

Sustainability Matters

Tech Trends in Sustainable Supply Chains: Tools That You Can Use Right Now

June 21, 2017



BSR[®]

The Business of a Better World

Today's Speakers

Tech Trends in Sustainable Supply Chains: Tools That You Can Use Right Now



Tara Norton

- Managing Director, Supply Chain, BSR



Geoff Taylor

- Chief Technology Officer, ChainPoint



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- Senior Manager, Product Management & Business Development, DHL Resilience360

Our Agenda for Today's Webinar:

1. Overview: Tech Trends
2. Case Study: ChainPoint
3. Case Study: DHL Resilience360
4. Questions & Answers

Overview

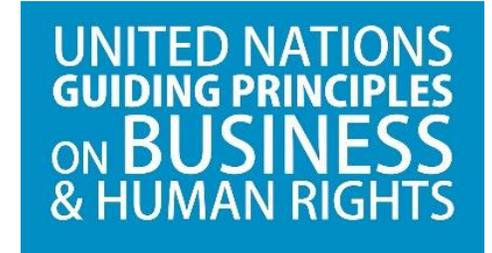
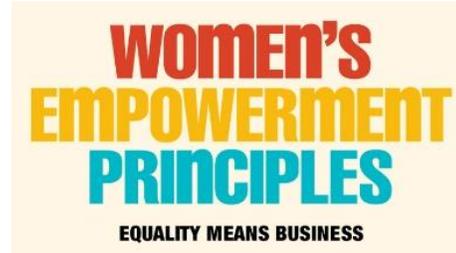
Tara Norton, BSR

Context

“A little less conversation, a little more action”

— *Prime Minister of Norway Erna Solberg (and Elvis)*

The agenda is set.



- We Mean Business Action Agenda provides 10 actions for business.

	Adopt a science-based emissions reduction target
	Put a price on carbon
	Commit to renewable power
	Responsible corporate engagement in climate policy
	Report climate change information in mainstream reports as a fiduciary duty
	Remove commodity-driven deforestation from all supply chains by 2020
	Reduce short-lived climate pollutant emissions
	Commit to improve energy productivity
	Improve water security
	Grow the market for the world's most sustainable fuels

- 17 global goals for private sector, civil society and all people to end poverty, protect the planet, and ensure prosperity for all as part of a new sustainable development agenda.

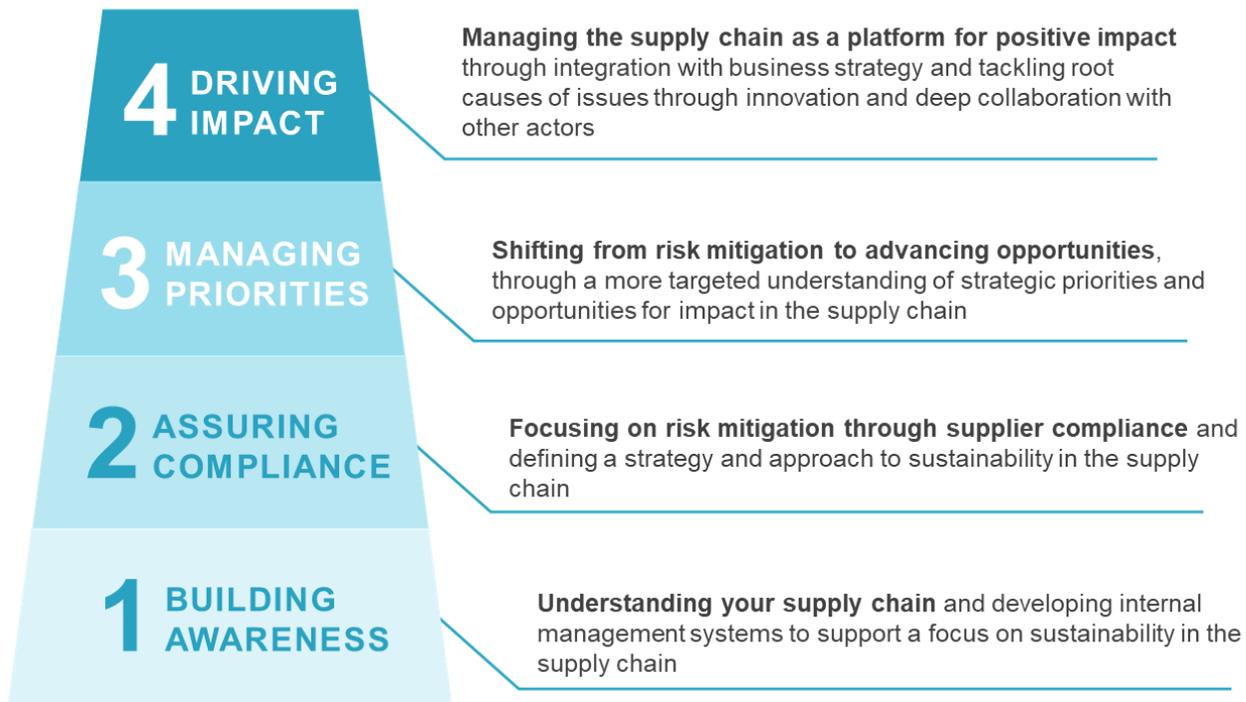
- 7 principles offering guidance on how to empower women in the workplace, marketplace and community.

- A set of 31 guidelines for States and companies to prevent, address and remedy human rights abuses committed in business operations.

BSR Supply Chain Leadership Ladder

BSR has defined what we see as best practice in supply chain sustainability.

Four Rungs



Four Dimensions

INTERNAL		EXTERNAL	
Program Scope & Structure	Governance & Management	Supplier Engagement	Collaboration & Reporting
<ul style="list-style-type: none"> • Level of visibility / traceability • Strategic approach to risk and opportunity prioritization • Alignment with business strategy • Vision for impact 	<ul style="list-style-type: none"> • Integration of key functions and leadership • Progress and performance tracking • Strategies, tools, and incentives to direct the program 	<ul style="list-style-type: none"> • Approach to supplier assessment and capability building • Scope of issues addressed • Supplier site-level performance tracking 	<ul style="list-style-type: none"> • Participation in collaborative groups • Alignment / engagement with global goals and standards • Public disclosures on supply chain

Technology Trends in Supply Chains

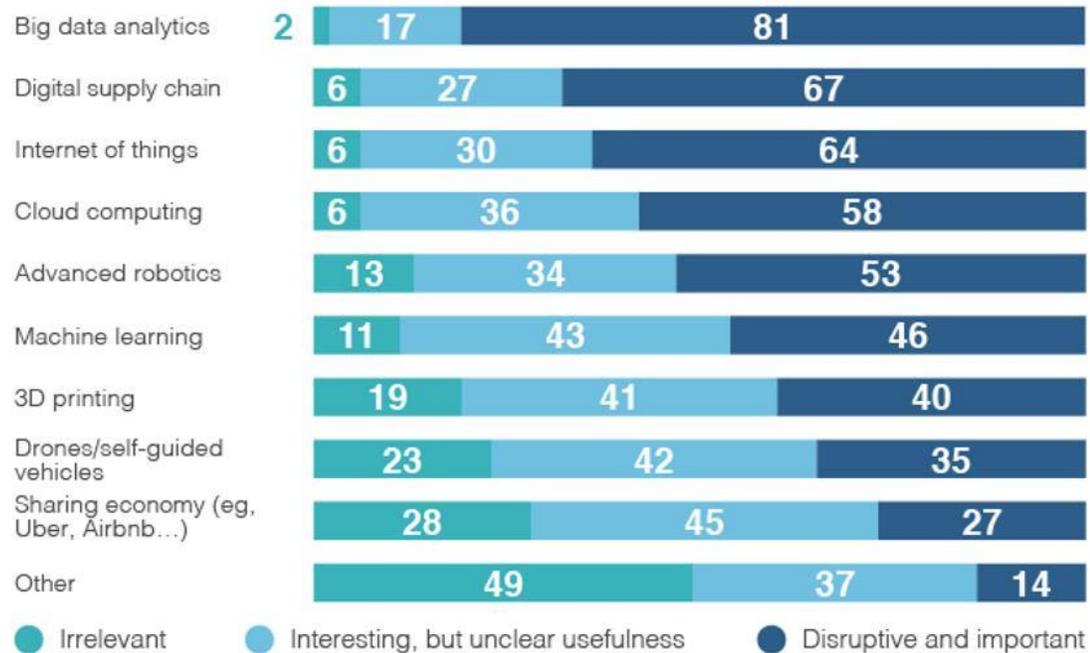
“The Spread of computers and the Internet will put jobs in two categories: People who tell computers what to do, and people who are told by computers what to do.”

— *Marc Andreessen*

Digitalization of the Supply Chain

Supply chain sustainability has a new mandate: Embed sustainability firmly into the information, functionality, and end-use of digital technologies as they come into the mainstream.

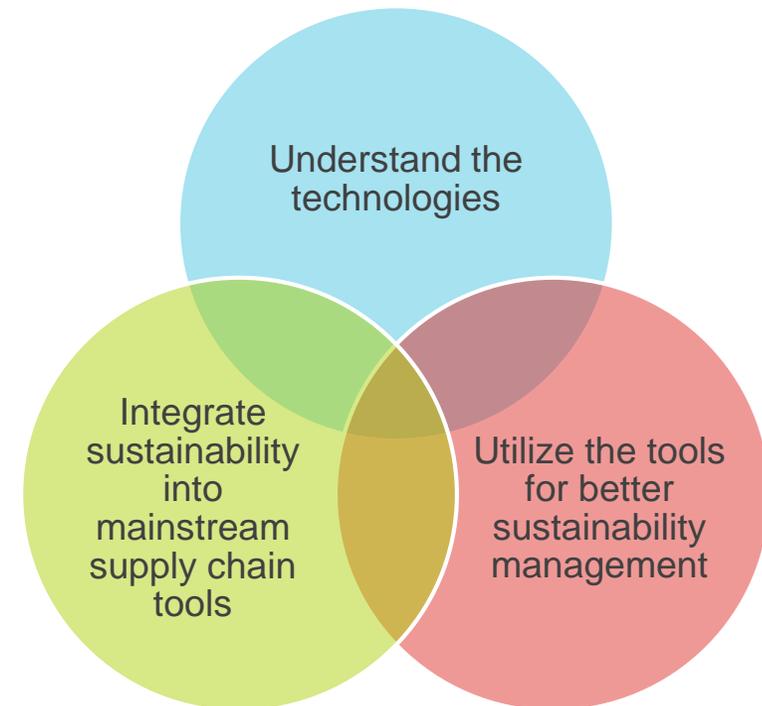
With Respect to Supply Chain Strategy, Which of the Following Technologies are Disruptive and Important for Your Company?



Source: SCM World Future of Supply Chain Survey 2016

% of respondents
n=1,415

Opportunities for supply chain sustainability



Interoperable Data Platforms

Systems supporting all aspects of supply chains are being made interoperable.

Opportunities for supply chain sustainability

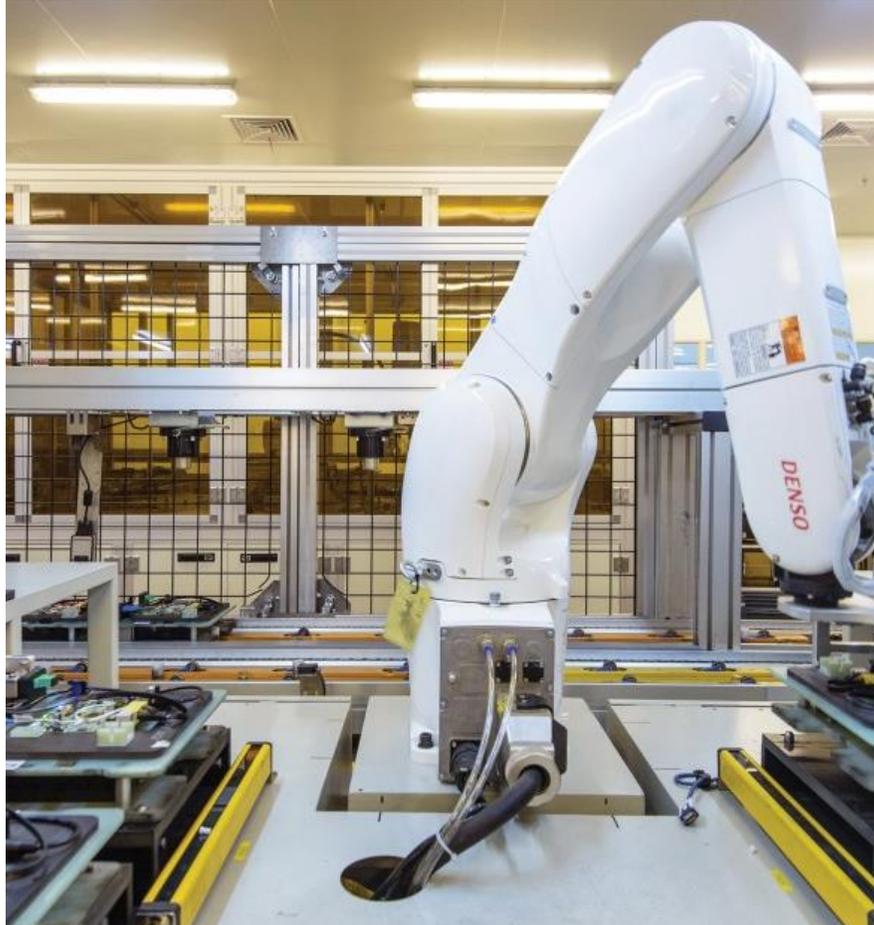
The screenshot displays the 'dsi Supply Chain App Store' interface. At the top, there is a search bar labeled 'Search for an app' and a 'REQUEST ACCESS | LOG IN' link. Below the search bar is a navigation menu with the following items: HOME, CLOUD INVENTORY™, ADC, SERVICE, SALES, CUSTOMER ENGAGEMENT, and APPS BY ERP. The main content area features six app categories, each with an icon, a title, and a brief description:

- Cloud Inventory**: Streamline and execute inventory from one cloud-based solution.
- Automated Data Collection (ADC)**: Capture data and present it to the right person on any device.
- Service**: Optimize service with remote access to customer and inventory information.
- Sales**: Make more sales calls with real-time inventory and customer information.
- Customer Engagement**: Exceed customer expectations with order visibility and mobile convenience.
- Apps by ERP**: Find apps by ERP.

- Review technology and systems
- Consider the evolution of tools and systems
- Insist on interoperability with other digital platforms

Automation

McKinsey Global Institute estimates that 60% of current labor time in manufacturing will be automated.



Opportunities for supply chain sustainability

- Understand where in your supply chain automation is a possibility
- Engage with suppliers to ensure that the social implications of automating are being considered – license to operate will become a critical issue in the future
- Apply BSR's framework for sustainable automation
- Consider what could be automated as part of the social compliance process

3D Technologies and Augmented/Virtual Reality

3D and augmented reality are being used to enable better testing and design, and to enhance accuracy in tasks such as maintenance and order picking.

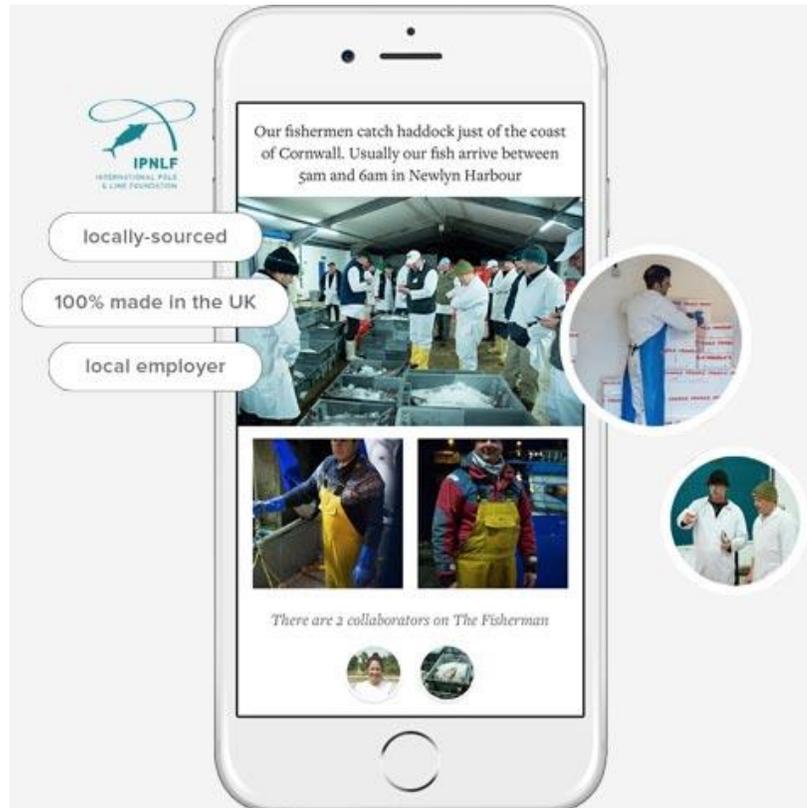


Opportunities for supply chain sustainability

- Consider the human rights impacts associated with deploying these technologies
- Consider how to deploy these technologies for better worker engagement, for better sustainability data collection, and for the improvement of the worker experience

Block Chain

Still in a research and pilot phase, but there is an opportunity to prepare for its arrival.

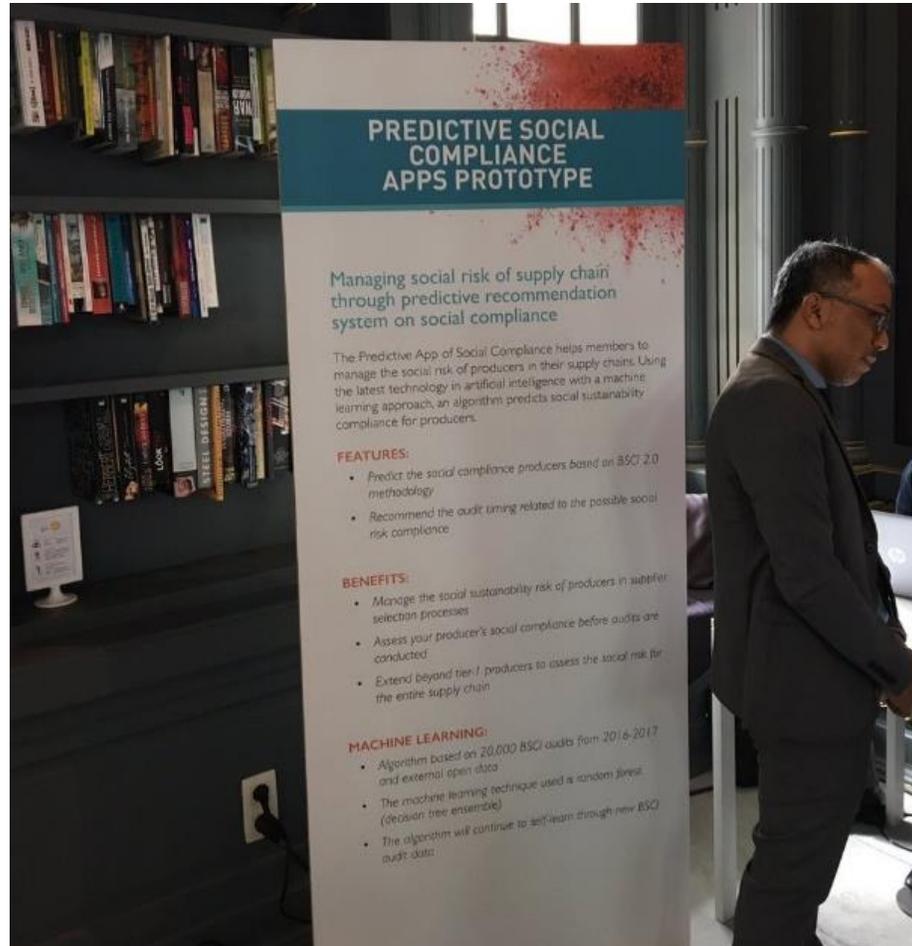


Opportunities for supply chain sustainability

- Build alliances along the supply chain for data sharing
- Identify what sustainability data could be packaged and shared along the chain
- Consider data that needs to be digitalized
- Potentially powerful hypertransparency tool

Artificial Intelligence & Machine Learning

AI & machine learning is being actively used already to enable better decision-making.



Opportunities for supply chain sustainability

- Harness machine learning technology to identify and manage sustainability risk in the supply chain
- Consider how to use machine learning to eliminate low value tasks in social compliance
- Ensure that algorithms and technologies are inclusive by design and do not perpetuate inequities

ChainPoint

Geoff Taylor

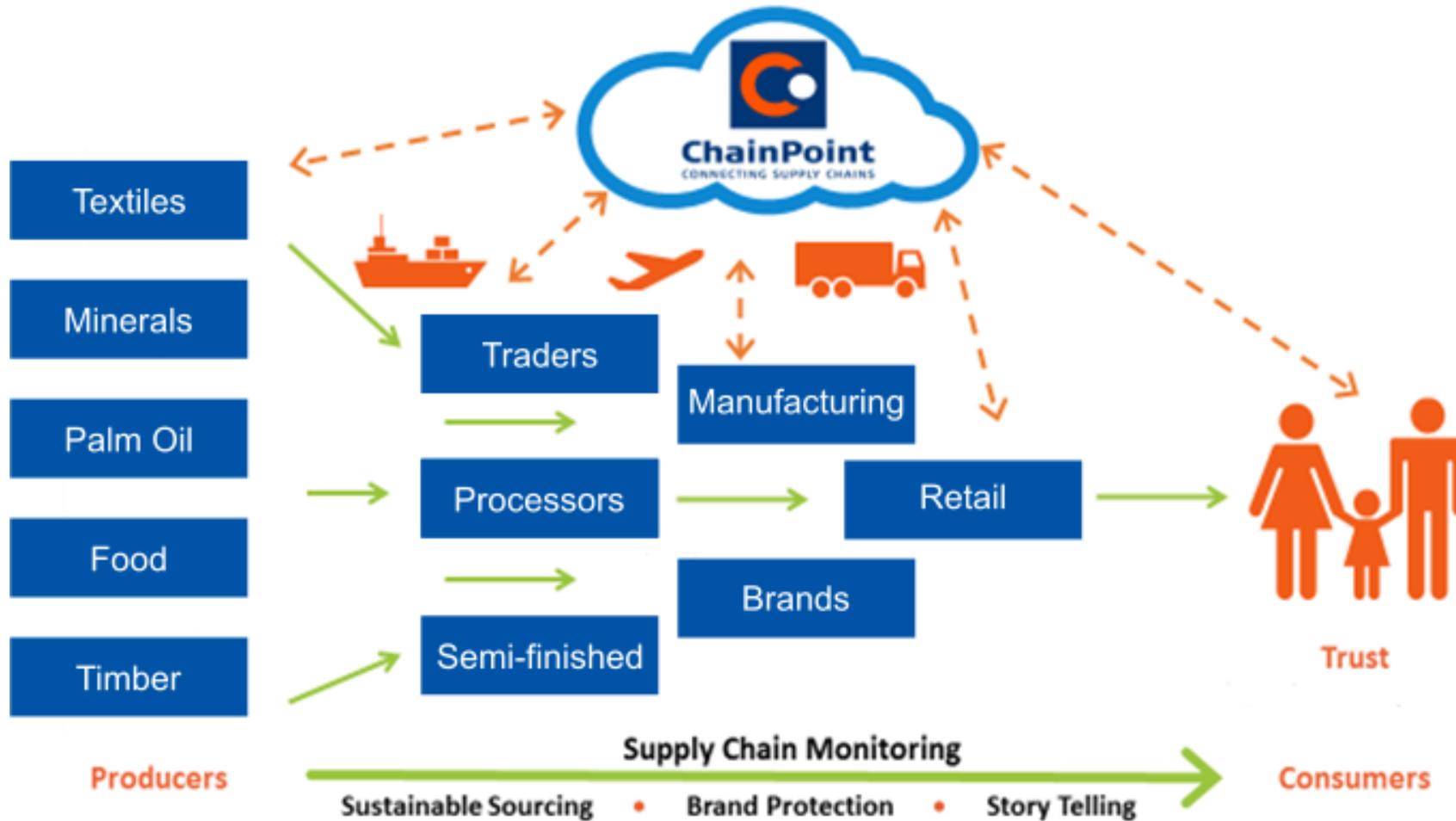


ChainPoint
CONNECTING SUPPLY CHAINS

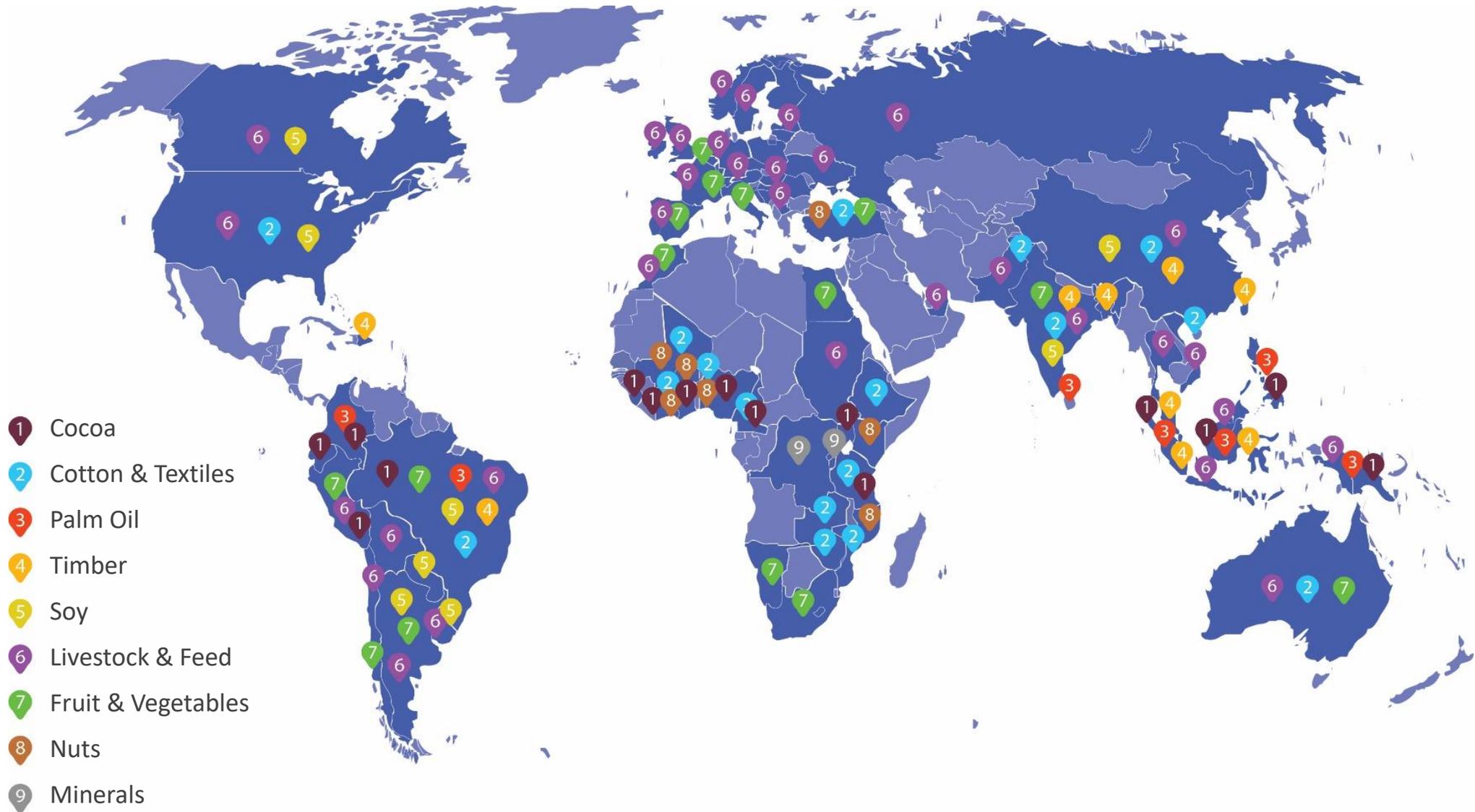
**How GoodWeave uses
ChainPoint to provide supply
chain transparency to Target.**



Overview of ChainPoint



Global experience across many commodities

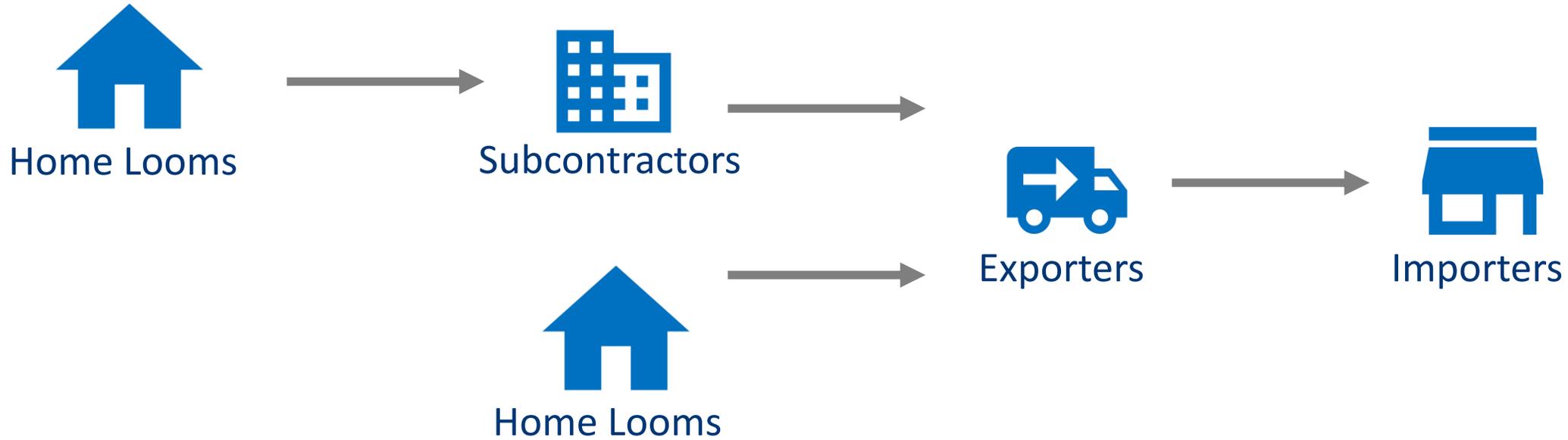




GoodWeave works to end child labor in global supply chains, from the producer's hands to the consumer's. Target is a major retailer in the United States. GoodWeave provides Target with the assurance that carpets and rugs they import are not produced with child, forced and bonded labor.



GoodWeave's activities

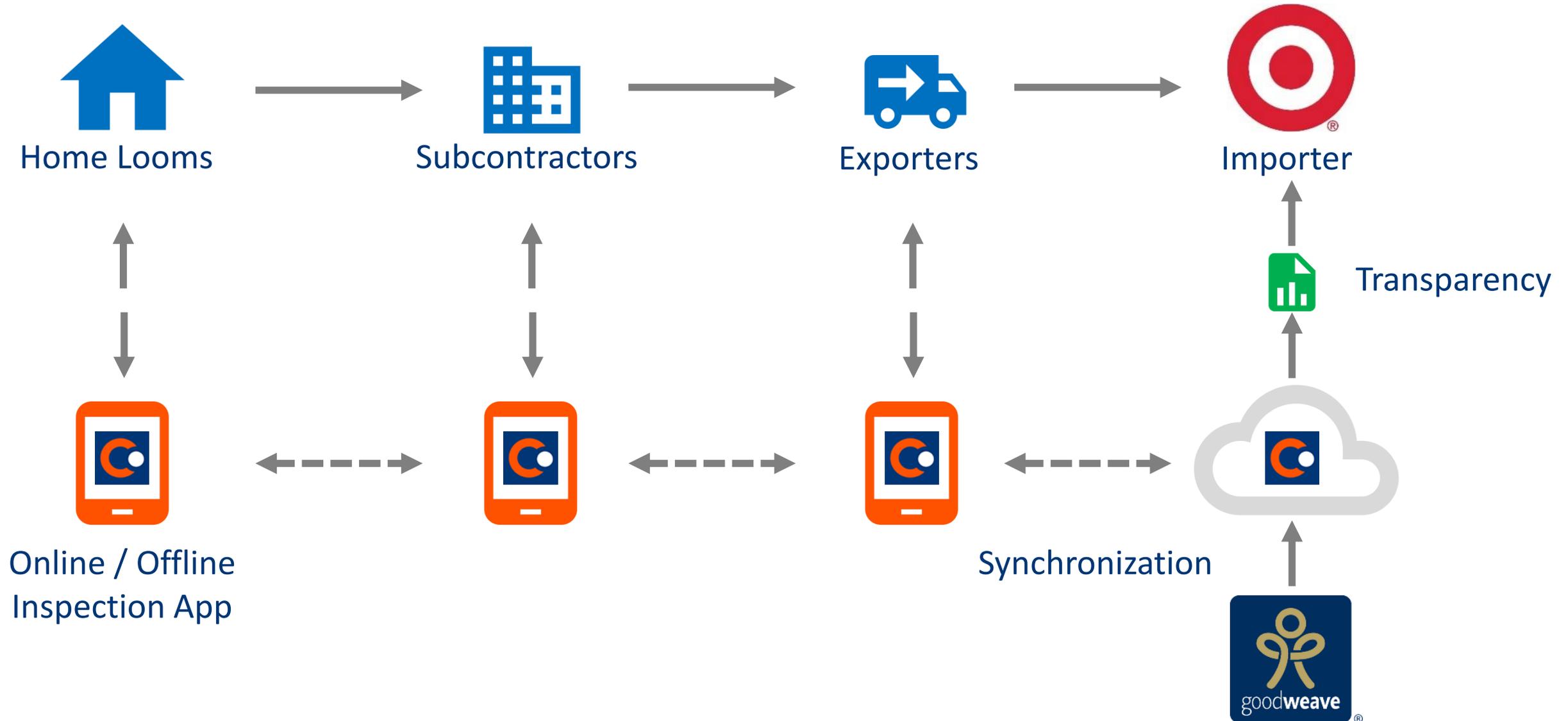


GoodWeave carries out planned and unplanned inspections to help keep carpet and rug supply chains free from child, forced and bonded labor...

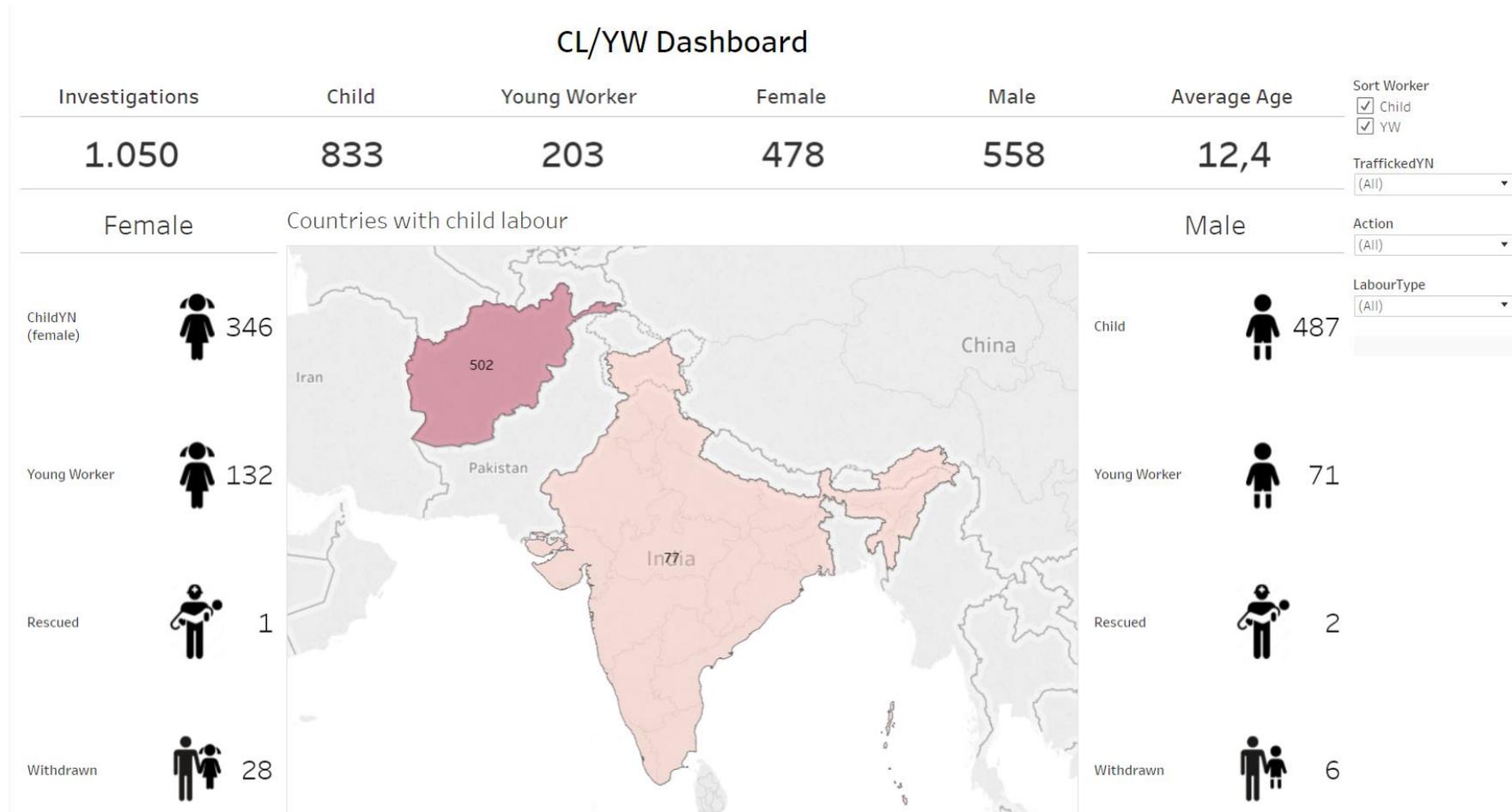


...and makes aggregated data available.

Where ChainPoint fits in



Example dashboard with test data





Added value



Supply chain mapping.
Data quality.



Inspection management



Up to date
transparency
information





ChainPoint
CONNECTING SUPPLY CHAINS

Thank you.

DHL Resilience360

Shehrina Kamal

LEVERAGING DATA TO GAIN SUPPLY CHAIN TRANSPARENCY

Shehrina Kamal, Senior Manager
DHL Resilience360



Innovation at DHL

- » Trend research
- » Technology scouting
- » Product development



Why we started DHL Resilience360



82%

of companies do **not have complete visibility** on their supply chain (tier 1, 2 & beyond)¹⁾



50%

of **supply chain disruptions** originate at subtier suppliers (**beyond tier 1**)³⁾



45%

of **supply chain executives** say they are experiencing increased pressure for **regulatory compliance**⁴⁾

Need for transparency

Good Manufacturing Practice
C-TPAT Eco-Label
Good Distribution Practice
Regulation Child Labor
Sub-supplier Identification
Single Point of Failure
Supplier Business Continuity
Alternative Suppliers
Conflict Minerals ISO 9001
Sustainability
Certification



Source: 1) "Global Manufacturing Outlook", KPMG, 2016; 2) & 3) "Supply Chain Resilience Report", Business Continuity Institute, 2015; 4) "The Value of Strategic Supplier Data Management", Aberdeen Group, 2015; 4) "The Value of Strategic Supplier Data Management", Aberdeen Group, 2015

DHL Resilience360 in a nutshell



Supply Chain Visibility

Shipment tracking, ETA predictions, geo-fencing for alerts and business intelligence on performance



Risk & Incident Monitoring

Near-real-time alerting of relevant incidents, network disruption feedback and industry news monitoring



Risk & Impact Assessment

Every point-of-planet Risk Index, over 30 databases, heat-maps, country risk monitoring and impact assessment methodology



Transparency & Compliance

Online collaboration, pre-defined surveys for multi-tier mapping, business continuity, sustainability and compliance (e.g. C-TPAT)



DHL Supply Watch

Early stress indicator across a company wide supply base, using on automated real-time online and social media searches

Assess at-risk suppliers

DHL RESILIENCE360 Demo Account

Network Visualization Incident Monitoring **Risk Assessment** Country Risk Transparency Portal Supply Watch

NETWORK VISUALIZATION > RISK EXPOSURE INDEX

Node: Mijdhet Components ME, Nha Trang, Vietnam

RISK EXPOSURE INDEX

- Overall Risk Index: 55
- Sustainability Index: 58
- Workers Rights: 75

Nodes: 1,182 of 1,182
Lanes: 1,014 of 1,014
Warehouse Exposure: 12,720,000
Risk Exposure: Workers Rights

0-20: Insignificant
21-40: Minor
41-60: Moderate
61-80: Major
81-100: Extreme

Sustainability Index

- Personal Freedom
- Workers Rights
- Child Labour
- Environment

Slices
Countries

RESET FILTERS APPLY



Identify multi-tiered supplier base



Supplier Identification

Identify your suppliers and their manufacturing locations across all tiers by using an iterative multi-tier supplier identification survey

Location | Location Contacts | Business Continuity Management | Alternative Locations | Suppliers

Provide Location Details
In this section, please provide information to determine the exact geographic location of your facility and which Business Unit this location/facility serves.

1. Name of the location/facility*
Plant Leipzig

2. The Business Unit that is mainly served by this location. Please choose "Other" if multiple business units are served by this location and list them in the comment field.*
 Aviation Healthcare Transportation Water Energy Renewables Other
Comment
-

3. Address (street name and house number)*
Hugo-Junkers-Strasse

4. ZIP / Postcode*
04158

5. City*
Leipzig

6. State / Province / Region
-

7. Country where the location/facility is located*
Germany

8. Please enter the longitude and latitude for the location below. You can use "Get address geocode" link to find your location automatically on the map. Alternatively you can use your mouse wheel to scroll into the map and drag & drop the location marker. The longitude and latitude will automatically be determined in this case. Please use the zoom-in functionality to identify your location as accurately as possible.*

Automate the task of identifying supplier distress



Search up to 30 million posts every day



Identify company-level risks matching our taxonomy



Get a daily summary of recent posts published





Application

- ▶ Identify supplier non-compliance with financial, safety, environmental and labor regulations
- ▶ Prevent reputational loss by addressing emerging issues quickly
- ▶ Focus your compliance, audit and risk management activities on the most relevant suppliers

Case-study

» Key Figures

150+ countries

50,000+ suppliers

21 Bn revenue pa

» Challenges

- Identifying the at-risk suppliers; spend vs. criticality
- Structured, automated approach to collecting information
- Continuous monitoring of key suppliers

» Outcome

- Streamlined approach to identifying which suppliers to focus on
- Less manual effort in supplier data collection
- Quicker identification of emerging issues

THANK YOU

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- SHOW BUSINESS
- NETWORK
- MUSIC
- CINEMA
- BUSINESS/FINANCE
- WORLD NEWS

- LIVE CHAT
- MEDIA
- PHOTOS
- VIDEOS

- VIDEO
- MUSIC
- FILES
- SEARCH
- CONTACTS
- MESSAGES

- STRATEGY
- PLAN
- INVESTMENT
- INCOME
- MONEY

- INTERNET
- LIVE CHAT
- MEDIA
- PHOTOS
- VIDEOS
- MUSIC

- INTERNET
- LIVE CHAT
- MEDIA
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Questions & Answers



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