

A WORLD OF BEST PRACTICES

FOR THE ELECTRONIC
COMPONENTS INDUSTRY

October 19, 2020



Electronic Components Industry Association

A large graphic of a globe on the right side of the slide. The globe is composed of a network of blue lines connecting various nodes, representing a global network or data flow. The nodes are represented by small blue and grey dots of varying sizes.

GIPC

Agenda:

1. ECIA Update – [David Loftus, ECIA President and CEO](#)
2. NA Electronic Component Sales Trends and COVID-19 – [Dale Ford, ECIA Chief Analyst](#)
3. Sales Interacting with Business Partners and Customers – [Russ Dzielak, Director of Channel & Key Accounts, Phoenix Contact](#)
4. Design Registration Study Update – [Don Elario](#)
5. Paperless Manufacturer COC Update – [Phil Fraser, Distribution Sales Director, Analog Devices Inc](#) and [Pete Shopp, SVP Business Operations, Mouser Electronics](#)
6. Listing Authorized Distributors and Manufacturer Reps on Manufacturer's Websites – [Victor Meijers, ECIA SVP](#)
7. Compliance & Risks Webinar – [Don Elario](#)
8. Competitive Insights Webinar – [Don Elario](#)
9. Join our SME Pool in Q4 as we head into 2021

A large graphic on the right side of the slide. It depicts a globe with a network of blue dots and lines connecting them, representing a global network or data flow. The text "Global Industry Practices Committee" is overlaid on the globe in a bold, blue, sans-serif font. The words "Global Industry" are on the top line, and "Practices Committee" are on the bottom line, with "Practices" and "Committee" underlined.

**Global Industry
Practices Committee**

ECIA

with

David Loftus

ECIA President and CEO



Electronic Components Industry Association

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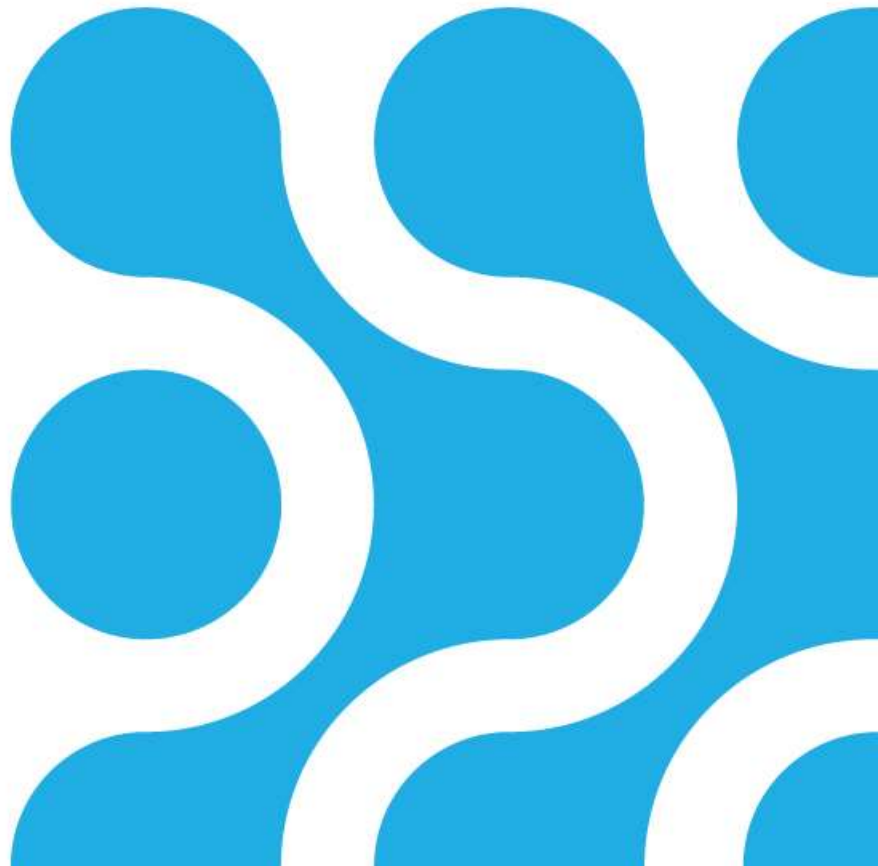
**Global Industry
Practices Committee**

COVID-19: The Numbers & Impact

Dale Ford – Chief Analyst
October 19, 2020



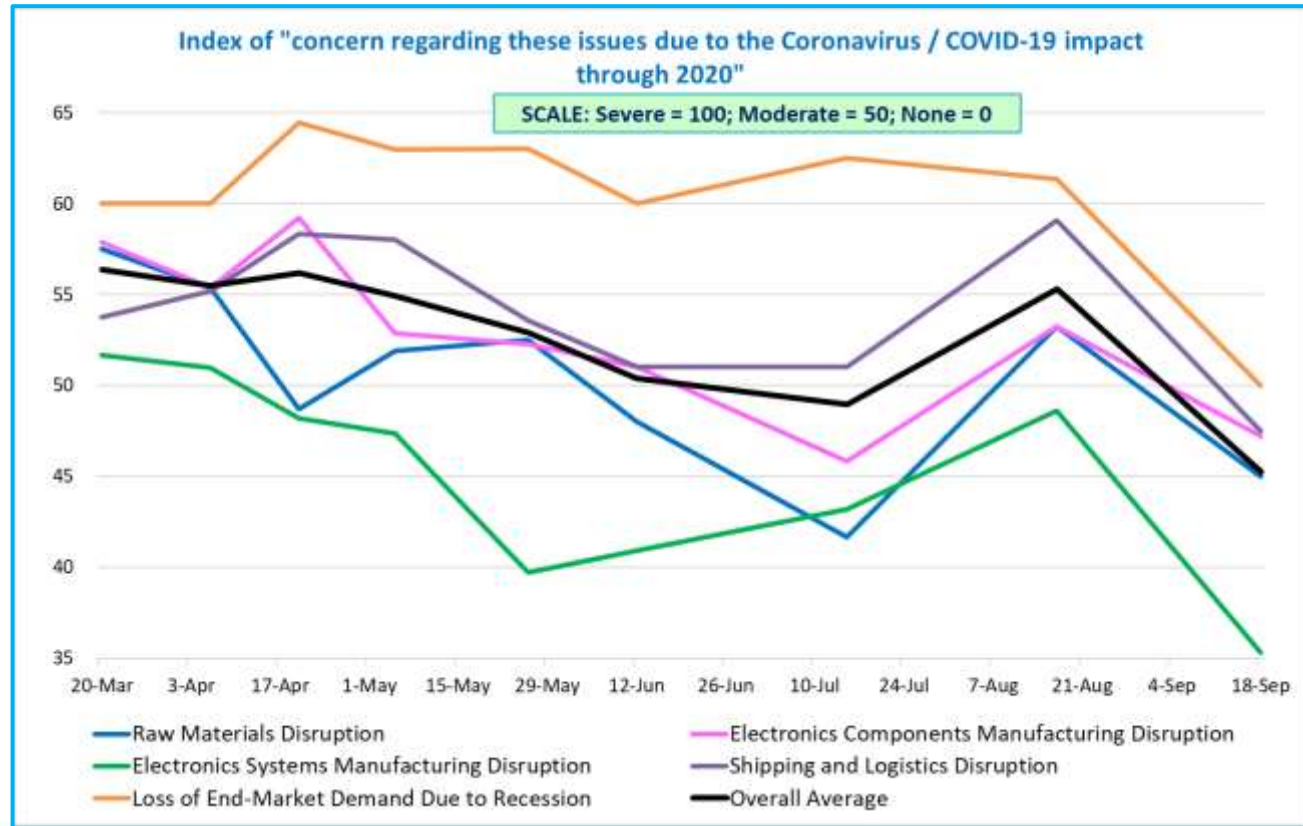
Electronic Components Industry Association



A Whipsaw Disaster That Required a Nimble Response

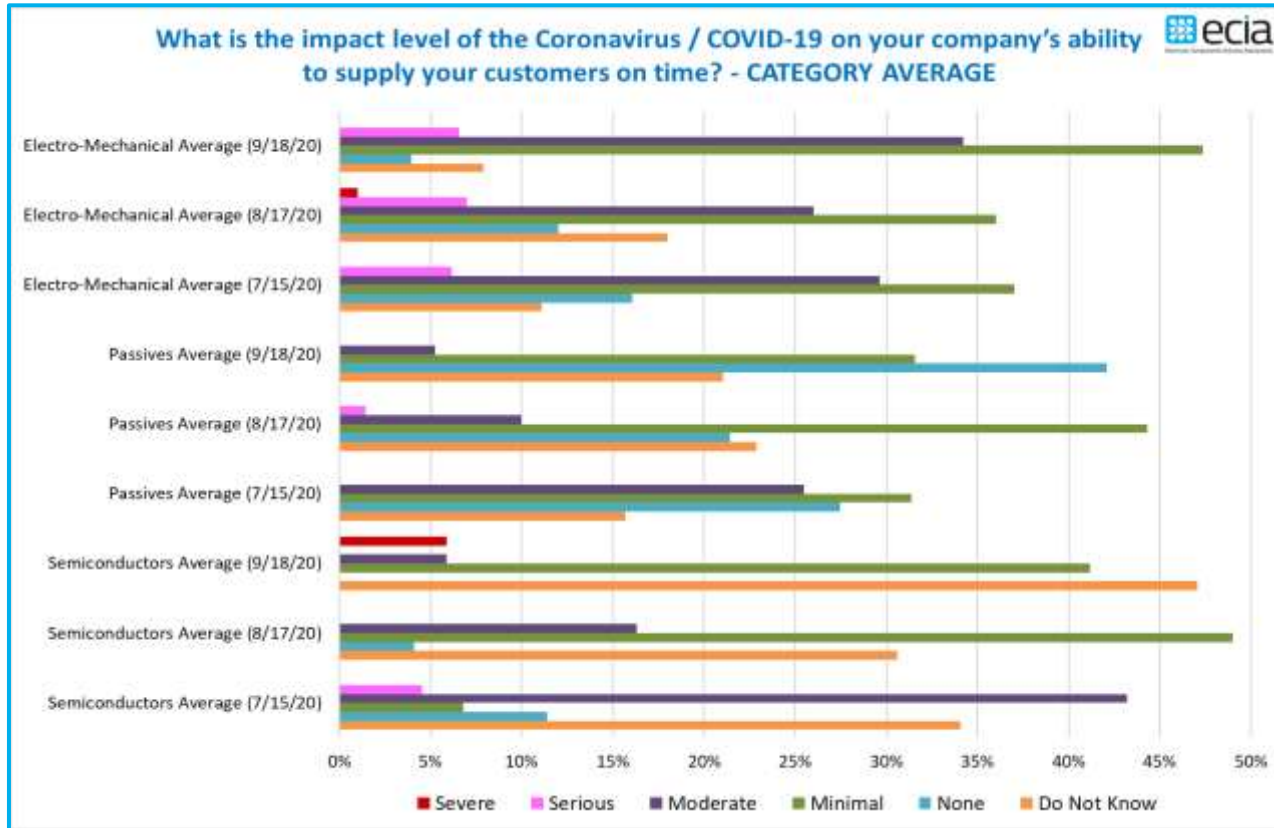
Connect. Influence. Optimize.

COVID-19 Supply Chain Impact – September Status



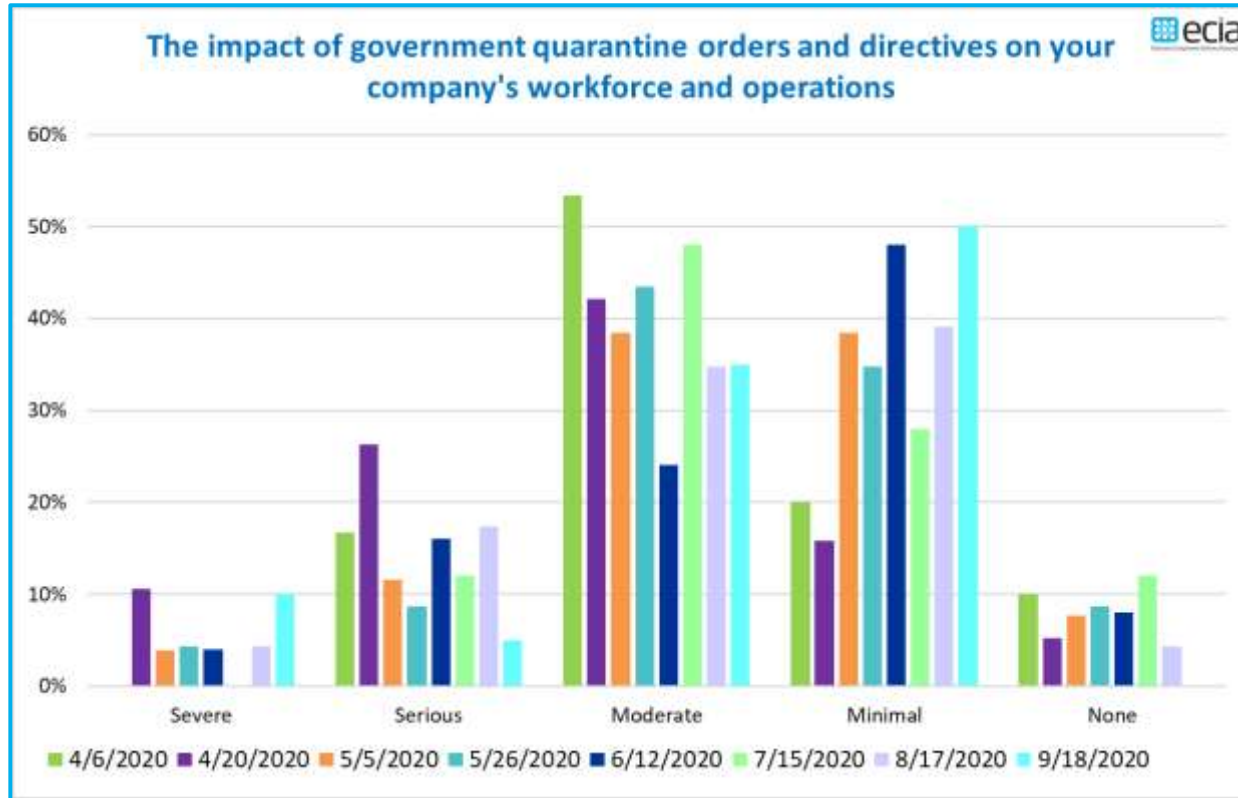
Connect. Influence. Optimize.

COVID-19 Supply Chain Impact – September Status



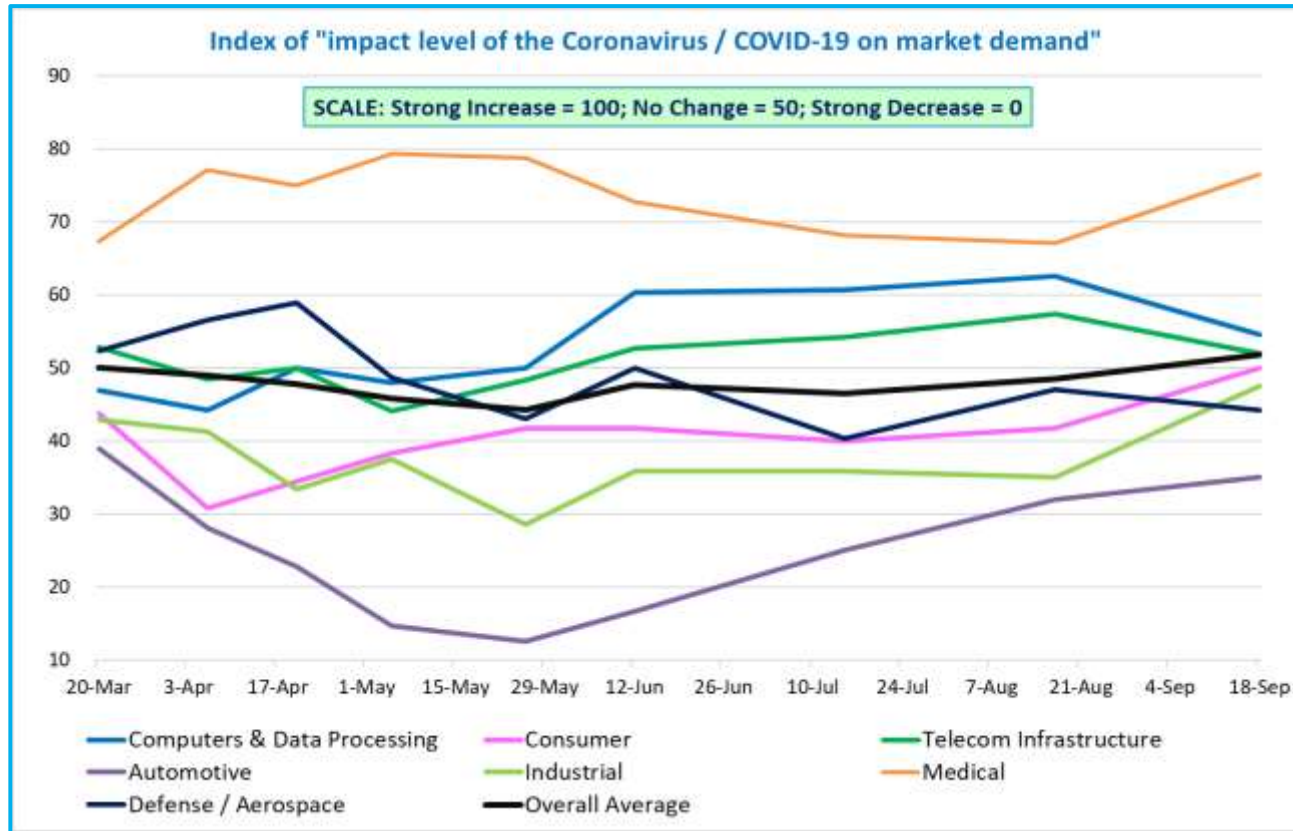
Connect. Influence. Optimize.

COVID-19 Supply Chain Impact – September Status



Connect. Influence. Optimize.

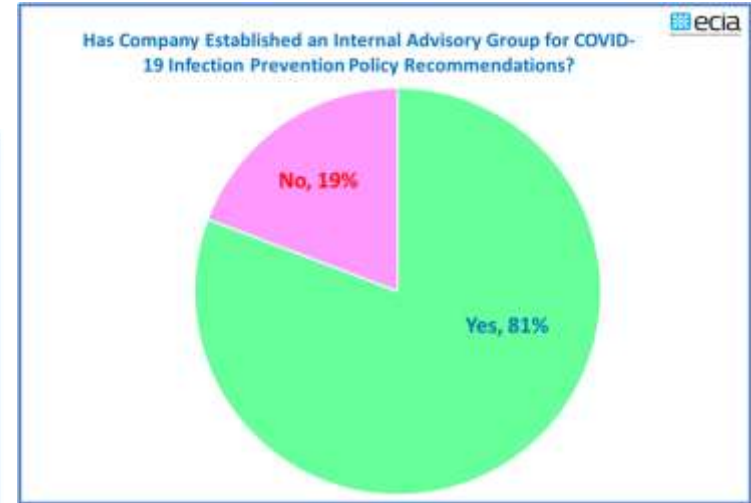
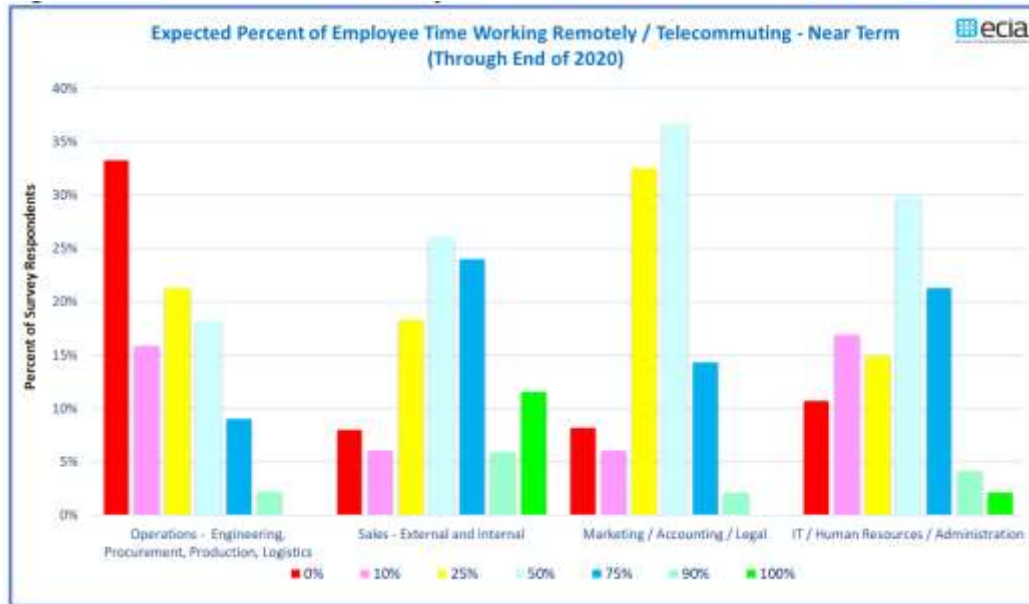
COVID-19 Supply Chain Impact – September Status



Connect. Influence. Optimize.

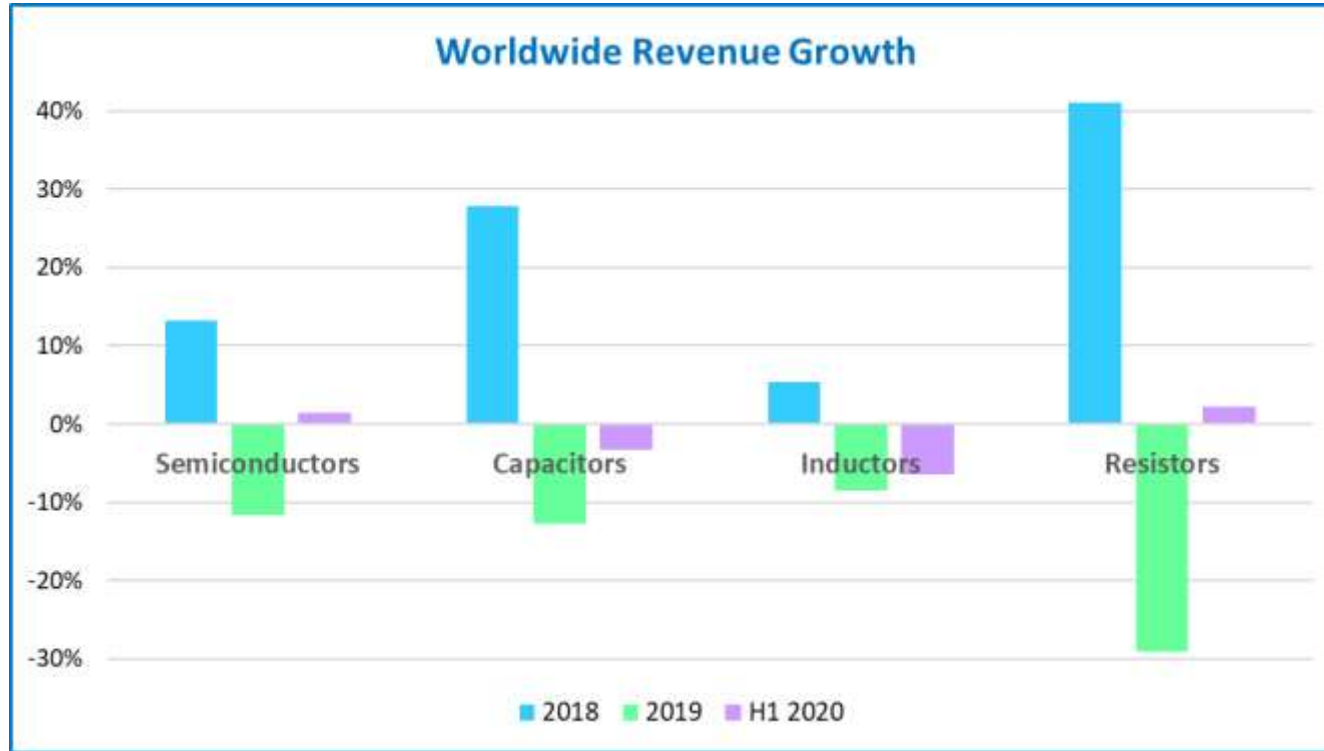
Best Practices Development – Industry Intelligence

The Human Version of AI



Connect. Influence. Optimize.

Electronic Component Revenue Growth



Source: World Semiconductor Trade Statistics (WSTS),
World Passive Trade Statistics (WPTS)

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IHS Markit U.S. Manufacturing PMI – October

Key Results

Strongest improvement in operating conditions since January 2019

- Overall growth was supported by a faster expansion in production and a solid rise in new orders.
- Contributing to the overall upturn was a quicker rise in output at the end of the third quarter. The rate of growth was the sharpest for ten months and solid overall.
- Greater new sales led to further pressure on capacity at manufacturing firms. As a result, companies registered a second monthly rise in backlogs of work.
- Input buying remained modest in September. Although firms expanded their purchasing activity, supplier delays and the use of stocks in production led to a renewed contraction in pre-production inventories.



Economic Risk Factors

Economic Confrontations Between Major Powers

- World trade in manufactured goods has more than doubled between 2000 and 2017—from \$4.8 trillion to \$12.2 trillion. The U.S. share of world trade in manufactured goods has grown from 7.6% in 2002 to 8.7% in 2017. *(Source: World Trade Organization)*
- Globally Weak Investment Due to Low Expected Returns, Uncertainty About Economic Policy

Small Business Health

- The majority of manufacturing firms in the United States are quite small. In 2017, there were 248,039 firms in the manufacturing sector, with all but 3,914 firms considered to be small (i.e., having fewer than 500 employees). In fact, three-quarters of these firms have fewer than 20 employees. *(Source: U.S. Census Bureau, Statistics of U.S. Businesses)*
- Unemployment and State Lockdown Orders

Energy Shocks

- Manufacturers consume more than 30% of the nation's energy consumption. Industrial users consumed 32.3 quadrillion Btu of energy in 2018, or 32.3% of the total. *(Source: U.S. Energy Information Administration, Annual Energy Outlook 2019)*

Societal and Political Turmoil

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GDP Forecast Scenarios

Scenarios have evolved over time

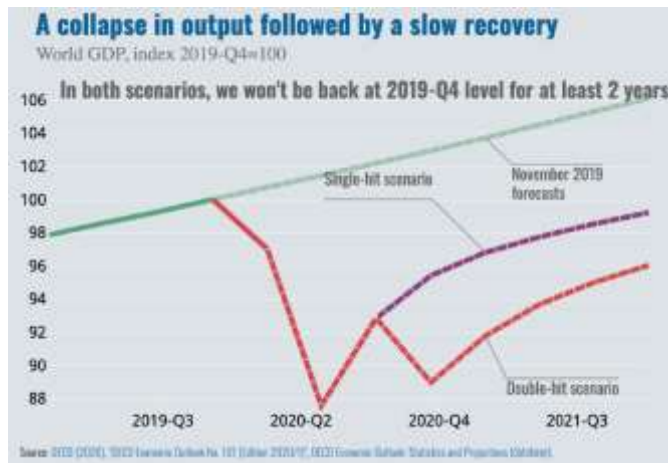
V – Shaped

U – Shaped

Bathtub – Shaped

Pi (π) – Shaped

W – Shape



“A Crisis Like No Other, An Uncertain Recovery”

- IMF

The Swoosh Scenario

- Conference Board

	PROJECTIONS		
(real GDP, annual percent change)	2019	2020	2021
World Output	2.9	-4.9	5.4
Advanced Economies	1.7	-8.0	4.8
United States	2.3	-8.0	4.5
Euro Area	1.3	-10.2	6.0
Germany	0.6	-7.8	5.4
France	1.5	-12.5	7.3
Italy	0.3	-12.8	6.3
Spain	2.0	-12.8	6.3
Japan	0.7	-5.8	2.4
United Kingdom	1.4	-10.2	6.3
Canada	1.7	-8.4	4.9
Other Advanced Economies	1.7	-4.8	4.2
Emerging Markets and Developing Economies	3.7	-3.0	5.9
Emerging and Developing Asia	5.5	-0.8	7.4
China	6.1	1.0	8.2
India	4.2	-4.5	6.0
ASEAN 5	4.9	-2.0	6.2
Emerging and Developing Europe	2.1	-5.8	4.3
Russia	1.3	-6.6	4.1
Latin America and the Caribbean	0.1	-9.4	3.7
Brazil	1.1	-9.1	3.6
Mexico	-0.3	-10.5	3.3

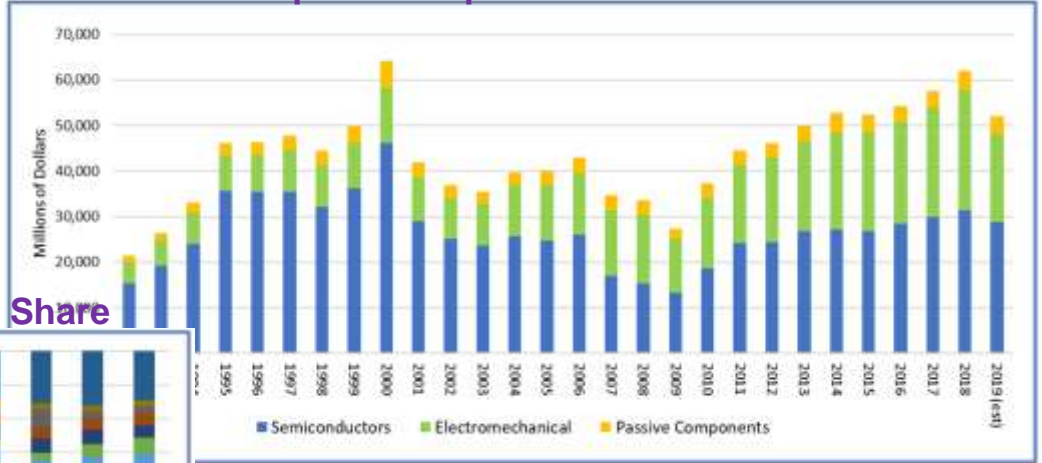
Source: IMF

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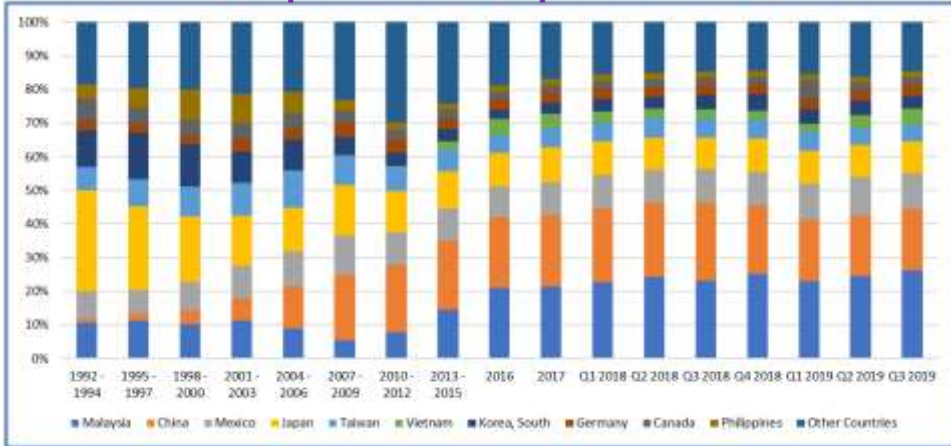
The Trade Winds are Shifting

- On-Shoring
- Re-Shoring
- Near-Shoring
- Sure-Shoring

Electronics Component Imports to the U.S.



Electronics Component U.S. Import Revenue Share



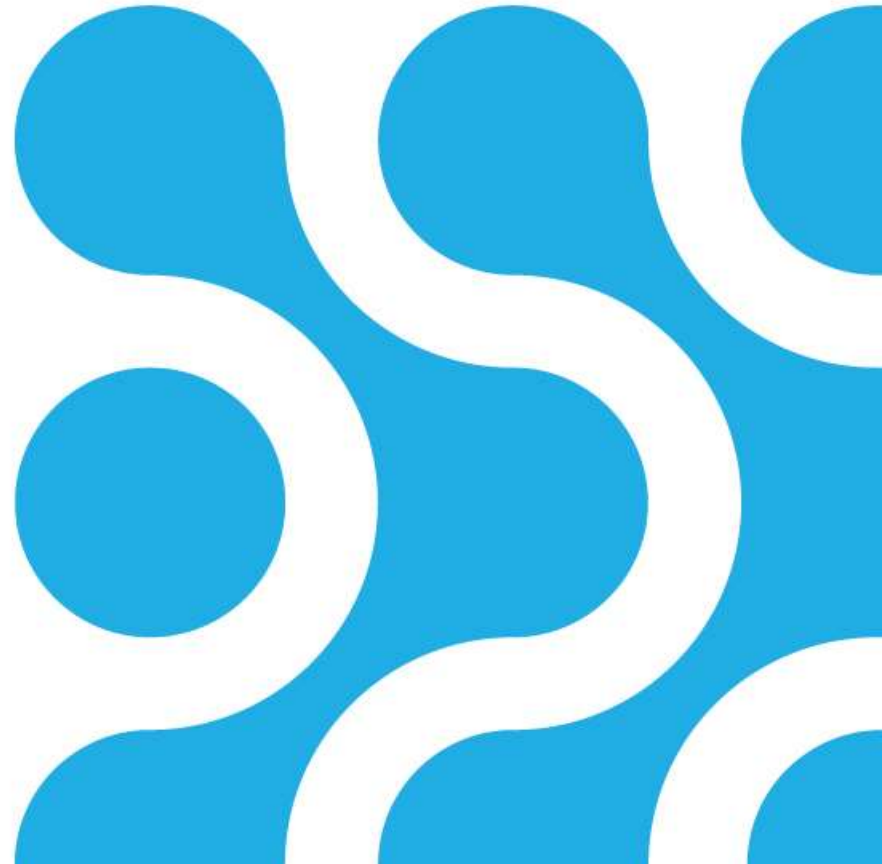
Connect. Influence. Optimize.

Thank you!

Dale Ford – Chief Analyst
dford@ecianow.org



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Sales Interacting with Business Partners and Customers

with

Russ Dzielak

Director of Channel & Key Accounts

Phoenix Contact



Electronic Components Industry Association

A large graphic on the right side of the slide depicting a globe. The globe is composed of a network of blue and grey dots connected by thin lines, representing a global network or data flow. The dots are of varying sizes and colors, and the lines form a complex web across the surface of the sphere.

**Global Industry
Practices Committee**

Sales Interacting with Business Partners and Customers

Project Objective:

To provide areas for consideration and best practices for how manufacturers, distributors and manufacturer's representatives in the electronic component industry can safely and effectively adapt their selling organizations in response to the Covid-19 pandemic using a combination of remote customer engagement policies and strategies along with guidance regarding face to face selling activities and other external stakeholder meetings.

Work Group:

AVX
Catalyst Unity Solutions
ON Semi
Phoenix Contact
Sager Electronics
TTI



Project Deliverables:

1. Best practices document highlighting “areas for consideration” published in June 2020
2. Work group continues to meet periodically to review and monitor the pandemic and ever-changing guidelines
3. Work group will determine the best time to publish a follow-up document

April

May

June – Ongoing...

Project Timeline
2020

Design Registration Project

with

Don Elario

ECIA VP Industry Practices



Electronic Components Industry Association

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**Global Industry
Practices Committee**

Design Registration Study Acknowledgements

Sponsor by: Manufacturer's Council

Supported by: ECIA, ERA, GEDA, Distributor's Council, Manufacturer's Representative Council, Executive Steering Committee

Legal Guidance by: ECIA COO and General Council – Robin Gray

Work Group: 14 Companies

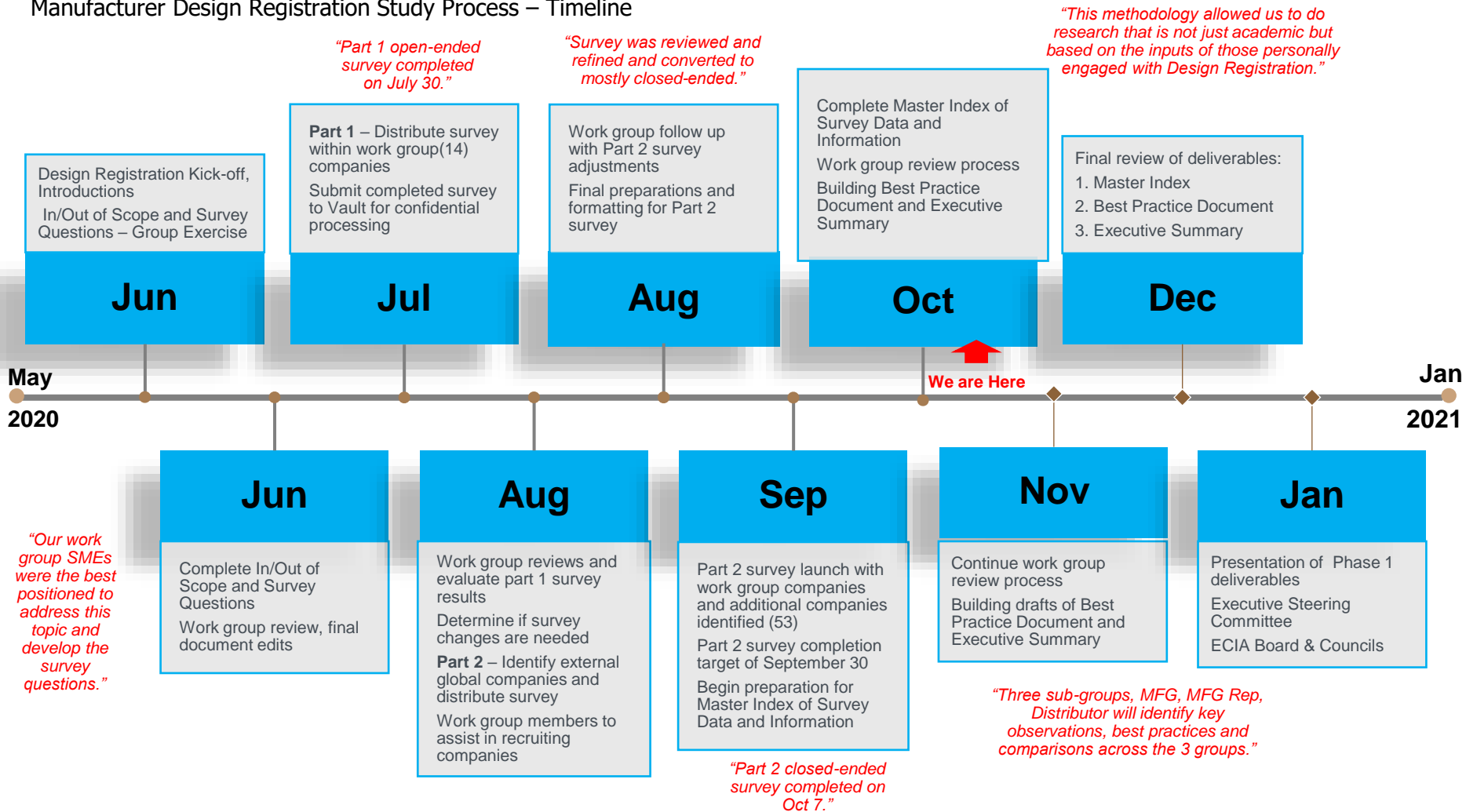
Avnet
AVX
Future
Kruvand
Maxim
Mel Foster Company
Molex
Murata
NXP
ON Semi
RFMW
★ TE Connectivity
★ TTI
Vishay



44 Companies who participated in the survey:

Avnet	Allegro
AVX	Avnet – EBV
Future	C&K
Kruvand	Cain Tech
Maxim	CK Associates
Mel Foster Company	Crowley Associates
Molex	CTS
Murata	Eaton
NXP	GMA Associates
ON Semi	IDT (Renesas)
RFMW	Littelfuse
TE Connectivity	Luscombe Engr
TTI	Macronix
Vishay	Micron
	Millenium Alliance
	Norris
	O'Donnell
	pSemi
	Panasonic
	Qualcomm
	Qorvo
	RF Associates
	Renesas
	Samtec
	Schaffner
	Sensirion
	ST Micro
	Toshiba
	WPG - America

Manufacturer Design Registration Study Process – Timeline



Phase 1 Research **Complete**, Analysis and Building Deliverables – **Work In Progress**

1. Master Index of Survey Results



Graphs, Charts and Commentary

2. Best Practice Document



Highest Rated Survey Results and Work Group Analysis

3. Executive Summary



Key Observations and Comparisons from Work Group

“This study has required commitment, dedication and hard work to get it to this point and now, with the research complete...its time to transcribe our deliverables.”

Paperless Manufacturer COC

with

Phil Fraser

Distribution Sales Director, Analog
Devices Inc.

Pete Shopp

SVP Business Operations, Mouser
Electronics



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**Global Industry
Practices Committee**

Digital Transfer of Manufacturer Certificate of Compliance



A Paperless Process

Industry Benefits:

- Create a streamlined process to digitally exchange compliance documentation such as manufacturers certificate of compliance. The industry benefits will be improved efficiency for the exchange of documents, reduction in costs associated with the current manual, paper driven process and improved visibility and availability of information.

Goal:

- Organize a working group comprised of 2 manufacturers, 2 distributors.
- Design architecture to embed compliance documentation into a 2D barcode: process flow to start with manufacture – to – distributor – to – customer.
- Implement pilot with working group participants.
- Create final process documents for industry release.

Key Outputs/Metrics:

- Final process documents for industry publication and use.
- Pilot results for publication when completed.
- ROI examples and/or estimates for industry publication.

Financial Considerations:

- ROI impact for Manufacturer (TBD)
- ROI impact for Distributor (TBD)

Project Timeline:

- April 2019 – April 2020

Problem Statement:

- There is only a manual, paper driven process today for the transfer and exchange of compliance documentation in the electronic component supply chain. This drives unnecessary administration costs with manufacturers, distributors and customers and service dissatisfaction through-out the supply chain.

Assignment Scope:

- Start with the manufacturers certificate of compliance.
- Consider other compliance documents that would enhance the offering, but would not complicate or slow down the initial target of embedding manufacturers CofC into 2D labeling process flow.
- Phase 1 = 1 Manufacturer Documents to 1 Distributor
- Phase 2 = Multiple Manufacturers and Distributors Implemented
- Phase 3 = Distributors Internalize Documents for Delivery to End Customers

Project Team:

- Sponsors – Phil Fraser, ADI and Pete Shopp, Mouser Electronics
- Leaders – Selinna Chen, ADI and Kendra White, Mouser Electronics
- Contributor – Andy Verb, Brien Fennell, Bar Code Graphics, Inc.

Paperless Manufacturer Certificate of Compliance

Contributions by Bar Code Graphics, Inc.

Concept Proposed by ECIA's GIPC

ADI, Littelfuse, Digi-Key, Mouser
Solution Development IT Project Teams Assigned

2019

Q1

Q2

Q3

Q4

2020

Embed COC in 2D Bar Code

Digital Transfer of COC with Linkage to Shipment

Roadmap

Distributors-to-Customers

ADI

ADI, Mouser

Process Development

Adds Distributors

Testing, Implementation

Process Development

Q4

Q3

Q2

Q1

2019-2021
3 Year Plan

2021

Additional Manufacturers, Distributors

CPI

Continued Industry Implementation

Continuous Process Improvement – Next Generation

Q1

Q2

Q3

Q4

2022


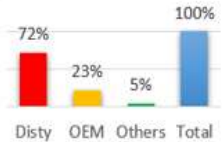

Global

Global Industry Implementation

Best Practices

Benchmark Data



Projects ROI (End State)	4 Warehouses
Volume <i>(Distributors)</i>	72%
Standardization (3 categories)	
Sustainability (Save Trees)	
Operation Efficiency <i>(Distributors)</i>	
Cost Reduction (Annual)	

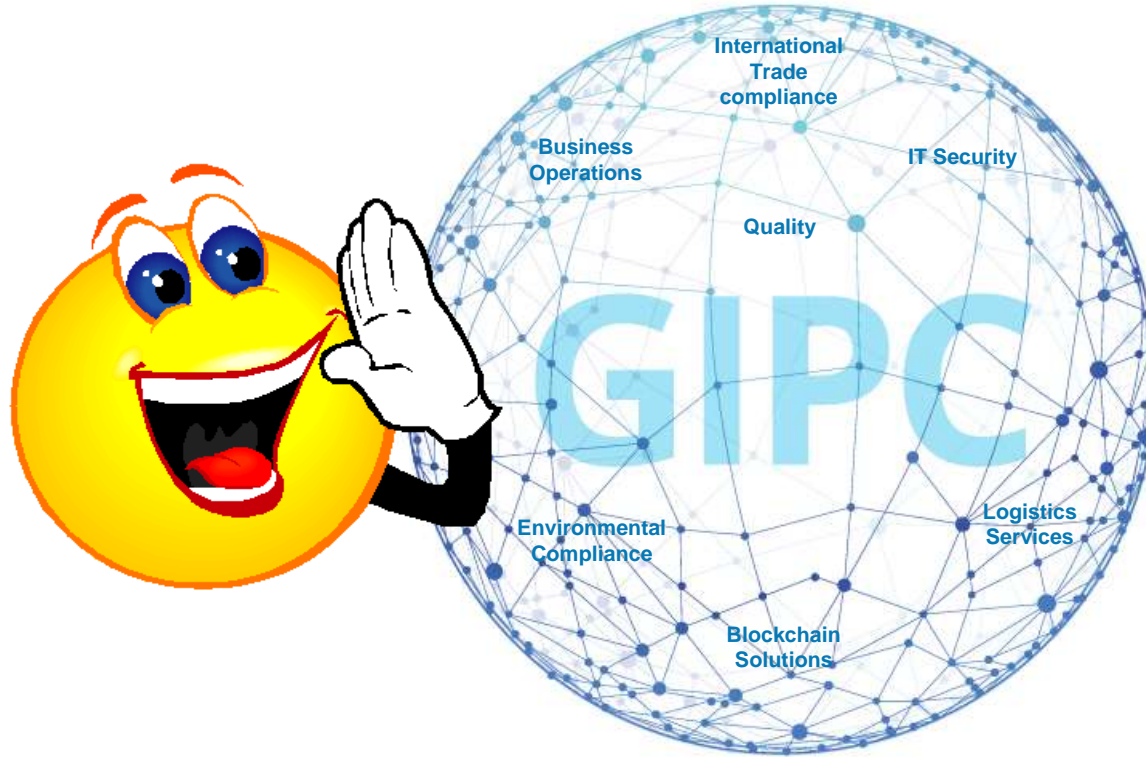
Distributor

Estimated Labor Savings at Distributor:

\$2.5K to \$5K per Manufacturer

* Additional ROI to be determined...

Digital Transfer of Manufacturer Certificate of Compliance



Listing Authorized Distributors and Manufacturer Reps on Manufacturer Websites

with

Victor Meijers

ECIA Sr. Vice President



Electronic Components Industry Association

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Global Industry
Practices Committee

Listing Authorized Distributors and Manufacturer Reps on Manufacturer Websites

Project Objective:

Research electronic component manufacturer websites to find best practice examples for locating/listing authorized distributors and manufacturer representatives.

Work Group:

Digi-Key
Mouser Electronics
TTI
WPG – Americas
EBM-PAPST
Kemet
Littelfuse
Rohm Semiconductor
Tech-Trek
AEM Group



Project Deliverables:

1. Best practices document highlighting “areas for consideration” for publication
2. Reference best practice examples of manufacturer websites identified by the work group
3. Podcast with a work group member and a manufacturer website representative
4. Marketing plan to drive industry awareness and future adoption.

October

November

December

Project Timeline
2020

Atlanta, GA – ECIA welcomes [Compliance & Risks](#)' Louise Forrest who will present an update on some of the most important component industry-specific regulatory concerns. [The webinar will take place Thursday October 15 at 11:00 Eastern.](#) Louise will shed light on:

- SCIP (Substances of Concern in Products) database with the European Chemical Agency scheduled for implementation January 5, 2021. Is your company ready?
- Update on RoHS exemption renewals
- Status of RoHS Pack 15 (potential new RoHS substances)
- Brief update on EU Conflict Minerals rule coming into force in 2021
- Global impact from COVID-19 on regulatory and compliance deadlines and regional impact around the world
- Regulatory and compliance challenges coming with IOT – 20 billion connections in 2020 and expected growth to 65-70 billion connections by 2025

Louise Forrest has led C&R's Global Regulatory Compliance team for the last five years and was featured on a [June Channel Channel Podcast](#). Compliance & Risks creates business advantages for clients by providing reliable legislative information, insights and actions through C2P, a compliance knowledge management software platform, consulting, market access, managed services and other solutions. The company is recognized as the end to end global regulatory solutions provider across the technology, consumer goods and retail, industrial goods and life sciences sectors.

“This webinar will bring a wealth of targeted and concise information to our members about what they need to know to comply with the accelerating number of regulations affecting the electronic component industry,” commented Don Elario, ECIA Vice President of Industry Practices. “I encourage anyone with responsibility for this area to listen to Louise’s presentation.”

[Click here to register.](#) Registration for this webinar is open to members and non-members.

Global Industry Practices Committee (GIPC)



Thursday, October 22, 2020 1:00 PM - 2:00 PM EDT

Category: Webinar

Competitive Insights, LLC enable companies to gain maximum value through specific, precise and actionable insights across the organization for smarter growth...

Supply Chain Risk Management: Handling Disruptions Today and Tomorrow

The COVID-19 pandemic has exposed many supply chain related resiliency issues, ranging from shortages in product availability to meeting surges in demand. Because the supply chain issues are so visible and affecting so many companies adversely, shareholders and stakeholders will require companies aCompetitive Insights continuously enhances the visibility for smart growth with innovative advanced analytics, improvements in streamlining data governance and better functionality for business users to make data-driven decisions. nd their supply chain executives to demonstrate an active, effective and ongoing Supply Chain Risk Management (SCRM) program. What will be the next disruptive event? Are you ready?

You are invited to attend a very interactive presentation by Richard Sharpe, CEO of Competitive Insights, and gain key takeaways to make smarter and more targeted SCRM decisions, both reactive and proactive.

Learn how effective SCRM analytics enables companies to add measurable resiliency to their operation while, at the same time, protecting profit and shareholder and stakeholder investments.

Global Industry Practices Committee (GIPC)

Competitive **insights**

**Supply Chain Risk Insights
mitigating supply chain
disruptions to protect profits**



 **ecia**
Electronic Components Industry Association

Why *(Participate in the GIPC or a Subject Matter Expert pool?)*

- Opportunity to Influence
- Impact *Your Company's* Efficiencies and Standardization through Best Practice Awareness
- Collaborate on Common Challenges and Obstacles in *Your Area of Expertise*
- Industry Networking
- Take Advantage of this Talent Development Platform

Set Up Your Profile and...

- Join our Quarterly GIPC update webinars
- Receive group emails with news and project activity



Sign-up for the SME resource pool in Q4...



Teri Ivaniszyn – VP Operational Excellence, Digi-Key [Chair](#)
 Dawn Manhart – Director Global Sales Operations, Littelfuse [Past Chair](#)
 Melanie Pizzey – VP Global Business Operations, TTI
 Pete Shopp – SVP Business Operations, Mouser Electronics
 Tom Griffin – President, Catalyst Sales
 Kimberly Appleton – SVP Global Sales Operations, ON Semi
 Russ Dzielak – Director of Channel & Key Accounts, Phoenix Contact
 Victor Meijers – SVP ECIA
 Don Elario – VP Industry Practices ECIA

GIPC

Subject Matter Experts from ECIA Member Companies						
International Trade Compliance	IT Security	Business Operations	Blockchain Solutions	Environmental Compliance	Quality	Logistics Services

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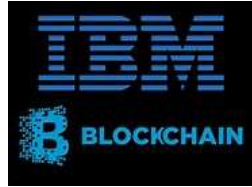
- Competitive Insights:** [Business Operations](#) – Supply Chain Risk Management webinar with CEO Richard Sharpe on October 22
- Compliance & Risk:** [Environmental Compliance](#), [Quality](#) – Webinar with Louise Forrest to cover regulatory/compliance trends on October 15
- Manufacturer COC Paperless Process:** [Logistics Services](#) – IT Project – ADI and Mouser will speak about expanding implementation and ROI
- Design Registration:** [Business Operations](#) – Phase 1 of the project is coming to an end; organizing deliverables to be published
- Sales Interacting with Business Partners and Customer:** [GIPC](#) – Work group continues to meet and monitor areas for consideration
- SME Resource Pool** – Updating our SME resource pool in Q4 as we head into 2021
- GIPC Quarterly Update:** Next call scheduled for Monday, January 18, 2021

*Updated October 2020

Global Industry Practices Committee (GIPC)



BAR CODE
G R A P H I C S



M NATIONAL ASSOCIATION OF
Manufacturers



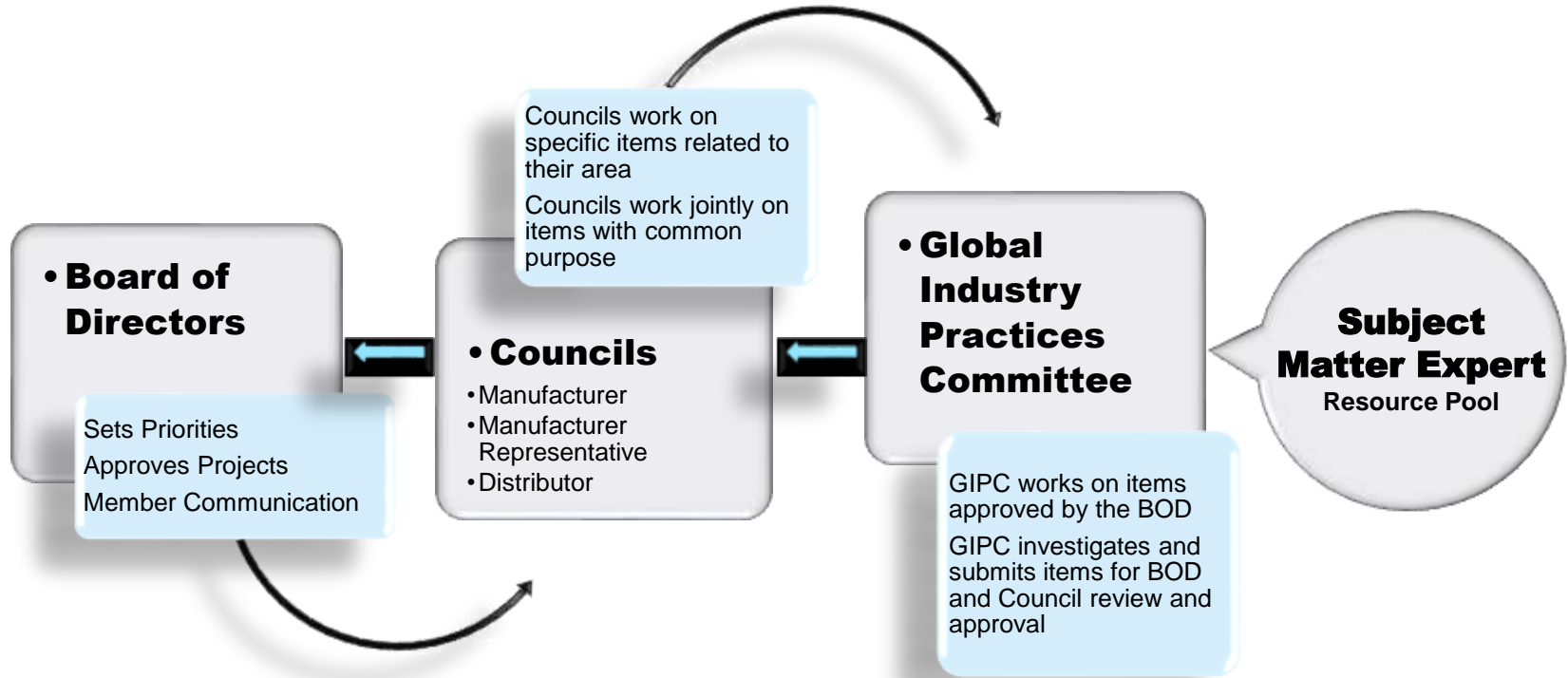
 **compliance & risks**

the **trust**
bridge

pri
PERFORMANCE
REVIEW INSTITUTE

 **RoHS Umbrella Industry Project**

How it works today...



Global Industry Practices Committee (GIPC)