





# Discover the Power of Networked





65%

are planning for accelerated NPD

# We can't just throw people at the challenges we face

A pivot back toward innovation is running into high labor costs, turnover and employee burnout

85%

describe themselves personally as overworked 9.9M

Unfilled manufacturing jobs in the US alone

National Association of Manufacturers, 2023

# NOW MORE THAN EVER, DATA INSIGHTS DRIVE SUCCESS

Material lot compliance is at the heart of your brand promise

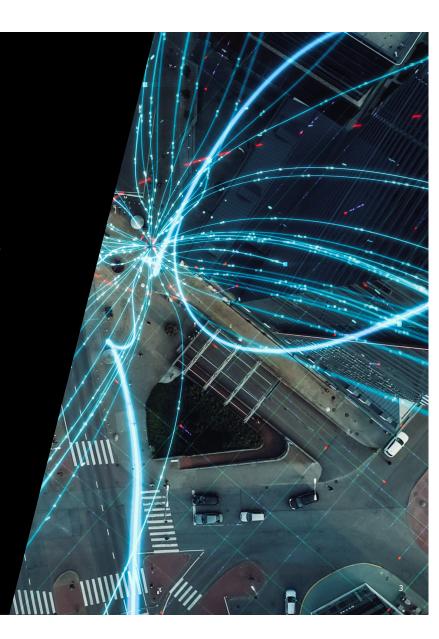
- Quality, safety, compliance
- Product experience
- A delighted CONSUMER



# **DIGITIZATION AND VISIBILITY**

#### **COMPLIANCE INFORMATION YIELDS CRITICAL DATA**

- Linking, tracking and reporting
- Connection to the supply chain
- Connection to your operation
  Trending and analysis to spot issues BEFORE THEY HAPPEN



# **AUTOMATION** AND PERFORMANCE

#### **REDUCE WASTE AND ERROR**

- Process controls, measurable outcomes
- Minimize human error
- Unlock PERFORMANCE INSIGHTS



## **MASTERING YOUR SUPPLY CHAIN**

#### **RELATIONSHIPS AND COLLABORATION**

Invest in your strongest partnersObjective, data-driven evaluation

Build partnerships based on COLLABORATION AND TRUST



### **CHANGING FOR THE BETTER**



#### **CONNECT**

Connecting people and businesses to exchange information seamlessly and accurately.



#### **STANDARDIZE**

Standardizing ingredientlevel data and creating a common language throughout the network



#### **AUTOMATE**

Breaking free of repetitive, expensive and error-prone human processes



# AUTOMATE VISIBILITY INTO MATERIAL LOT

# **QUALITY**

Measure ongoing material performance and risk



### **AGENDA**

1 PROBLEM TO SOLVE

0 2 WHAT TRACEGAINS DOES

**03** WHO BENEFITS?

O4 SOME CASE STUDIES



REDUCE COSTS

IMPROVE QUALITY

AUTOMATICALLY





- 1. COA
- 2. Delivery of ordered materials
- 3. COA Review/Acceptance Receiving Inspection Material Testing

4. Manufacturing Process Plant Floor Feedback

5. Impact on Quality of Product to Customer





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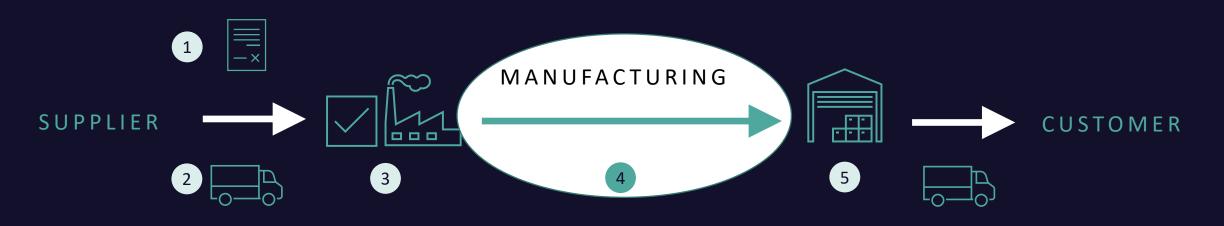


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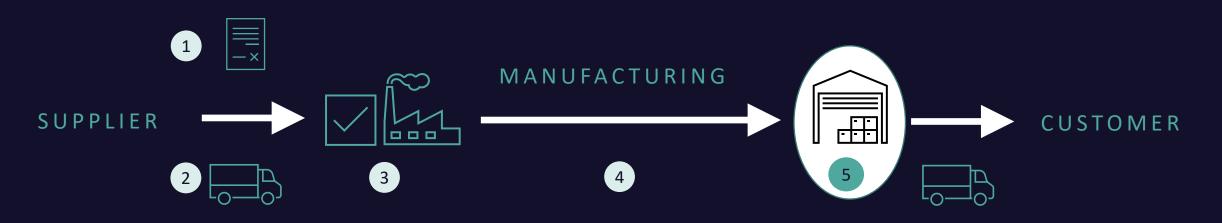


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# WHAT TRACEGAINS DOES

Comprehensive Material Lot Characterization



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Comprehensive Material Lot Characterization

<u>Automatically</u>





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#### RAW MATERIAL COMPLIANCE IN A SINGLE RECORD PER LOT

**Certificates of Analysis** 





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**Truck Inspections** 





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**Truck Inspections** 



Laboratory Tests and Checks





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**Certificates of Analysis** 



**Truck Inspections** 



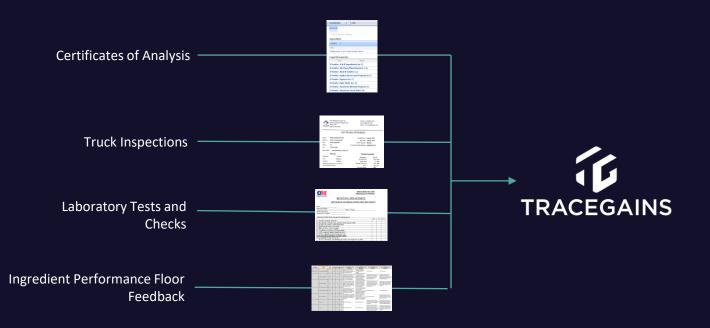
Laboratory Tests and Checks



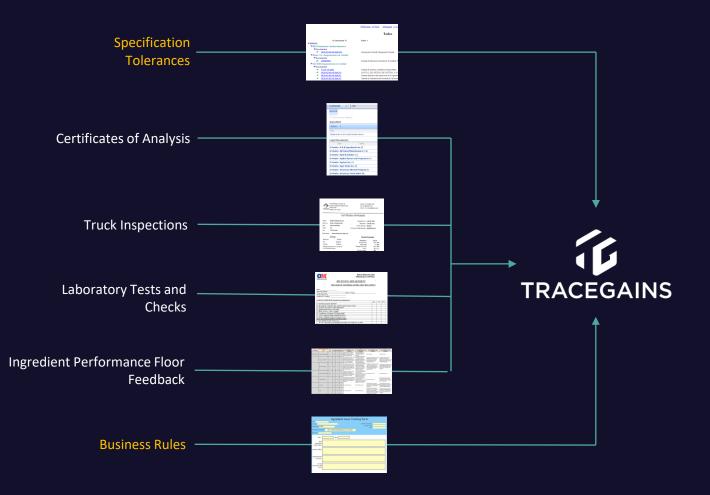
Ingredient Performance Floor



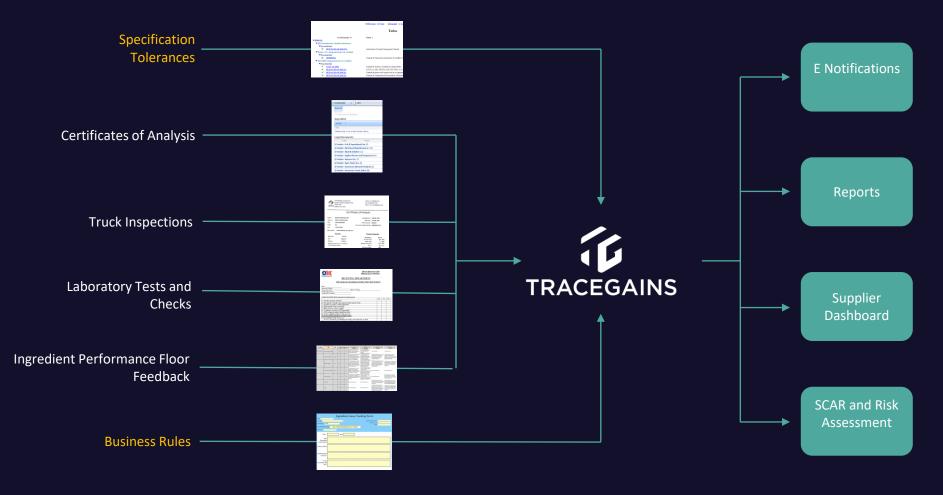






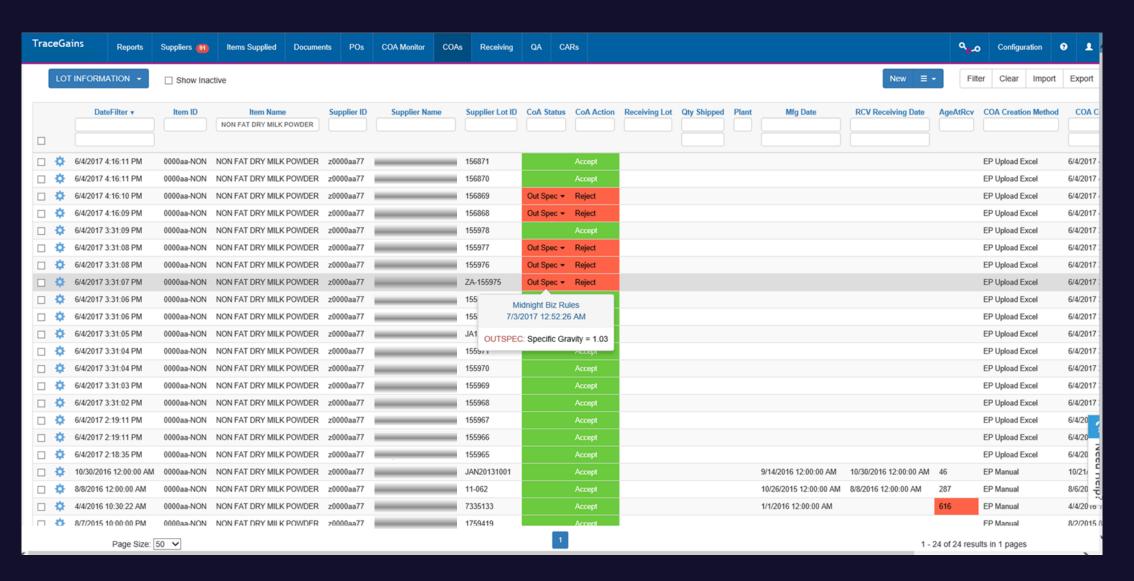








#### **COA** DASHBOARDS



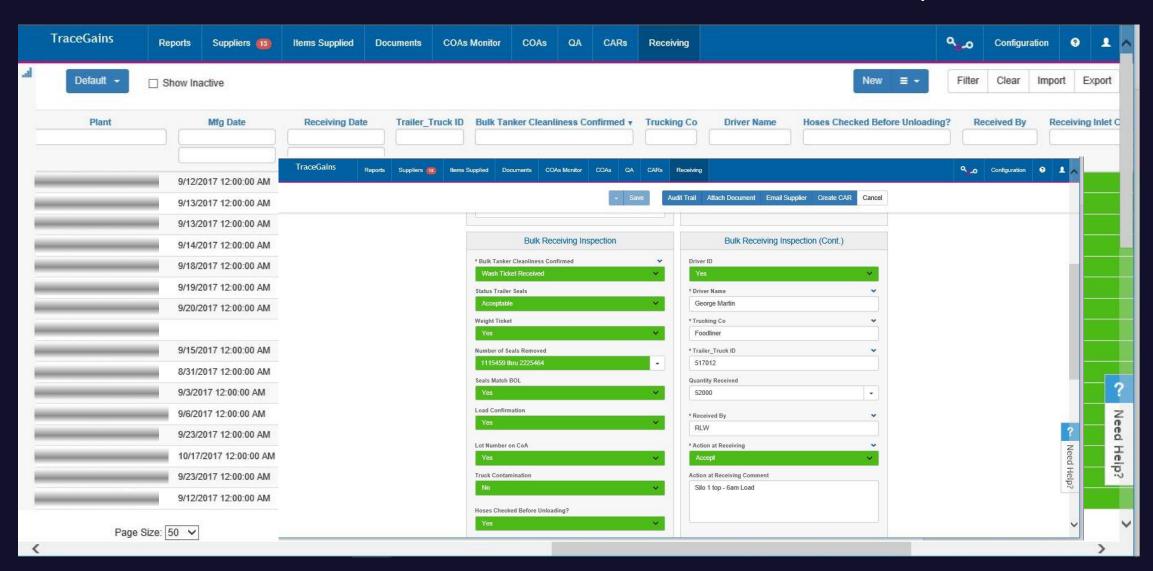


#### **AUTOMATE SHELF LIFE CALCULATIONS FROM EXTRACTED COA DATA**

TraceGains		Market Hub	Reports	Supplie	ers Items Sup	plied Documents	COAs N	Monitor	COAs	QA	CARs	Receiving			Need He	dp?	Configuration		^
.tıl	Supplier In	formation includin	ng Shelf Life In	nfo ▾	☐ Show Ina	tive							New	≣▼	Filter	Clear	Import	Export	
plier Lo	t ID	Mfg Date	Receiving D	ate	Receiving Lot	PO Number		Group By	Transfe	r Contro	l Number	AgeAtRcv	Age at Tra	nsfer Shelf	Life - Days	Shelf	Life Remaining	g - Days	
30519	3/5/20	19 12:00:00 AM				51009195-109							0	90		80			Elk
19ADBA	A 2/19/2	019 12:00:00 AM				51007108 - 909							0	365		341			Bea
19ADBA	A 3/4/20	19 12:00:00 AM				51007108 - 909							0	365		354			D.o.
19ADBA	A 2/12/2	019 12:00:00 AM				51007108 - 909							0	365		334			
73225 02	3/16/2	019 12:00:00 AM				51009193-175 (2207322	5)						0	90		91			
73224 01	3/16/2	019 12:00:00 AM				51009193-175 (2207322	4)						0	90		91			
2960879	3/15/2	019 12:00:00 AM				51009187-257							0	90		90			
3S0115K	3/14/2	019 12:00:00 AM 3	3/15/2019 12:00	0:00 AM		51009210-111-2						1	0	30		29			
419	3/14/2	019 12:00:00 AM				51006869-772							0	90		89			
319	3/13/2	019 12:00:00 AM				51006869-772							0	90		88			
319	3/13/2	019 12:00:00 AM				51006869-771							0	90		88			
89-1050	8 2/28/2	019 12:00:00 AM				51005917-218							0	180		165			
804.	2/14/2	019 12:00:00 AM 3	3/15/2019 12:00	):00 AM		51009216-104						29	0	42		13			
2957790	3/15/2	019 12:00:00 AM				51009187-244							0	90		90			
39827	3/13/2	019 12:00:00 AM				51009193-162							0	90		88			
39826	3/13/2	019 12:00:00 AM				51009193-162							0	90		88			
19800-0	0 3/15/2	019 12:00:00 AM				PO#31009193-161							0	90		90			
39825	3/13/2	019 12:00:00 AM				51009193-162							0	90		88			
2200360	1/28/2	019 12:00:00 AM				51005614-8271							0	365		319			L-115
4600400	2/40/2	040 42.00.00 414				C400EC44 0220							^	366		240			187-

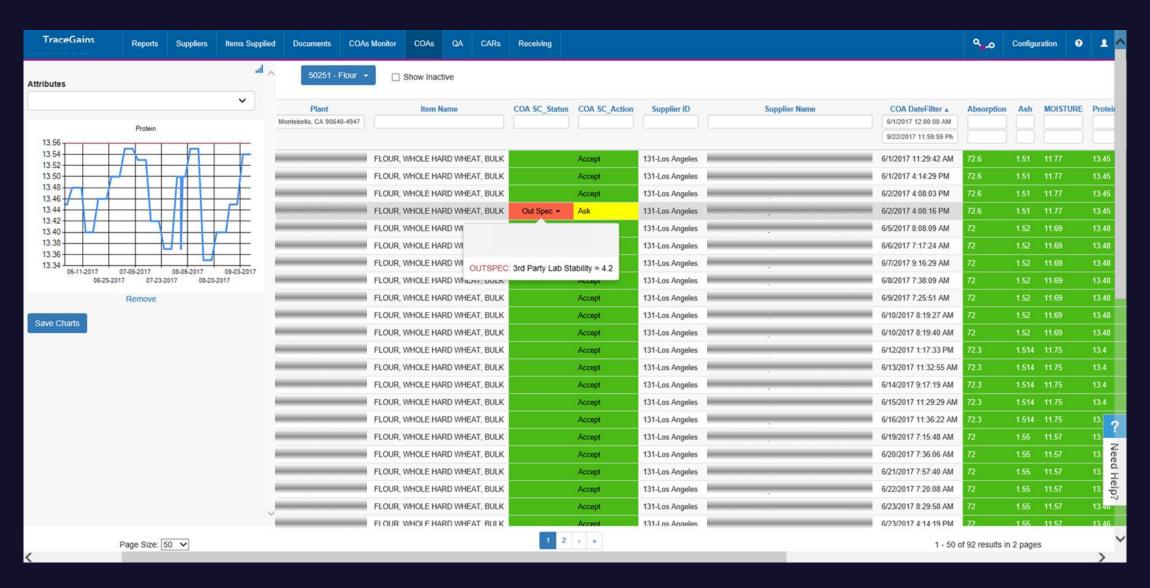


#### **CONDUCT ELECTRONIC RECEIVING INSPECTIONS: ALERTS/TRENDS**



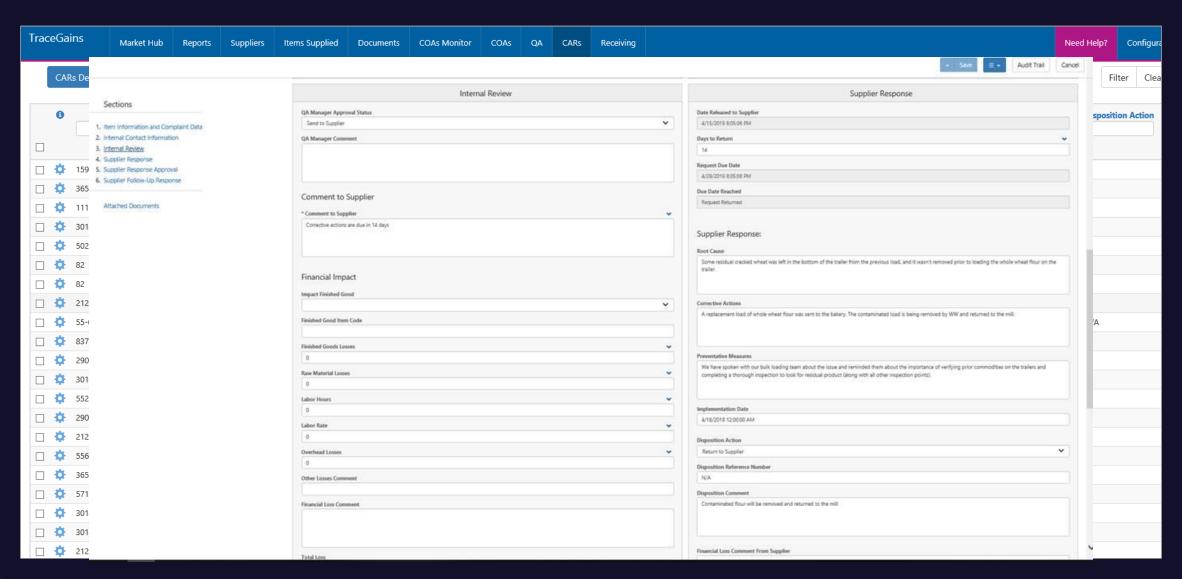


#### LAB TESTING LOT TO LOT ATTRIBUTE TRENDS



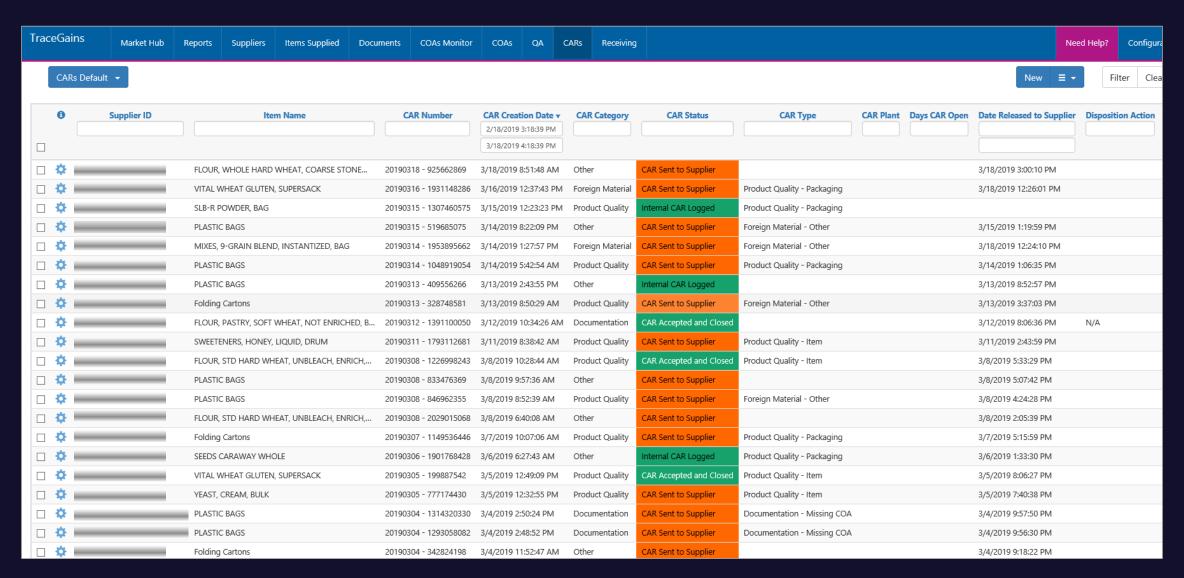


#### **SUPPLIER** CORRECTIVE ACTIONS



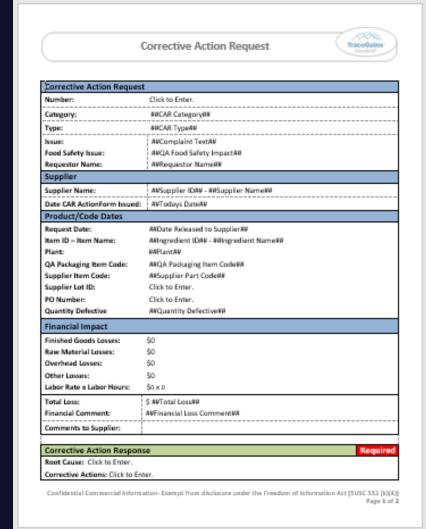


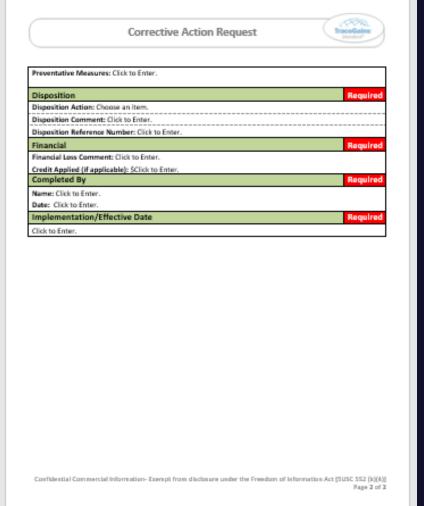
#### **SUPPLIER CORRECTIVE ACTIONS**





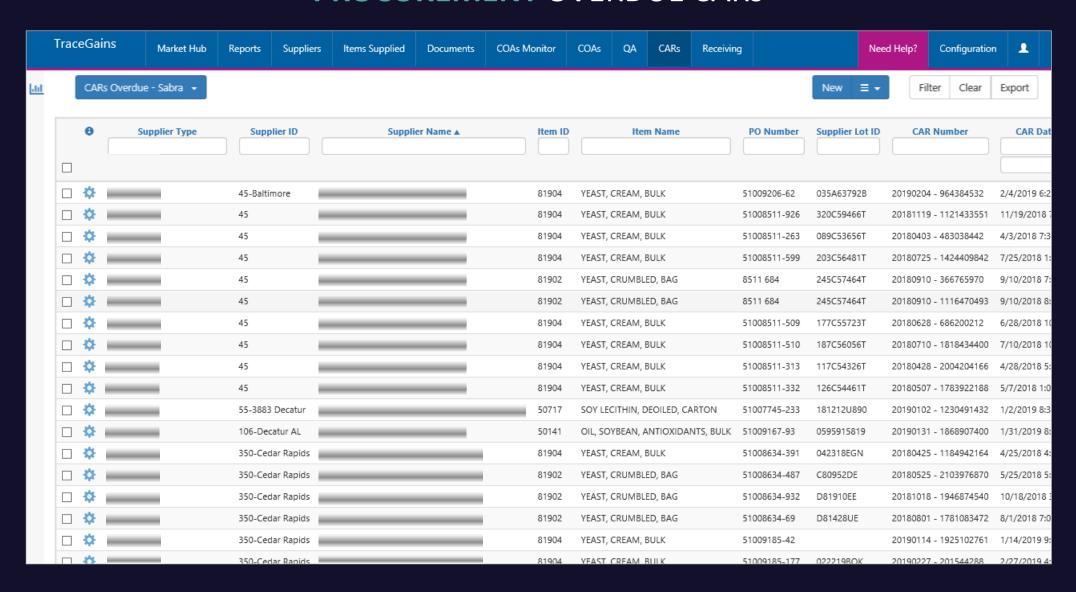
### **SUPPLIER** CORRECTIVE ACTIONS







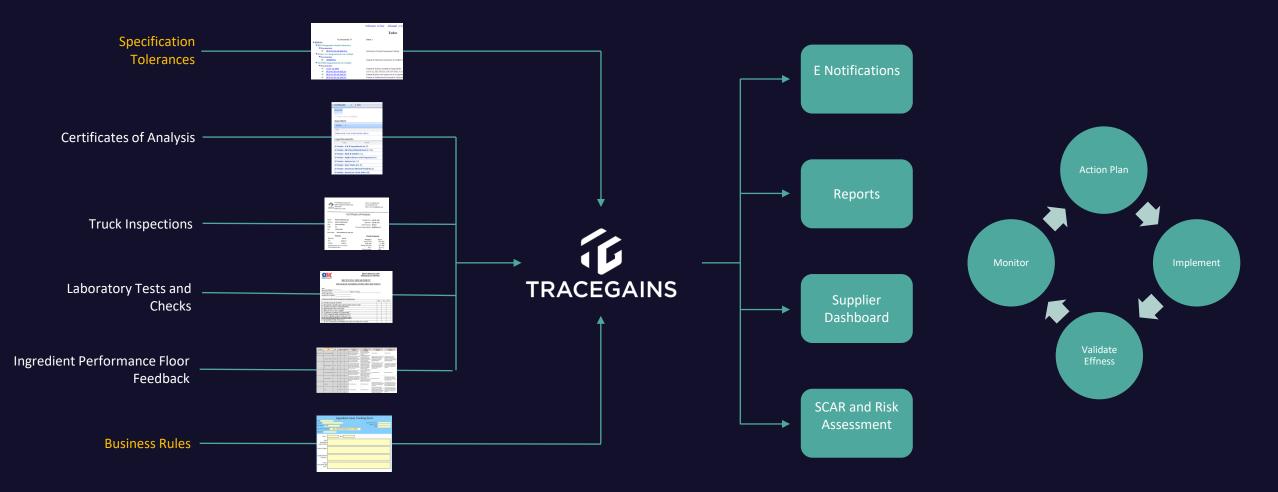
### **PROCUREMENT OVERDUE CARS**





### **TraceGains Components**

### RAW MATERIAL COMPLIANCE IN A SINGLE RECORD PER LOT





### **DASHBOARDS SPOT TRENDS / DRIVE INSIGHT + INTELLIGENCE**





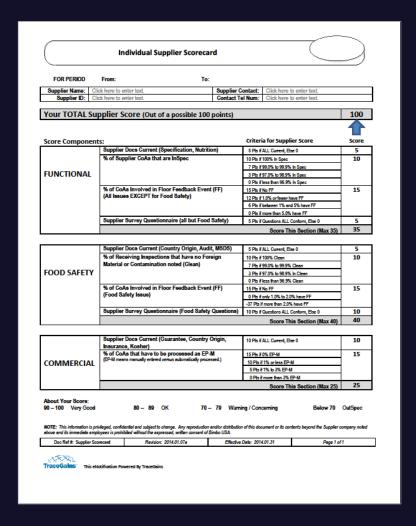






# **DATA DRIVES SUPPLIER BEHAVIOR**+ IMPROVES QUALITY

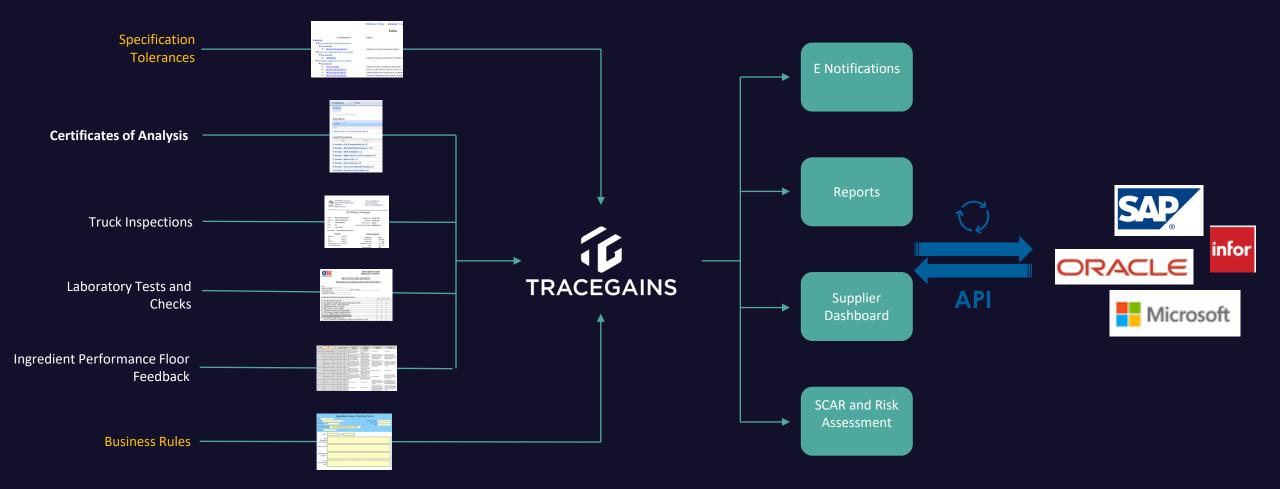
- Managing RM Compliance in a process-driven & automated way focuses suppliers to provide high quality consistent product
- Automatically identify Non-Conformances, manage Corrective
   Actions & analyze trends for Continuous Improvement
- Report Performance back to suppliers, grading them in key areas and focusing on improving Quality of product
- Analyze Historical Data to understand Global Risk, optimize supplier selection + Price Negotiations





### **TraceGains Components**

### RAW MATERIAL COMPLIANCE IN A SINGLE RECORD PER LOT





# **WHO** BENEFITS?

Value Points + ROI



### **OPPORTUNITY TO PROVIDE**

### Mimic/Automate the Processes Taking Place at the Plants in TG

COAs to Receiving (to Spot Testing) to Plant Floor

#### **Enforce Standard Best Practices Across Plants**

- Time spent reading COAs is eliminated. Automated COA checks are 100% of inbound materials versus x % using manual labor
- Streamline/Standardize electronic data collection of all lot attributes



# TRANSPARENCY: SUPPLIERS/MATERIAL PERFORMANCE MEASURES ACROSS ALL LOCATIONS

- Information that would take man-weeks to aggregate across all locations is instantaneously available.
- Detect and reduce non-performing suppliers that are costing money in production quality
- Who is our best/worst supplier?
  - Compliance with Specifications
  - Compliance with Delivery Performance
  - Compliance Complete and Undamaged Materials
  - Transportation Compliance Truck Inspections, Seals, Temperature etc.
  - Other attributes associated with lot and delivery quality
- Habitual supplier problems/complaints are left unnoticed if they are only tracked at each individual plant
- Transparency of a bad material lot across all affected locations avoids scrapping of finished goods at another location
- Real time ingredient trends are available on the plant floor. Avoid scrap or inconsistent quality



# SCAR PROCESS AUTOMATED UPON ENTRY OF INFORMATION AT ANY POINT

- O COA
- Receiving
- Testing
- Plant Floor
- Finished Good Complaints

Automate Charge Backs for Damages due to poor material – quality, safety, labor etc.



## **CASE STUDIES**



### **TRACEGAINS CUSTOMERS**

### LEVERAGING MATERIAL **COMPLIANCE**

#### **Existing Customer Volumes**

- Global Ingredient Supplier
  - 8,000 Items
  - 250,000 COA per year
- Global Bakery Manufacturer
  - 2,000 Items
  - 400,000 COA per year
- Global Drinks Business
  - 600 Items
  - 150,000 COA per year

























"Digitizing COAs and making them actionable through TraceGains has resulted in a **75% REDUCTION** of out-of-spec lots on the receiving dock.



—Bill Besson, Quality Assurance Director, Chelsea Milling aka Jiffy Mix



## Case Study



Driving Supplier Performance and Behavior













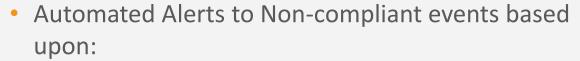
# Grupo Bimbo The World's Largest Bakery

- Multi-national, multi-lingual conglomerate
- Supplier/ingredient performance with ranking and score-carding capability
- Bimbo USA Needed centralized solution for 59 U.S. plants initially
- Used by GB entities on all continents, over 100 plant locations.
- Bimbo USA- 200,000 CoAs/Lot Inspections per year.
- 96% are automatically processed by TraceGains against specifications.
- Automated alerts to non compliance.









- COA Attributes: including numeric values, dates, addresses of non-qualified plant locations.
- Receiving Inspections Attributes
- Laboratory Testing (Spot Checks) vs. COA claims or additional tests
- Plant Floor Complaints/ Observations
- **Customer Complaints**













# When Automation Detects a Problem at One Plant

- Examples: contamination, out-of-spec attributes, etc.
- Automated signal sent to dozens of other plants and receiving automatically locked out at those plants
- Automated SCAR workflow kicks in/chargebacks to suppliers for bad material















JOHN B. SANFILIPPO & SON, INC.

LEVERAGING DATA TO DRIVE SUPPLIER COMPLIANCE

TGCon20 - August 20, 2020



### Criteria Determination

### Determining Key Quality Attributes:

KPI Category	KPI	Use	KPI Category	KPI	Use
Data	Data Integrity	21%		DPPM	52%
General	Certifications	55%	Parts/Products Issues	First Pass Yield (FPY)	21%
	CoPSQ	31%		Internal Stakeholder Complaints	38%
	Subject Matter Expertise	19%		Lot Acceptance Rate (LAR)	20%
		62%		Non-Compliance Rate	62%
	Supplier Risk Rating			Percentage of Returns	38%
	Technical Expertise	40%		Rework	36%
Improvement	4D/8D Effectiveness	21%	Shipping	MPM (Misdeliveries per million)	10%
	4D/8D Timeliness	36%		On time delivery Rate	79%
	Audit Results	69%	\ <u> </u>		
	Number of SCARs	71%	Supplier's Customer Service	Change Control Management	31%
	Past Due SCARs	60%		Deadline Adherence Rate	29%
New Service and Product Offerings	New Service/Product	26% 17%		Emergency Requests	10%
	Integration			Number of Customer Complaints	55%
	PPAP First Pass Approval			Number of Other Customers	2%
	Rate			Supplier Responsiveness	57%
	PPAP Timeliness	12%		Warranty Data	21%

Source: CEB (now Gartner) 03.28.18 Supplier Quality Benchmark KPI Heat Map

\_

Supplier Name: Supplier ID:		Supplier Contact: Contact Telephone #:		
- Coppenius II				
■ 90 – 100 pts Very Good		pplier Score (Out of 100 points mag / Selow 76 pts Out of Spec	80	
Score Componen	ts:	Criteria for Supplier Score	Score	
FUNCTIONAL.	Supplied Items Documentation Current	10 pts if 100% Current	10	
		7 pts // 85.0% to 99.99% Current 3 pts // 50.0% to 54.99% Current	10000	
		0 pts if less than 49.99% Current	-	
	Freshness Measurement	5 pts if terms have >50% age at receiving	0	
	NASCONSSISSION	9 pts one or more out of specitisms within time	9	
	% of Supplier CoAs that are in Spec	16 pls if 100% in Spec	10	
		7 pts # 85.0% to 99.99% in Spec	1977	
		3 pts / 50.0% to 64.96% in Spec		
	K-15	6 pts Fless than 45.99% in Spec 15 pts FAS CARIS		
	% of Corrective Action Requests per CoA Received (Non-Food Safety Related)	7 pts if 1.0% or linear CARs/CoA	15	
	and many	1 pt between 1% - 5% CARs/CoA		
		9 pts if greater than 5% CARUCOA		
		Score This Section (Max 40 pt	(a) 35	
	Supplier Level Documentation Current	19 pts if 100% Current	10	
FOOD SAFETY		7 pts if 85.0% to 99.99% Current		
		3 pts if 50.0% to 64.99% Current		
		8 pts f less tran 49.99% Current		
	JBSS QA Supply Chain Validation	19 pts if current acceptable JBSS QA Supply Chain Validation	10	
	% of Corrective Action Requests per CoA Received (Food Safety	15 pts if no CARs	15	
	Related)	7 pts if only 1.0% to 2.0% CARs/CoA		
		-3 pts if more than 2.0% CARIs/CoA	7	
	ten Questionnaire	S pts if current item Questionnaire	0	
	Supplier GFSI Certification	5 pts if certified & rating is at least a "B"	- 6	
			40	
	Score This Section (Max 45 pts)			
COMMERCIAL	Corporate Level Documentation Current	5 pts if all current	0	
	1000	Service Control of the Control of th		
	% of CoAs that need to be processed as EP-M	10 pts #0-2% EP-M	- 5	
	(Manually entered versus automatically processed)	7 pts #2.01-10% EP-M	-	
	1	5 pts // 10.01-50% EP-M		
		8 pts if over 49,99% [P-M		
	Score This Section (Max 15 pts)			
TE: This information is privi	leged, confidential and subject to change. Any reproduction and/or distribut			
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# HOPE THAT HELPS





### Thank You

