#### **PRODUCT LAUNCH**

# Predictive<sup>AI</sup> PO On-Time Delivery (OTD)

#### Speakers:

Sumit Vakil, CPO and co-founder Sandeep Ramachandran, Director of Product Management



## Agenda

#### **Predictive Analytics + Supply Chain**

- Why predictive technology is the next big leap in SCRM
- Adoption of predictive analytics and automation in SCM

#### **Overview: Predictive PO On-Time Delivery Solution**

- How it works
- Product capabilities
- ROI

#### Q&A



## **Speakers**



**Sumit Vakil | CPO + co-founder** 



**Sandeep Ramachandran | Dir. of Product** 



## **Supply Chain Resiliency: Trends & Sentiments**

Source: Future of Supply Chain: Crisis Shapes the Profession, Gartner, December 2020

87%

Of companies are currently investing in RESILIENCE

89%

are investing now in AGILITY

Top success factors for Resilient Supply Chains are:

- Order Fulfillment Cycle Time largely not impacted by disruptions
- Perfect Order Fulfillment Metric largely not impacted by disruptions
- Multi-tier Supply Chain Visibility



## **Supply Chain Resiliency: Trends & Sentiments**

Source: Future of Supply Chain: Crisis Shapes the Profession, Gartner, December 2020

Digital Transformation 58% of companies are investing NOW in Machine Learning & Big Data

HyperAutomation



## **HyperAutomation Drives Resilience**

Predictive & Prescriptive Solutions based on

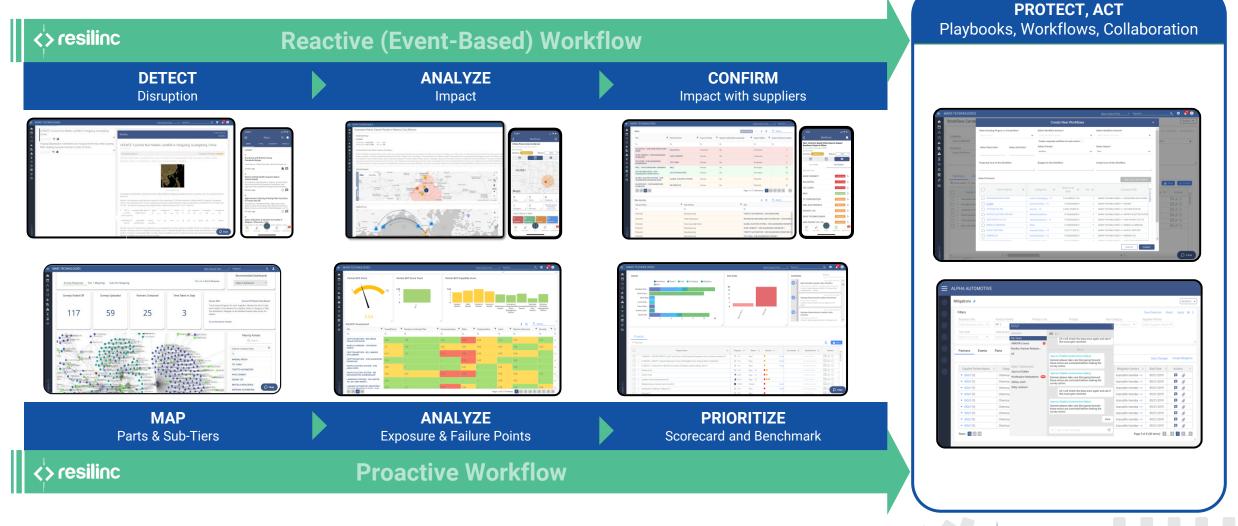
Artificial intelligence and machine learning will accelerate

hyperautomation to:

- Augment human decision making
- Take over mundane tasks; freeing up humans to focus on value added tasks
- Automatically collect 360 insights from suppliers
- Generate risk KPIs
- Determine Supplier Impact Assessments from disruptions
- Identify suppliers most likely to impact Order Fulfillment metrics
- Prescribe next steps for high-risk suppliers, disruptions, etc.

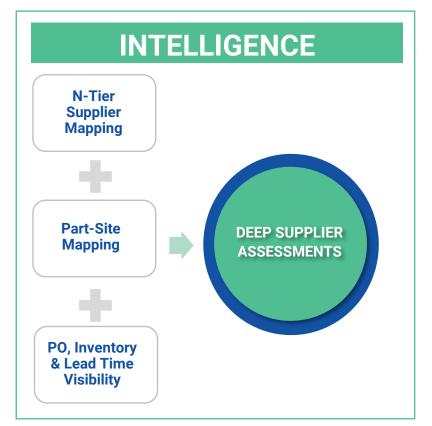


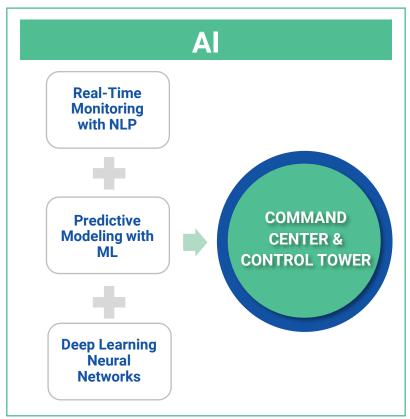
#### Resilinc's comprehensive approach for event response and proactive risk protection





#### Our Product: Data > Prediction > Action





#### **AUTOMATION**

SUPPLIER PERFORMANCE MANAGEMENT PLATFORM

Application on Web, Mobile, API, On Premise, Private Cloud Services: Technical and Advisory Consulting and Business process outsourcing



## **Predictive Success Story: COVID-19**

Top

Tech

Company

Path of lockdowns charted

Critical adjustments made in inventory flow



PO delays predicted based on supplier closures





New lanes opened; alternate sites qualified

\$53M saved over two quarters



## Predictive<sup>Al</sup> PO On-Time Delivery

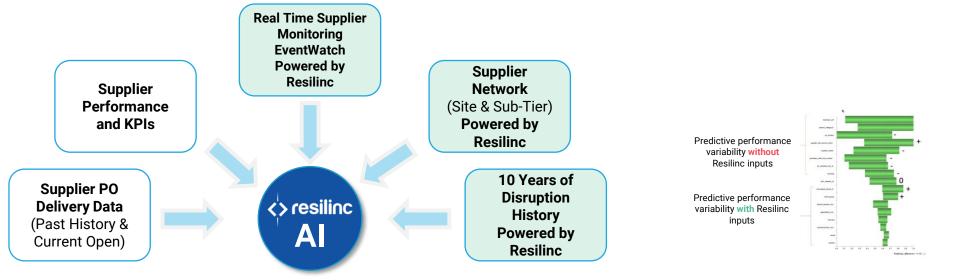


## Importance of On Time Delivery and its Effects

- It is important to have an effective Order Fulfillment Cycle Time and Perfect Order Fulfillment metrics
- Delays could result in inefficient business operations and increased costs from
  - Increased overhead expenditure: time spent on analyzing impact and re-ordering processing, invoicing, accounts payable, receiving.
  - Expedited Shipping
  - Raw Material Shortage or Allocation or in some cases could lead to Excess On-hand Inventory
  - Opportunity Cost: Lost Sales and impact to Customer satisfaction



### How Resilinc's Supplier Predictive PO On-Time Delivery works



#### All POs at risk of delayed delivery

(correlated to past performance, independent of events)



Autonomous Compounded Sub-Tier & Site → Site effects

Which POs at risk

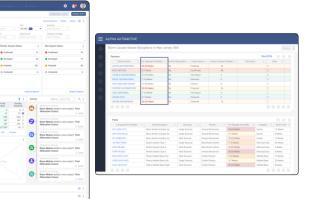
How delayed

Confidence Level

#### POs delivery at risk <u>due to event(s) near supplier</u>

(causation inference established, tied to event history)





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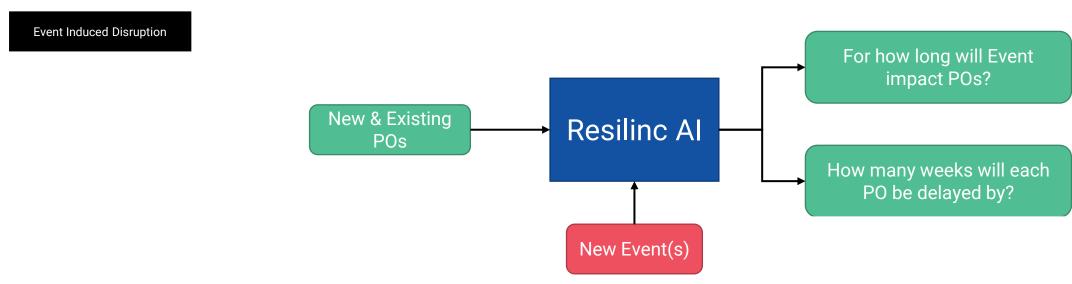
### **Al Predicts Delays in Purchase Orders Delivery Performance**

Normal Course of Operations

New PO

Resilinc Al

Predict Delivery Delay



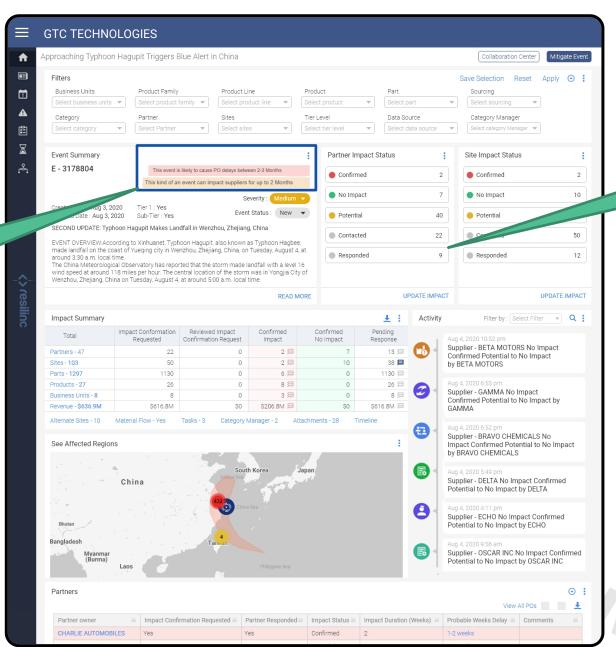
#### **Purchase Order Delay Prediction AI in Events**

GTC is a global semiconductor company

- · Event: Typhoon Hagupit in China
- 47 Suppliers | 436 Sites

Predicted PO delay between 2-3 months

Such event types could impact suppliers for up to 2 months



Automated Supplier Impact Confirmation Outreach

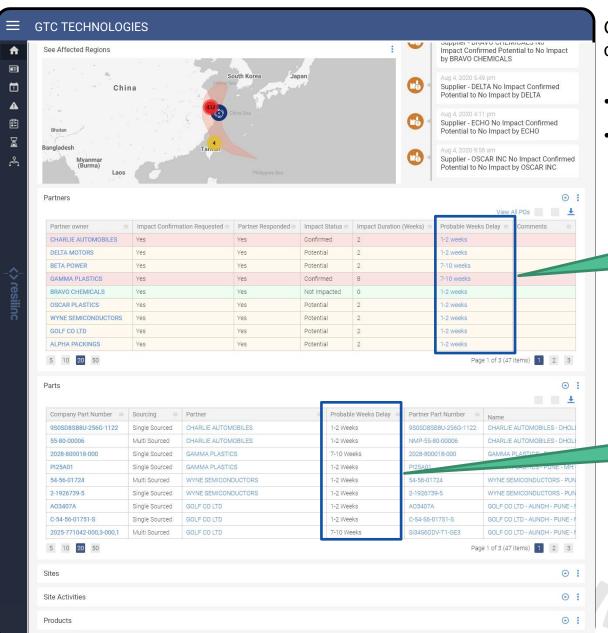


#### **Supplier and Category Level Purchase Order Delay Prediction**

A: PO Delays for Suppliers:

- 70% impacted and have less than2 weeks of delay
- 20% with no delays
- 10% impacted and have delays
  - > 7 weeks

B: View which parts are single or multi sourced, the site recovery time and whether the sites have alternate locations to switch the site source.



GTC is a global semiconductor company

- Event: Typhoon Hagupit in China
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Supplier level OTD PO Impact

Category level OTD PO Impact

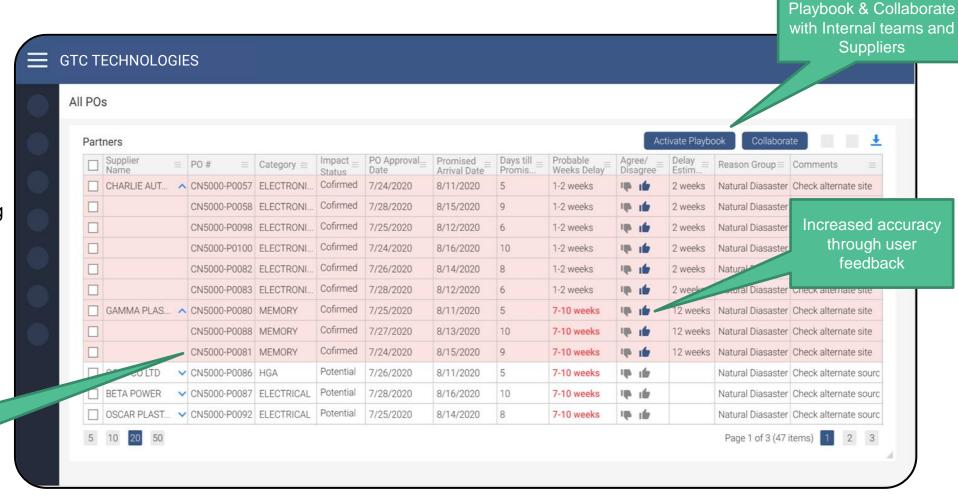


**Activate Mitigation** 

#### **Detailed Information on Purchase Orders**

- Detailed information about the PO's and the materials sourced from the event region
- User can provide additional inputs to the system improving the prediction accuracy
- Activate your mitigation playbooks

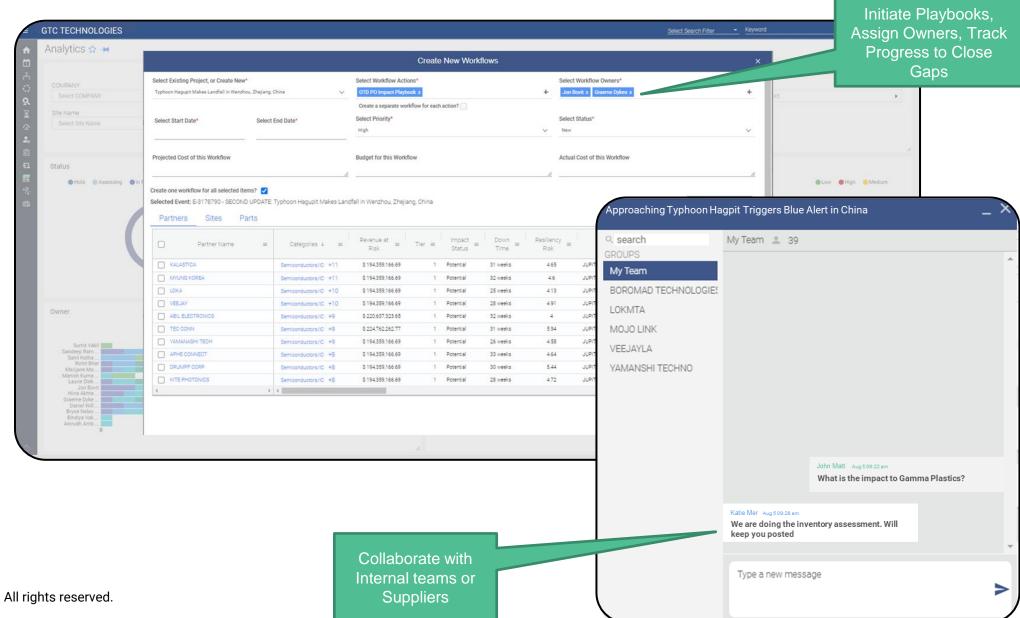
Detailed PO List, Supplier Impact Confirmation & Predicted Delay





#### **Integrated with Mitigation Playbooks and Collaboration Center**

- Assign tasks to your team members, set due date and priority
- Monitor the progress of the tasks and review actions taken
- Have contextual collaboration with your internal and external teams



### Continuous ROI from predictive supplier delivery performance

#### Predict supplier PO delivery performance ROI in less than 6 months of Go Live

- Right size inventory levels for optimized cash and working capital
- Improve Lead Time accuracy to reduce shortages and excess
- Accurate planning and customer ATP
- Reduce ongoing shortages due to last minute PO delivery delays
- Reduce PO expedite fees

## Resilinc's Predictive On-Time Delivery Solution How to get started...











+



#### **CUSTOMIZE**

- Test ML algorithm against past PO data, isolate exceptions, finetune parameters and model variables
- Document user stories, and assess viability and model accuracy for the user-stories
- Compute secondary metrics (e.g. guard-rails, exception management) to support workflow

#### CONNECT

- Map PO data structures and tailor Customer's available formats and columns to Resilinc's data model
- Create automated transmission system and frequency. Test data transmission.
- Demonstrate new data is successfully loaded and visible in production environment.

#### **PREDICT**

- Begin using PO delay predictor in Resilinc dashboards and Event WarRoom. Train users.
- Capture user feedback on accuracy and observations on an ongoing basis
- Test prediction against actual delivery performance to identify performance outliers

#### **ENHANCE**

- Diagnose model differences and root cause. Fine tune model parameters to improve accuracy.
- Model extensions for additional data sets and additional predicted measures



## Q&A

