TRANSFORMING Supply Chain

Lenovo Data Center Group

Bobby Bernard | March 2018

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Data Center Group Supply Chain Intro

- Globally managed Supply Chain
- 100% Build-to-Order
- Product & Customer Complexities

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Journey – Improvements made in the past year

Basic Digitization

Home grown tools in certain areas that help manage our dynamic d2d

ICC

Intelligent Customer Communication which provides automated order information

SLA Alignment

Enhanced Order Scheduling Process to enable the most accurate and competitive Customer Dates

CSC Capabilities

Core services expanded and Global Mgmt System established to streamline customization engagements

Quality

Manufacturing Automation, Product Packaging improvements, and White Glove / Ride-Along processes

Logistics

Implemented premium destination services and real-time visibility capabilities

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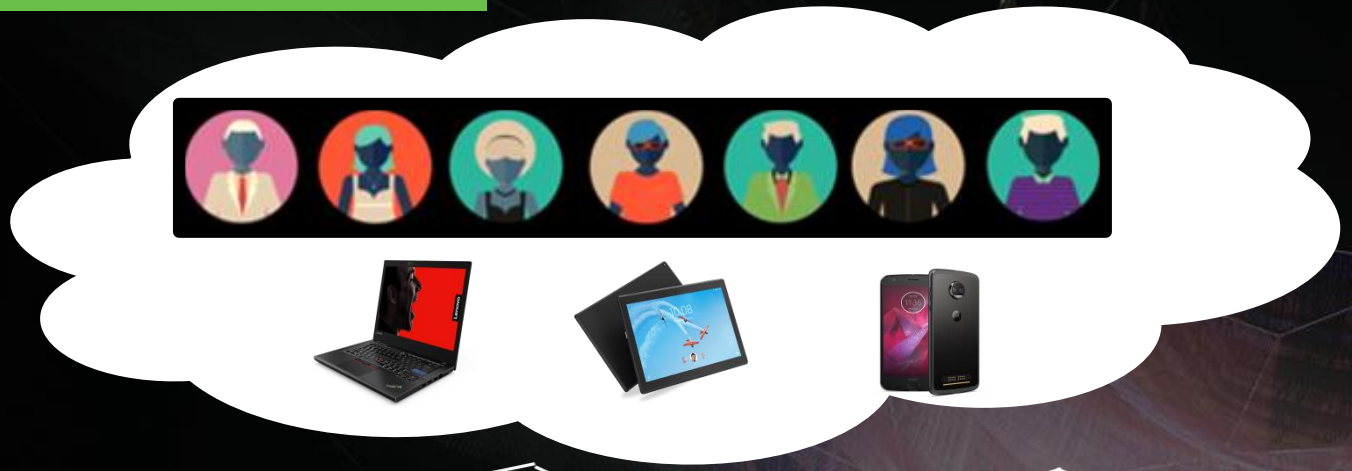
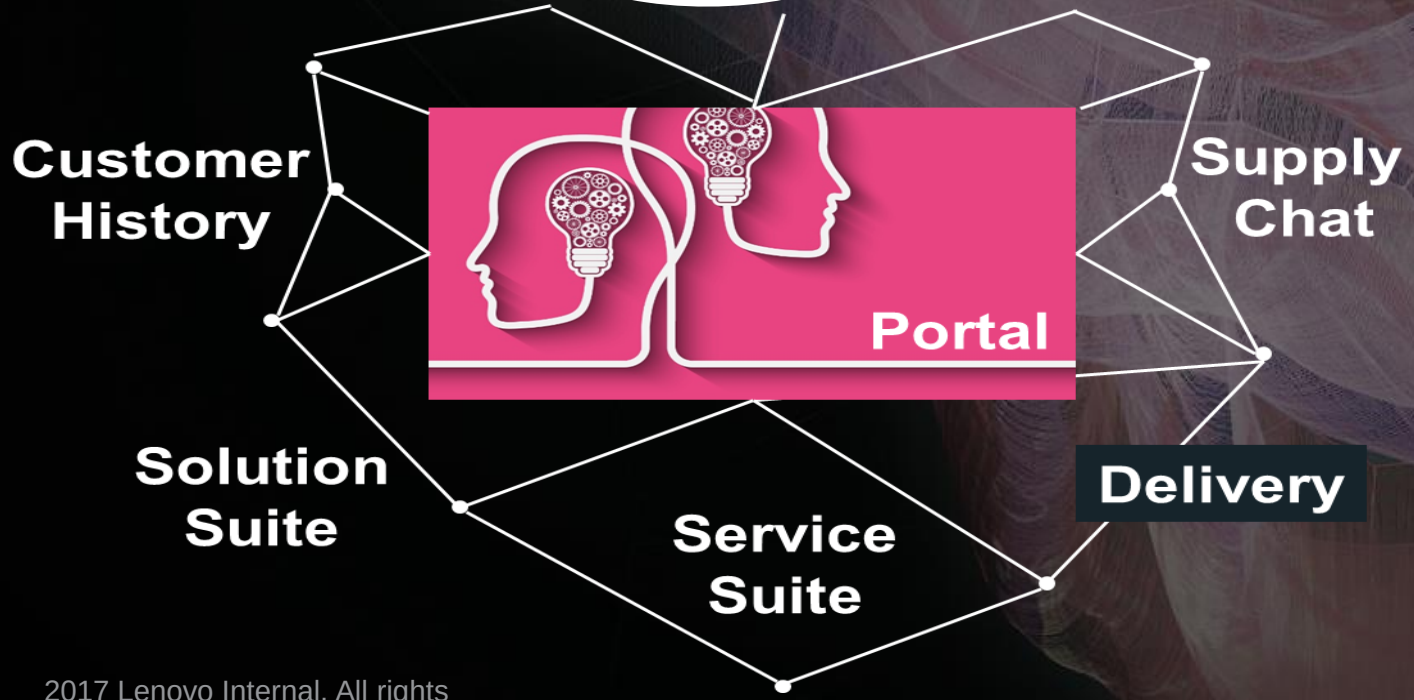
DCG Supply Chain Vision





- Digital Customer Experience
- Real Time & Interactive
- Sales Enabler
- Demand Shaping
- Proactive Inventory Mgmt
- Smart Margins

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DCG Supply Chain Strategy

1. **Strategic Sourcing**
   - Foundational category management
2. **Digital Procurement**
   - Spend analytics; Commodity Trends
3. **Supply Chain Digitalization**
   - End-to-end visibility and integration
4. **Manufacturing Services and Solutions**
   - Supply chain services and solutions
5. **Predictive Analytics**
   - Utilizing both structured and unstructured data
6. **Sales / Customer Communications**
   - Customer engagement portal

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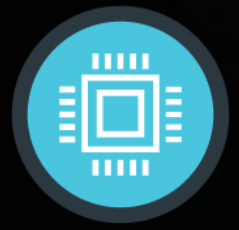
Transformation through Key Digital Technologies

IoT

Connect to track key order shipments or material flow

Analytics

Analyze patterns in data and information across the supply chain to drive meaningful actions and shape demand



AI / ML

Computer systems perform tasks that normally require human intelligence.

Blockchain

Use as a secure documentation ledger to access & share information with Partners

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Search for a Solution Provider

Criteria

- One partner
- Holistic supply chain solution
- Global Reach
- Digital Technology Enabler

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IBM Supply Chain Insights

Compare structured against dark data, identify business impact

Data you possess

Data outside your firewall

Data that's coming

Structured and active (20%)	Unstructured and dark (80%)

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An Operational Platform

Operations Center
with Smart Alerts

Configurable, intuitive alerts cut through data overload

Instantly assess financial impact of impending risks and disruptions

Visibility across internal and external events affecting the supply chain lifecycle

Slash informational retrieval time by 90%

Resolution Rooms
with Ask Watson

Online collaboration aided by cognitive insights to resolve disruptions and mitigate risks

Ask Watson to recommend experts, source key information and access knowledge from prior event resolution

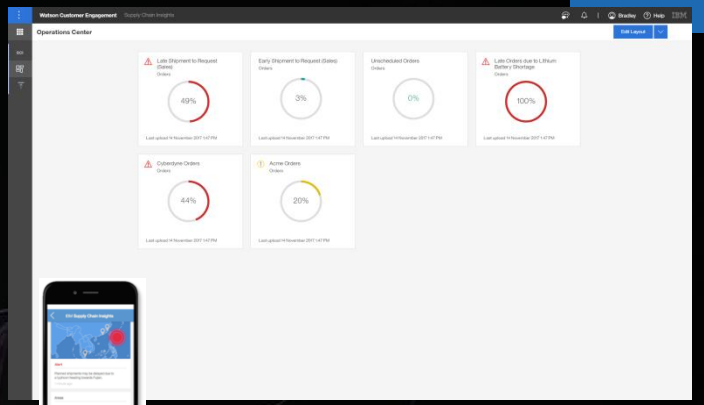
Watch disruption time dwindle from days to minutes

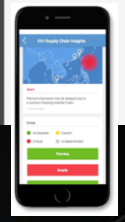
Digital Playbooks

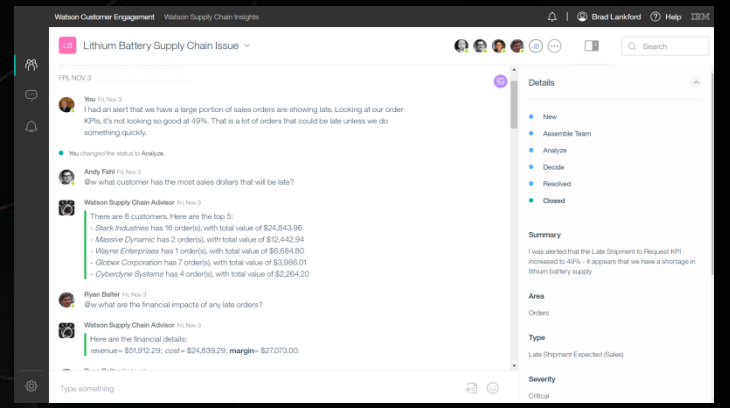
Remembers actions and builds a body of knowledge by learning over time about how issues are addressed

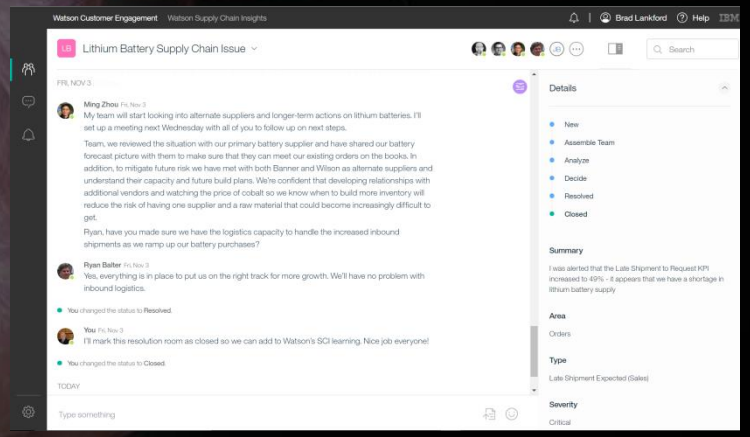
Enables greater speed and accuracy in responding to future events

Enable quick, highly-informed business decisions









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Watson Supply Chain Roadmap

Core Q&As and use case specific insights

developing expertise for high priority use cases (inbound supply, complex order management, route integrity)

External data ingestion

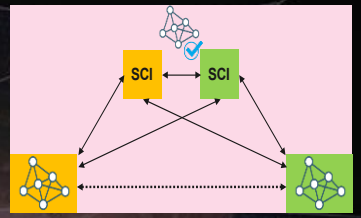
Weather Company, traffic congestion, supply chain legislation, supplier news, Watson News

Ecosystem Enablement

Partners imbedded into platform to deliver insights and help to teach Watson insights on their area of relevant data

Expand Industry Coverage

KPIs, Watson Insights and use cases support additional verticals (retail, healthcare, F&B…)

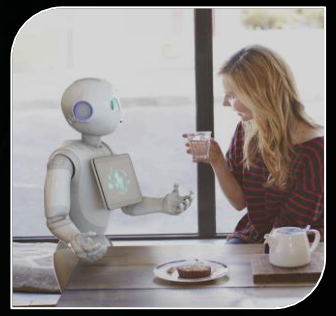


Data Model

Collaborate to define a standard data model with wide range of KPIs and use cases KPIs, Watson

Blockchain

Integrated solutions to leverage blockchain for supply chain use cases Watson



Watson generating insights across supply chain

Watson Supply Chain Insights Use Cases

Hill #1 Order Visibility & Alerting

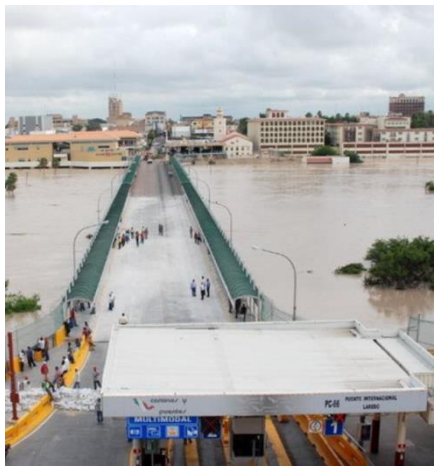
- **Who:** “Fred”, a fulfillment manager,
- **What:** can view a grouped list of recommended actions on outbound and in-transit orders so he can
- **Wow:** proactively change a possible negative outcome before it affects the customer.

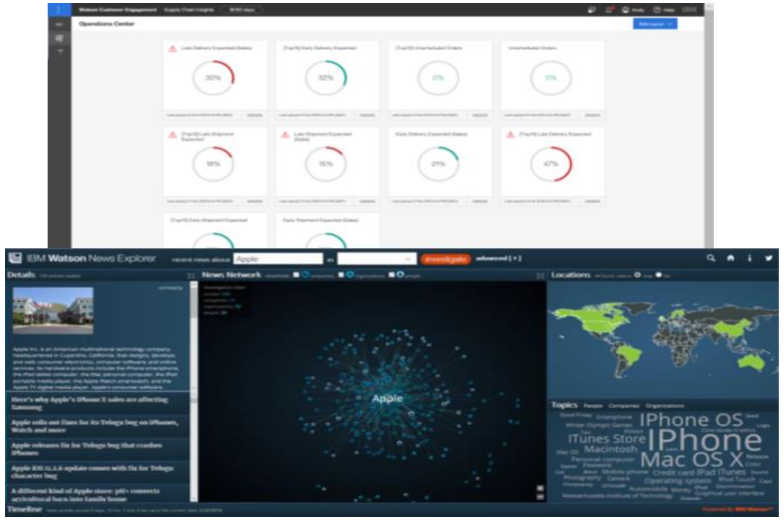
Hill #2 ATP

- **Who:** “Fred”, a fulfillment manager,
- **What:** can view a grouped list of recommended actions on outbound and in-transit orders so he can
- **Wow:** proactively change a possible negative outcome before it affects the customer.

Hill #3 Top 10 Customers

- **Who:** “Fred”, a fulfillment manager,
- **What:** can view a grouped list of recommended actions on outbound and in-transit orders so he can
- **Wow:** proactively change a possible negative outcome before it affects the customer.





Blockchain Use Cases

PROJECT STATE & NAME

PROJECT INFO

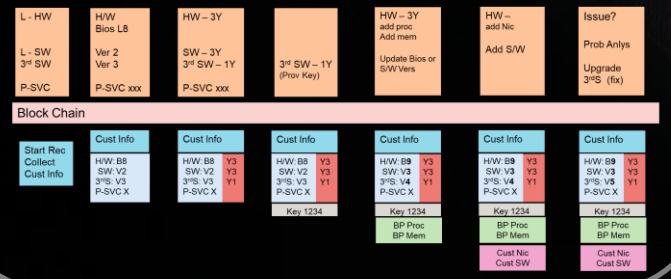
PLATFROM

FRAMEWORK

Operational, ready to Join

Asset Management and IBM

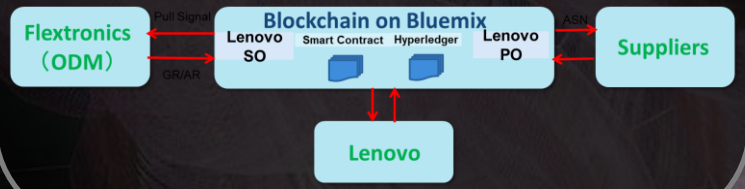
- IBM lead, seeking Lenovo to get onboard
- Working PoC - AMB
- PO through second sale life cycle and support



Testing

Buy / Sell and Lenovo BT/IT

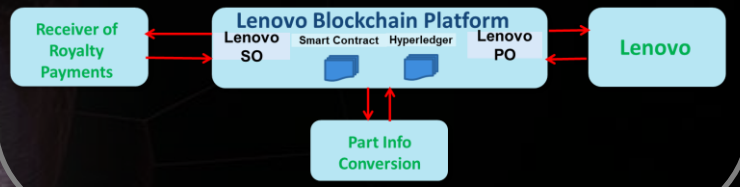
- Resolve offline communications for buy/sell process
- Upskill Blockchain development skills
- First internal PoC, 3 peers



Concept

Royalty Payments and DCG

- Tracking Royalty payments for SW licensing
- IBM will be first peer
- Currently managed by email, info is converted from Lenovo language to IBM language



IBM Bluemix

IBM Bluemix

IBM Bluemix → Lenovo // BLOCKCHAIN

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HYPERLEDGER

HYPERLEDGER

HYPERLEDGER

Capabilities through Transformation

Customer History - 360° View of Customer

Supply Chain Insights – Price-to-Quote; Available to Promise

Service Suite – Predictive Maintenance; Contract Extensions

Delivery – Risk Mitigation Actions; First Mover's Advantage

Customer Chat – Chat Bot; Customer Service

Source to Contract – Commodity Pricing Analysis; Spend Analytics

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