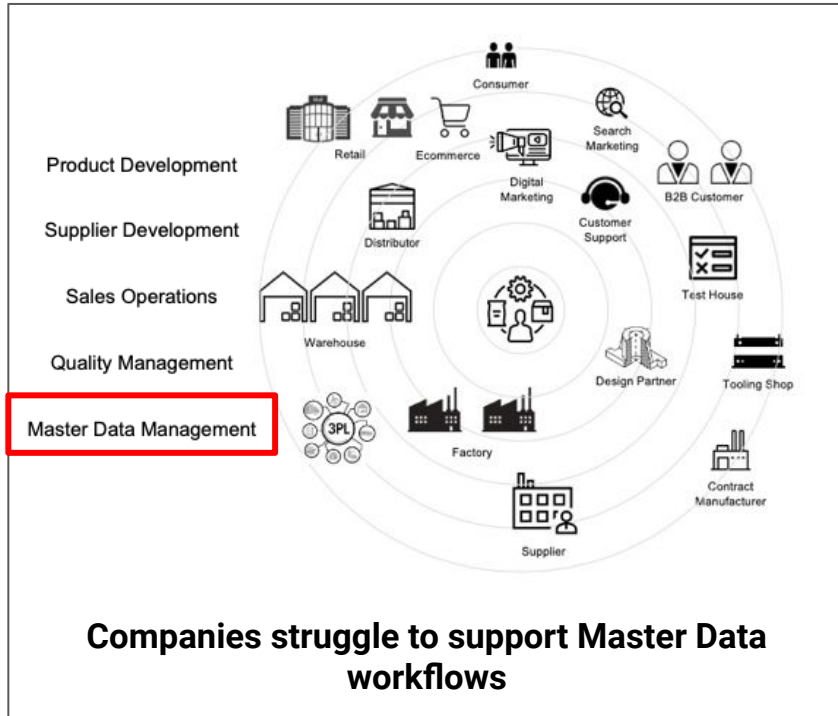
Hiren Shah

- 20+ years experience in ERP, CRM, Finance, Manufacturing
- SAP, Ford, Samsung
- Auto, High-tech, Software
- Michigan Tech (Elec Engg.), University of Chicago

Good Master Data is Critical to Supply Chain Excellence



Master Data Workflows are a Challenge for most Organizations



Poor E-commerce
Performance

New Product
Launch Issues

Supply Chain
Disruption

Poor Supplier
Performance

Poor Product and
Service Quality

High Sales
Operations Cost

Lost Sales

Uniformly bad consequences

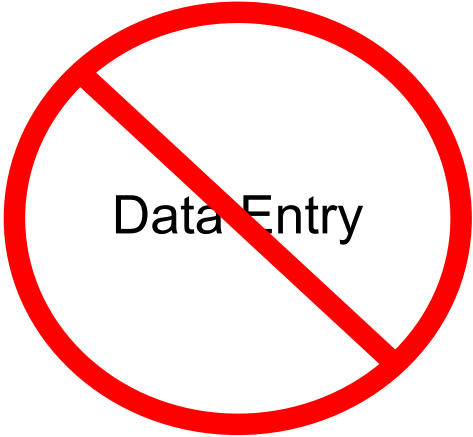
Effect

- Nothing exists in most cases (Email, Excel..)
- Too much focus on data entry
- Business stakeholders are not directly involved
- Takes too long and too much effort

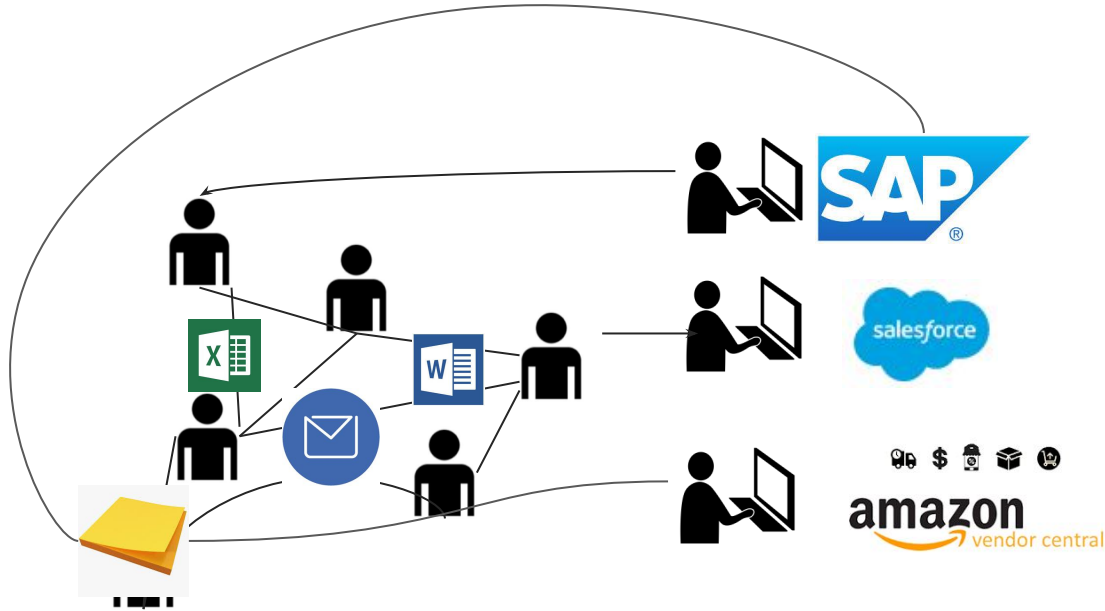
Root cause

Because Master Data workflows are poorly supported

Master Data Management



Traditional Master Data Management



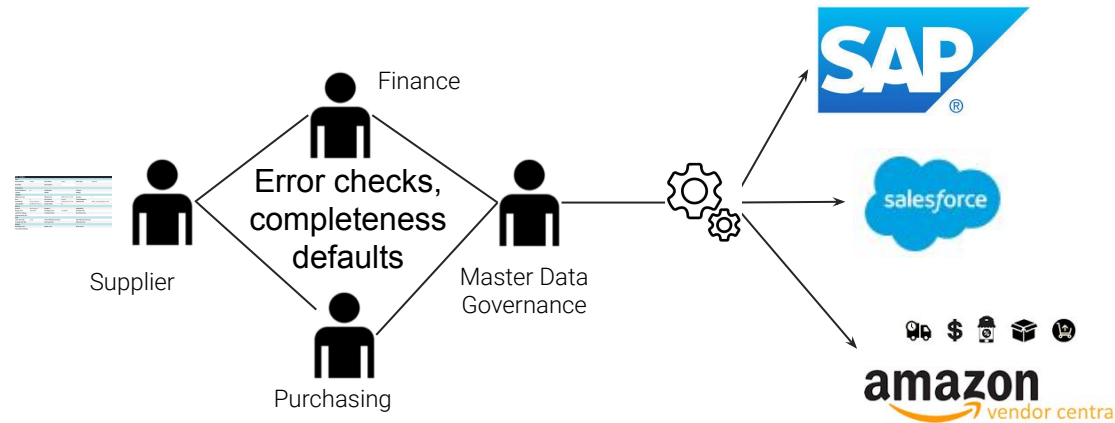
Takes a lot of time and resources

Very little business stakeholder involvement

Data entry focus

Error-prone

Collaborative Master Data Management



Faster and simpler
with digital workflow

Driven by business
stakeholders

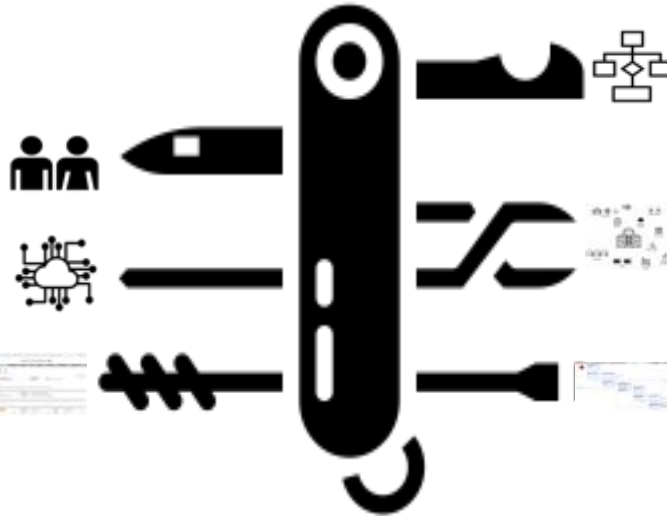
Business focused

Error-proof

*Inventory levels
Logistics flow
Supplier risk
E-commerce
readiness
.....*

ZFlow – The Swiss Army Knife of Digital Workflow

Right Activity, Right Time, Right Person

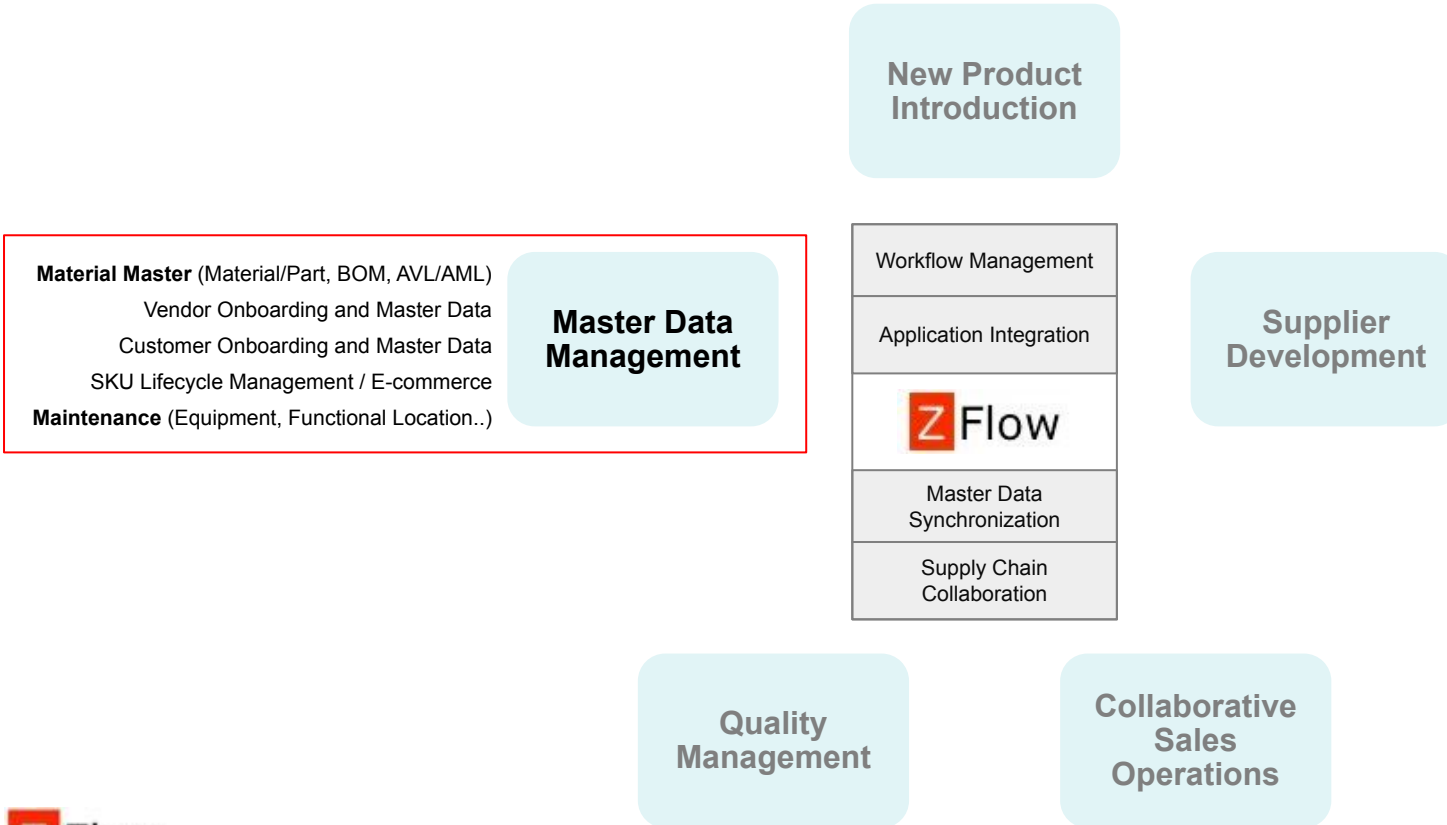


Do-it-yourself Workflow Design

Supply Chain Ready

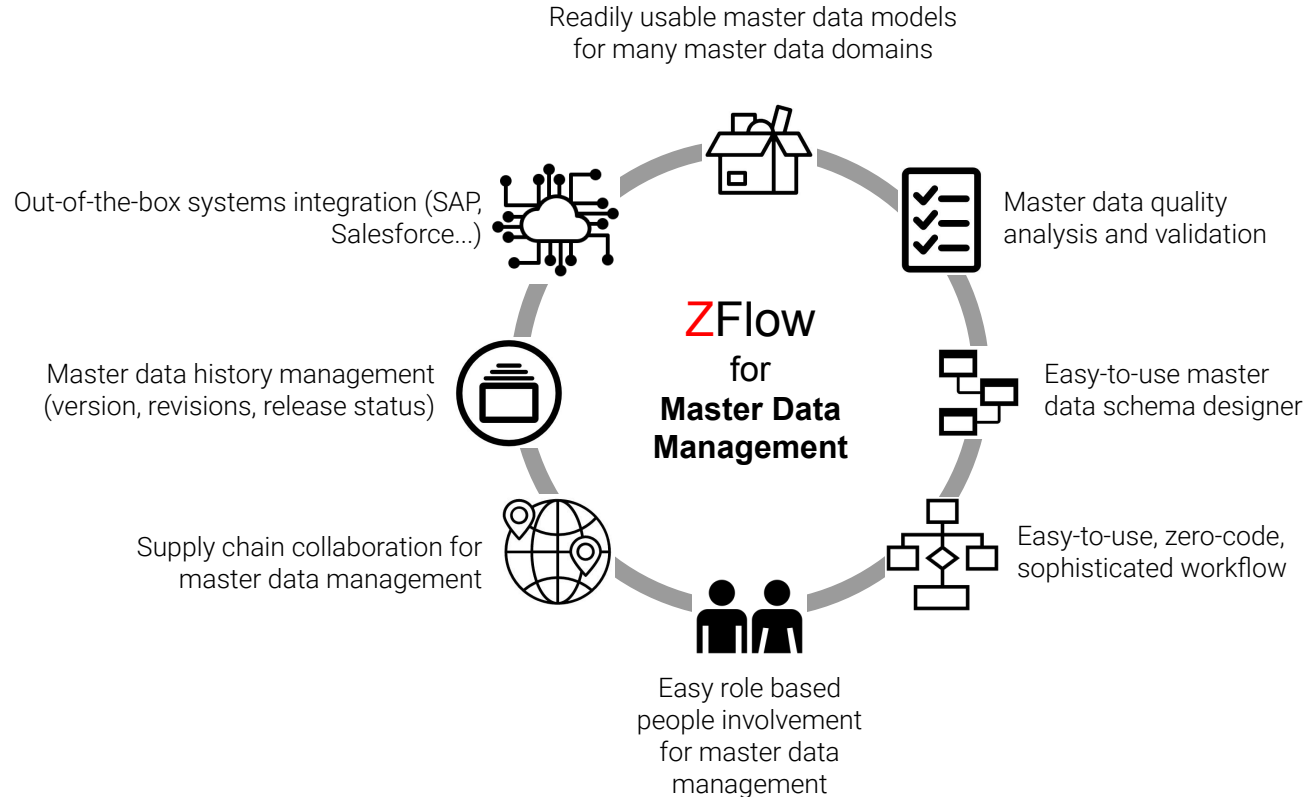
Readily Usable Process/Object Models
for many Domains
(New Production Introduction, Supplier Development,
Quote-to-Cash, E-commerce, Master Data...)

ZFlow Master Data Domains Support Key Business Processes




ZFlow for Collaborative SAP Master Data Management

Powerful Capabilities for Effective Master Data Management













Readily Usable SAP Master Data and Related Workflows




 [Launch Pad](#) [Administration](#) [Data Maintenance](#) [New Process](#) [Repository](#) [Reports](#) [My Profile](#) [Search](#) Admin Adm

Launch Pad for Administrator




Material Master Data Management

 Create SAP Material Master Active(0) Find Insights New	 NPI Process - Multiple Materials Active(3) Find Insights	 NPI to Production Transfer Active(2) Find Insights New	 New Part Request Active(6) Find Insights New
 Approved Manufacturer List List(0) Find	 Approved Vendor List List(0) Find	 Part/Assembly List(32) Find	 SAP Material Master List(2) Find
 SAP Purchase Info Record List(0) Find	 Manufacturer List(15) Find		




Supplier Master Data Management

 New Supplier Request Active(4) Find Insights	 Vendor Master List(0) Find	 Supplier List(16) Find
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Customer Master Data Management

 New Customer Active(3) Find Insights	 Customer Master List(0) Find	 SAP Customer Master List(1) Find
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ECommerce Master Data Management

 Multi SKU GTM Workflow Active(1) Find Insights	 Single SKU GTM Workflow Active(0) Find Insights New	 SKU List(0) Find
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Manufacturing Master Data Management

 Bill Of Material List(1) Find	 Control Plan List(0) Find	 Process FMEA List(0) Find	 Process Plan List(1) Find
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Versatile and Supports Many Types of Master Data Workflows

Design your own in a matter of minutes and hours

Master Data Management

- New Part/Material Request
- New Material (Basic View)
- Extend Material (All Views)
- Change Material
- New Materials
- Bill of Material
- Routing
- Recipe
- Production Version
- New SKU
- Channel SKU Listings (Amazon, Shopify, Google Merchant Center)
- E-commerce Variation Management

- Approved Manufacturers
- Approved Manufacturer Parts
- Approved Suppliers
- New Supplier Request
- New Supplier Onboarding
- Vendor Change
- Purchase Info Record
- Pricing Master
- Pricing Change
- Cost/Price Synchronization
- New Customer
- E-commerce Branding Content
- Equipment
- Functional Location
- Maintenance Plan

Component Engineering

- New Component Request
- Component Change Request
- New Component Qualification
- New Component Manufacturer Qualification

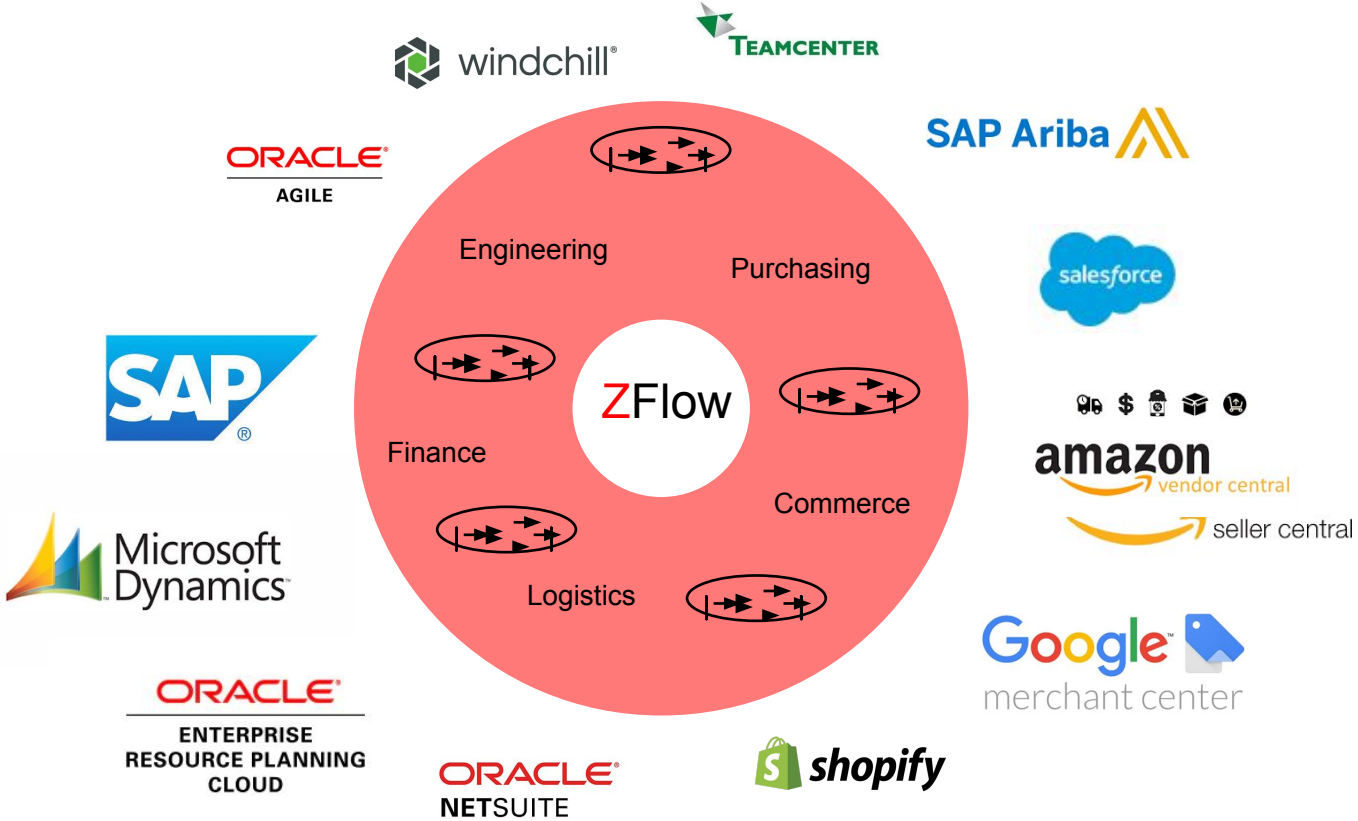
E-commerce

- SKU Lifecycle Management
- Amazon Seller and Vendor Central Integration – Product/Image/A+ Content/Inventory/Pricing Feed
- Google Merchant Center Integration – Product Feed
- Shopify Integration – Product Feed / Orders

Product Engineering

- New Product Development using Stage-gate Workflow
- New Product Development using Concurrent Engineering Workflow
- New Part Request
- New Part Release

Rich Capabilities for Integrating to Best-of-Breed Applications for Master Data Management



Demo

Simple
Part/Material
Creation

Extending
Materials

Plan for Every
Part

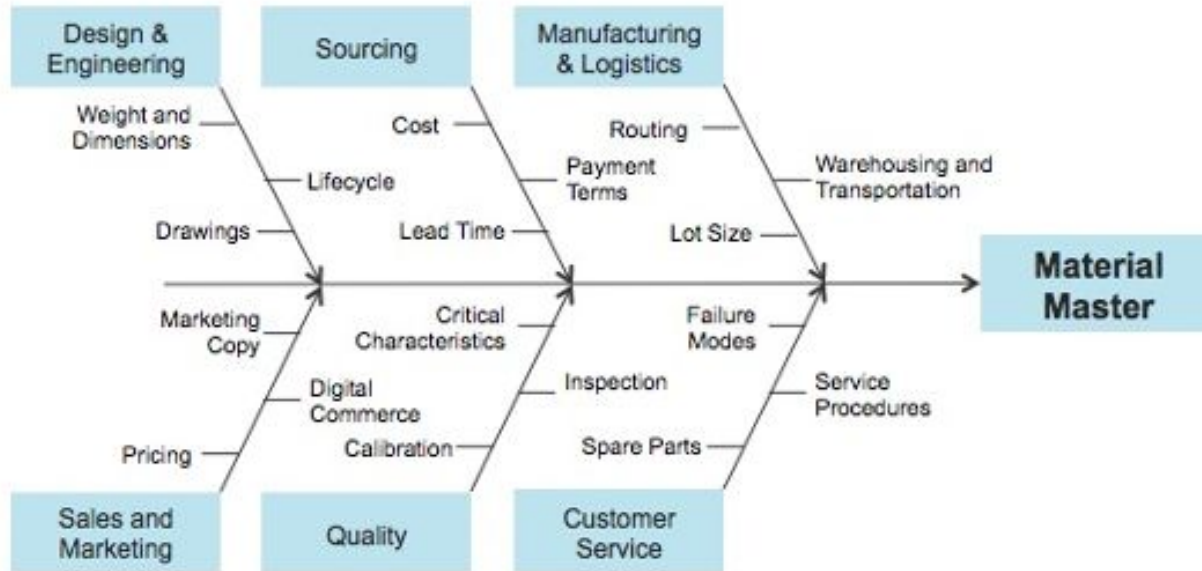
Are you ready
for
E-commerce?

New Suppliers
and
Onboarding

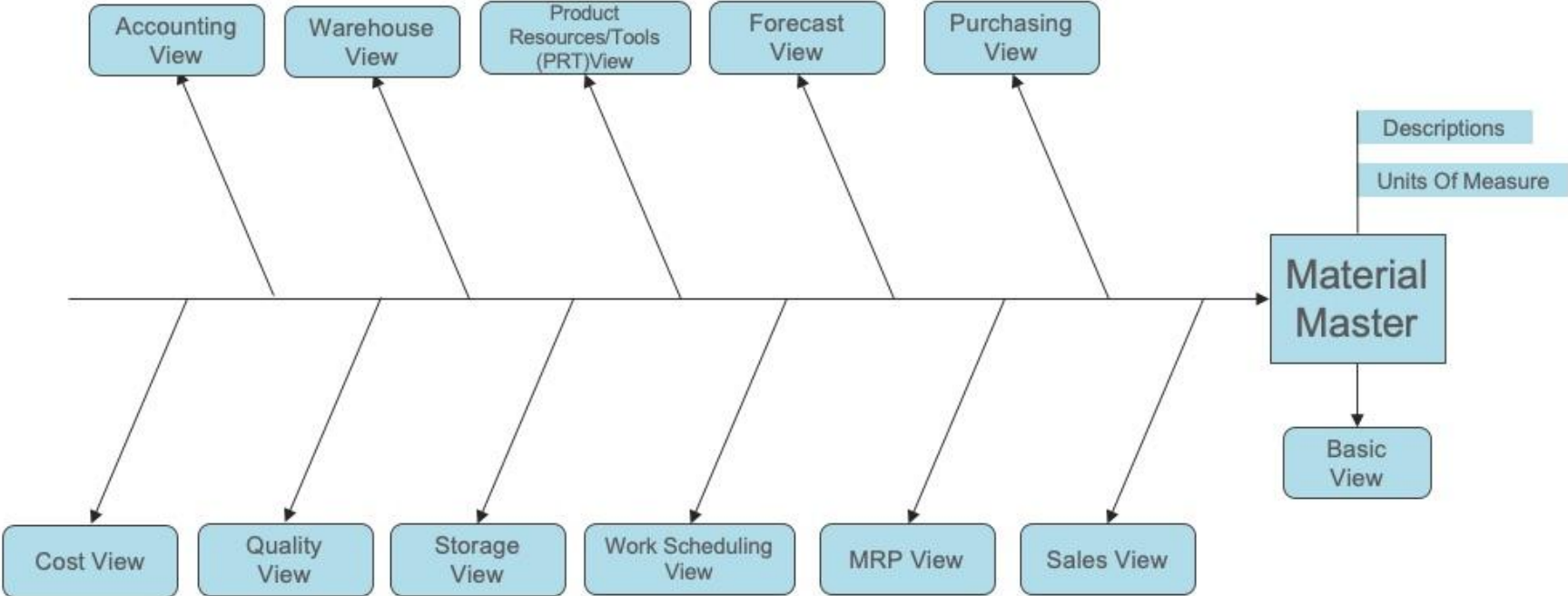
Supply Chain
Risk

Anatomy of a Material Master

Stakeholders and Decision-making for Materials Master Data



Material Master In SAP



Master Data for E-commerce

Technical Information

Product Information

Technical Details

Model Number	SM-N960U
Release Date	2019-08-01
OS	Android 9.0
Processor	Exynos 9800
RAM	6GB
Storage	128GB
Camera	12MP
Battery	3500mAh
Weight	165g
Dimensions	160.8 x 76.2 x 8.1 mm
Colors	Midnight Blue, Aurora Green

Descriptions and Bullet Points

Levi's® Hyper-CND™ 14 FWD Touch™ - 1999
Men's Slim-Fit Denim Jeans

- Hyper-CND™ fabric is made with a special stretch and recovery technology that helps you move and stay comfortable all day long.
- 14 FWD™ (Forward) stretch denim for extra flexibility and comfort.
- Available in a variety of colors and finishes.



Variants



Inventory and Store Location



Videos



Pricing

Visit the Levi's Store
Levi's Men's 501 (4.5 stars) - 41,273 ratings
Price: \$13.22 - \$79.50 &

Images



Master Data for Supplier and Supply Chain Risk

Supplier Risk Assessment - Intel Intel

Show Spreadsheet Reports Close Comments

Supplier Risk Assessment

- Intel Intel
- Quality
- Quality Defects per million
- Quality Ease of problem resolution
- Quality Product complexity
- Quality Timeliness of corrective action
- Quality Value of product
- Disruption
- Disruption Earthquake
- Disruption Fire
- Disruption Flooding
- Disruption Labor Availability
- Disruption Labor Dispute
- Disruption Political Issues
- Disruption Supplier Bankruptcy
- Disruption War and terrorism

Supplier: Intel @

Supplier Name: Intel

Supplier Number: SINTEL

Part Number: A10X

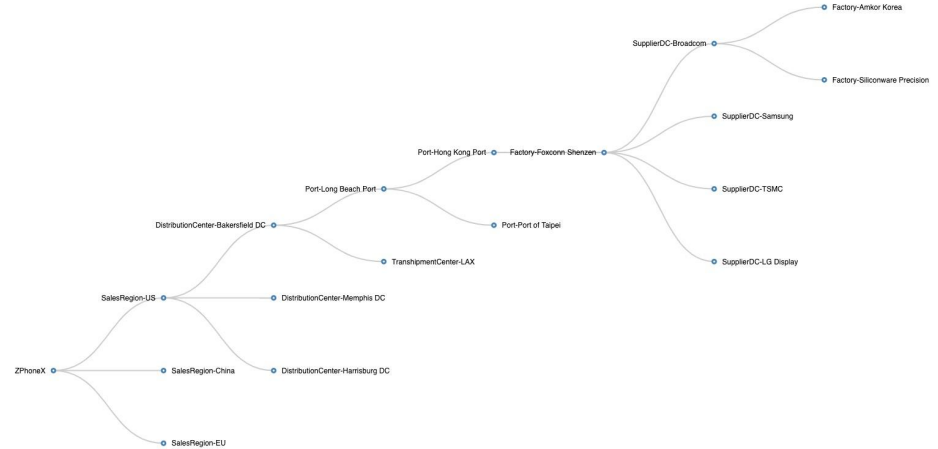
Part Description: A10X SOC

Manufacturing Plant: Portland

Risk Rating

Supplier Part Risk Rating: 4

Default					
#	%	Risk Category	Risk Subcategory	Weight	Rating
1		Quality		60.0	1.0
2		Disruption		40.0	2.0



Supply Chain Risk Assessment - ZPhoneX

Show Spreadsheet Reports Close Comments

Supply Chain Risk Assessment

- ZPhoneX
- US
- Bakersfield DC
- Long Beach Port
- Hong Kong Port
- Foxconn Shenzhen
- Broadcom
- Amkor Korea
- Siliconware Precision
- Samsung
- TSMC

Default									
#	%	Risk Category	Risk Driver	Risk Description	Risk Score	Risk Weight	Risk Rating	Mitigation Strategy	Mitigation Strategy Imp
1		Capacity	Capacity Shortage	Not enough capacity	4.00000	0.00000	0.00000		No
2		Systems	Cyber Security Incident	Ransomware stopping operations	0.00000	0.00000	0.00000	Check cyber security	Yes
3		Delay	Poor Yield	Low yield	0.00000	0.00000	0.00000	Add an extra shift	Yes

ZFlow Success Stories

Global Tier 1 Automotive Supplier

Deployed Processes:

- Engineering change authorization
- Manufacturing change authorization
- Production part approval process
- Process FMEA
- Repository for Part, Tooling and Manufacturing Process information

Systems integrated:

- SAP
- PTC Windchill

Semiconductor Systems & Embedded Computing Industry Leader

Deployed Processes:

- New Part Request/Release
- New Component Request, Component Change
- PCN Analysis, EOL Analysis

Systems integrated:

- SAP

Leading Specialty Chemicals Manufacturer

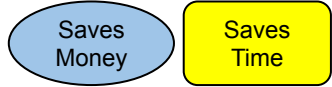
Deployed Processes:






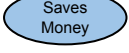




- Material, Customer, Customer Master Data Workflows

Systems integrated:

- SAP

ZFlow is Better for Customers



	ZFlow	Alternatives	
Readiness for use	Useful from Day 1 (Many ready-to-use master data object models and supporting workflows)	At least 2-3 months of implementation	 
Unlimited Users	Unlimited users when subscribing to instance based usage on Public Cloud Platforms	Per user licensing can limit usage/value and can become very expensive	
Ease of use	Zero code workflow design , modern UI framework, mobile ready	Requires coding, extensive in some cases	 
Supporting Technology Cost	\$0 - 100% built on open source components (Tomcat and mySQL)	Often require additional and highly expensive supporting technology (SQLServer, Oracle, .NET Servers..)	
Supply Chain Ready	Workflows can be extended to suppliers and customers easily	Usually do not support supply chain oriented workflows	
100% Browser Based	All administration and use is browser based	May require extensive systems management expertise	
Public Cloud	Ready for operations on all Public Cloud platforms (AWS, Azure, Google Cloud Platform)	May require extensive set up	 
Integration	Readily available integration (SAP, Salesforce...)	Often require expensive middleware	 

Summary

- ❑ *Proven success in many industries*
- ❑ *Easy to adopt and loved by users*
- ❑ *It only takes minutes to get started with the [Test Drive](#)*

For More Information

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[ZFlow for Collaborative SAP Master Data Management](#)