

MELINDA MCCANTS, SENIOR RESILIENCY OFFICER

OCTOBER 2019



SERVING PATIENTS IS A PRIVILEGE





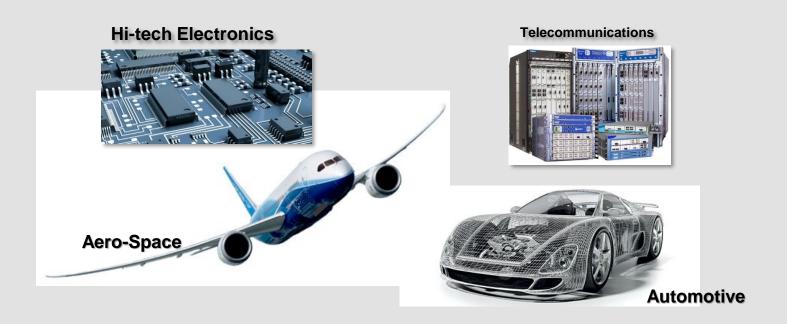
HIGHLIGHTED OPPORTUNITY TO BETTER UNDERSTAND OUR SUPPLY CHAIN AND PARTNER WITH OUR SUPPLIERS



Understanding the impact of the 2011 Tsunami...WEEKS!



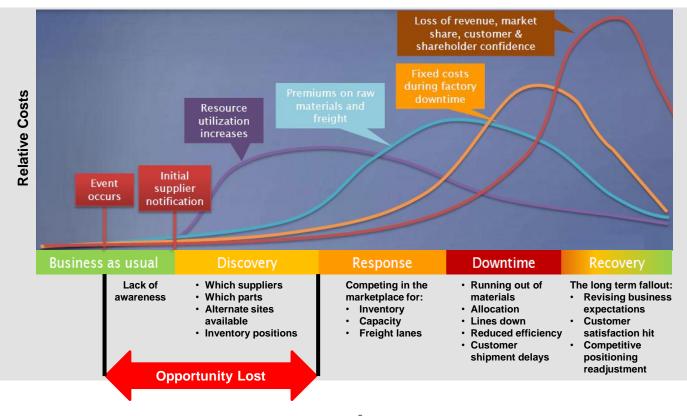
AMGEN LOOKED TO MATURE INDUSTRIES WITH BROAD COMPLEX SUPPLY CHAINS



And leveraged the learnings to improve our programs

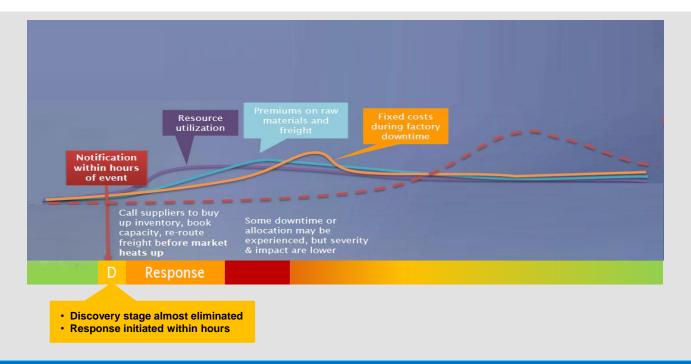


TYPICAL EVENT IMPACT PROFILE IN A REACTIVE RESPONSE POSITION





EVENT PROFILE WITH AN ESTABLISHED PROACTIVE RESILIENCY CAPABILITY – MAPPED AND MONITORED



Resiliency helps ensure faster recovery and ultimately uninterrupted patient supply

AMGEN NOW HAS A MULTIFACETED APPROACH TO ACHIEVE A ROBUST SUPPLY CHAIN AND PROACTIVELY MANAGE RISK



Key elements of a world class supply chain

Partnership (SRE Program)

Supply Chain Transparency & Monitoring

Risk Assessment & Mitigation

Open collaboration with suppliers

Understand manufacturing locations of suppliers

Understand raw material and supplier risk to avoid supply interruptions



PARTNERSHIP: SUPPLIER RELATIONSHIP EXCELLENCE PROGRAM PROVIDES THE FOUNDATION FOR ENGAGEMENT WITH OUR KEY EXTERNAL PARTNERS

Four Pillars of Supplier Relationship Excellence Program

Deep Technical Engagement

Deep and holistic technical
understanding of manufacturing

processes, equipment, materials,

their use, and interactions

Material key attributes

- Equipment and process characterization
- Aligned test methods and specifications
- · Improved in-process controls

Supply Chain Optimization

Forecast clarity, traceability and

full synchronization of the E2E

supply chain to ensure robust

· Clear understanding of the full

· Optimized inventory and lead-

· Sub-supplier inventory mgmt

· Supply risk mitigation program

supply

Reliable supply

supply chain

times

Quality Excellence

Total alignment of Quality requirements and performance standards to ensure regulatory compliance

- Aligned Quality Management system
- Robust testing / analytical methods
- Effective quality agreement and audits for sub-suppliers
- Lot definition and traceability

Robust Relationship

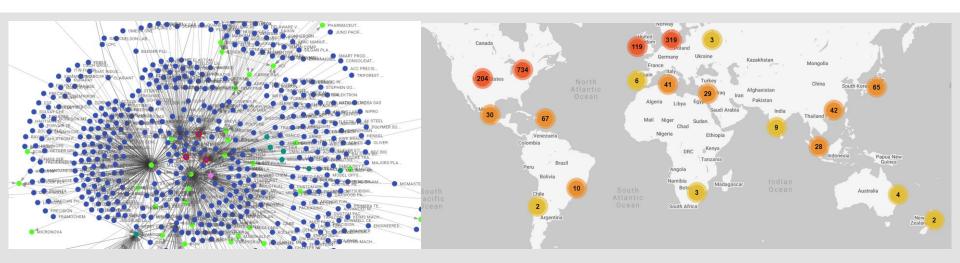
Earned Trust and Collaboration of joint, high performing team with clear expectations and a focus on results

- Shared goals
- Documented cadence of interactions
- · Regular executive engagement
- Clear two-way communications and expectations
- Transparency of challenges and sharing of benefits

Amgen's SRE program continues to deliver value and reduce risk in our supplier base by providing a structured approach to supplier management



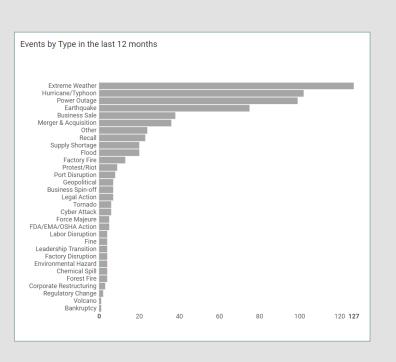
SUPPLY CHAIN TRANSPARENCY & MONITORING

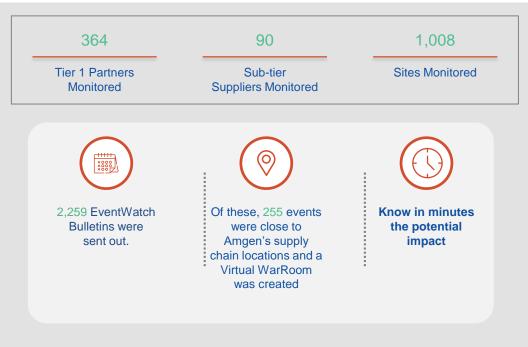


- Partnered with suppliers for supply chain mapping including their key suppliers
- Interdependencies between suppliers and sub-tier suppliers identified
- Understanding of risks associated with location and interdependencies



SUPPLY CHAIN TRANSPARENCY & MONITORING REDUCES WHAT TOOK WEEKS IN 2011 DOWN TO MINUTES







RISK ASSESSMENT: EXTERNAL SUPPLY RISK MODEL

Prioritization & Strategy Proposal

Strategy Review, Approval & Execution









May

June/July

August/September

Quarterly



EXTERNAL SUPPLY RISK PROGRAM IDENTIFIES OPPORTUNITIES TO FURTHER REDUCE RISK WITH EXTERNAL PARTNERS

External Supply Risk Model

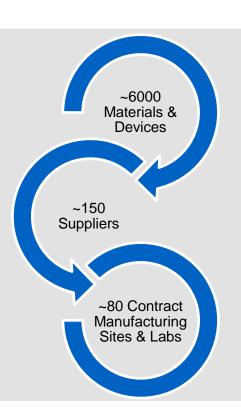
- All active raw materials/devices and contract manufacturers are ranked based on attributes
- Model is completed annually

Risk Mitigations are Defined based on Risk Model

 Mitigations are focused on reducing the risk for critical materials and tracked to completion

Ongoing Risk Monitoring & External Supply Risk Register

- Financial health is monitored through Dunn & Bradstreet
- FM Global conducts engineering site visits to critical suppliers/contract sites
- SRE & Site Leads identify potential risks through their engagement
- Additional risks identified through ongoing monitoring will have mitigations managed through the External Supply Risk Register





AMGEN'S RESILIENCE STRATEGY CONTINUES TO EVOLVE TO ENSURE WE SUPPLY EVERY PATIENT, EVERY TIME



RESPONSIVE APPROACH TO RISK MANAGEMENT COLLABORATING WITH SUPPLIERS AND CONTRACT SITES





Risk Management Collaboration



Proactive Monitoring of Potential Supply Chain Disruptions



- Documented process to manage potential Supply Chain disruptions
- Suppliers/Contract Sites respond via the system
- Communications strategy implemented to notify Amgen Network

Supplier/Contract Sites Collaboration



- Suppliers/Contract sites collaborate to mitigate risks identified by Risk Model
- Suppliers/Contract Sites Business Continuity Plans reviewed and understood by Amgen
- When disruptions occur proactive actions include expediting shipments, adding shifts, shifting production to alternate sites



Supply Chain Mapping

- All Tier 1 Suppliers and ACM sites including contract labs are mapped and actively monitored
- · All SRE Suppliers providing sub-tier information







