Welcome to the 2020 Board Review!
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David Loftus
President & CEO
November 2020
Thanks to all for support in 2020!

• Board
• Councils
• Committees and SME’s
• ECIA Staff
Agenda

Introduction of Board Members – David Loftus, ECIA President & CEO
ECIA Accomplishments and Initiatives – Jeff Thomson, ECIA Board Chairman
State of the Association – David Loftus
Thoughts from our Incoming Chairman – Frank Flynn
Open questions – Audience and Board Members
Market Update – Dale Ford, ECIA Chief Analyst
Jeff Thomson

ON Semiconductor
- Board Chair 2019-2020
Alan Ahern
Crowley Associates
- Independent Rep Council Chair
Rob Kirch

Vishay

• Manufacturer Council Chair
• EDS Board
Mike Morton

TTI, Inc.

• Distributor Council Chair
Phil Fraser

Analog Devices
- Manufacturer Council
Mark Shiring

ebm-papst, Inc.
• Manufacturer Council
• EDS Board
Karim Yasmine

Future Electronics

- Distributor Council
Chris Wadsworth

Carlton-Bates Company
• Distributor Council
• EDS Board
Frank Flynn

Sager Electronics
• ECIA Board Chair-Elect 2021-2022
ECIA Highlights 2019-2020

• **Major Restructure of the Organization**
  • Launched Fall of 2018 in response to feedback from the member survey
  • Streamlined Board and created Manufacturer, Distributor, Manufacturer Rep Councils
    • Board reduced to 9; each Council has 12 representatives
    • Created a more nimble decision-making body
    • Allows each constituent group to address relevant topics and initiatives
    • Semi-Annual meeting format changed to allow for Joint Council collaboration
    • Resulted in ECIA being more effective and having a greater impact on the industry
      • Bigger industry challenges being addressed
      • Greater number of deliverables provided to members
ECIA Highlights 2019-2020

• Councils each contributed to ECIA’s success
  • **Distribution Council**
    • Inventory site now self funding and rebranded as TrustedParts.com
    • Best practices for Manufacturers listing Authorized Distributors and Reps on their sites
  • **Manufacturer Council**
    • Design Registration Program Study
    • Creation of Americas DTAM for discrete semiconductors
    • Texas A&M channel study – waiting to be funded
  • **Manufacturer Rep Council**
    • ETL process for NBO’s
    • Distribution Branch Training Module
ECIA Highlights 2019-2020

- Reconfigured GIPC now utilizes a pool of member SME’s
  - Developed a 2D Bar Code Industry Specification
  - Reporting and Guidance for CA Prop 65
  - Tariff Best Practice of Exchange of Information and Tariff removal Guidance
  - Paperless Certificate of Compliance (CoC)
  - Best practices of the changed Sales role due to the pandemic
- Currently underway:
  - Design Registration Program Study (Manufacturer Council)
  - Best practices for Manufacturers listing Authorized Distributors and Reps on their sites (Distributor Council)
ECIA Highlights 2019-2020

• Market Research enhanced with the Addition of Dale Ford
  • Extensive coverage of Corona Virus impact on the Supply Chain
  • Successful launch of monthly/Quarterly ECST surveys tracking industry outlook
  • Creation of Americas DTAM for discrete semiconductors

• Expanded Member Communications
  • Redesign of the association website ecianow.org
  • Bi-weekly The Channel Channel podcasts hosted by various staff
  • Ongoing webinars covering a wide variety of topics

• Last, but not least, a smooth transition to our new CEO
State of the Association

David Loftus
President & CEO
November 2020
Thanks to our 2020 Member Survey Respondents!

Over 140 Responses!

After the 2018 survey, ECIA was restructured to create a smaller, more focused 9-member Board of Directors and three focused 12-person Councils for Manufacturers, Distributors, and Manufacturers' Reps. If you are familiar with the new structure, please rate this change.
Please rate your overall satisfaction with ECIA relative to the following statement: ECIA enables my company to be more effective in my industry.

![Bar chart showing satisfaction levels.](chart.png)
Please rate your overall satisfaction with ECIA relative to the following statement:
ECIA does a good job communicating with its members
What additional offering would make ECIA membership of greater value to you and your company? Other Feedback?

- Role specific communities
- Go global
- A lobbyist in DC to fight for our industry
- Expand market surveys, more efficient reminders
- Increase semiconductor companies
- Increased economic research
- More collaboration with ERA

2020 Summary

• Great accomplishments in a virtual world!
  • Councils working well
  • First virtual Joint Board and Council meetings held in late October

• Covid financial impact - Cancellation of EDS and Exec Conference

• Slight net loss of membership
  • Covid financial pressures
  • Consolidation
ECIA Funding

ECIA ORIGINAL 2020 BUDGETED INCOME
$3.571M

- Member Dues
- Executive Conference
- Standards Royalties
- Inventory Search
- EDS
- EDS Management Fee
- Other

2020 Projected Close: $3.043M
ECIA Expenses

ECIA ORIGINAL 2020 BUDGETED EXPENSE
$3.533M

- Meetings Expense
- Staff Expense
- Member Services
- Consulting
- Administrative, Rent

Member Services
- Inventory Site
- Standards
- GIPC
- Stats/Surveys
- Special Projects

2020 Projected Close: $3.035M

ECIA Financial Status is Solid

• 2020 projected close: $8K net positive
  • Lower income (-$370K) due to cancellation of Exec Conference
  • EDS event insurance
  • Lower expenses due to Covid, cancellation of EDS, Exec Conference

• Strong reserves: Current Assets $7.304M, Investments $6.581M (9/30/20)
  • Good historical management by staff and board
  • Good performance from investments

• 2021 budget approved by Board
  • $300K dip into reserves due to conservative expectations for EDS and Exec Conference
  • Tightly control expenses for 2021
  • TBD: Foundation proposal for investment in training
2021 Priorities

• Strong return of EDS and Executive Conference! [polling question]

• Rollout of Design Registration, ETL, CoC, education initiatives

• Increase membership
  – Semiconductor manufacturers
  – Pursue several international regional Distributors to increase global footprint & perspective

• Continued expansion of industry stats (i.e. DTAM)

• ERA & GEDA Cooperation

Comments from our incoming Chairman: Frank Flynn
Questions to the Board?

Submit your questions through the Q&A function at the bottom of your screen.
Electronics Components

A Whipsaw to a Swoosh

Dale Ford – Chief Analyst
November 9, 2020
COVID-19 Supply Chain Impact – September Status

Index of "concern regarding these issues due to the Coronavirus / COVID-19 impact through 2020"

SCALE: Severe = 100; Moderate = 50; None = 0

- Raw Materials Disruption
- Electronics Systems Manufacturing Disruption
- Loss of End-Market Demand Due to Recession
- Electronics Components Manufacturing Disruption
- Shipping and Logistics Disruption
- Overall Average
COVID-19 Supply Chain Impact – September Status

What is the impact level of the Coronavirus / COVID-19 on your company’s ability to supply your customers on time? - CATEGORY AVERAGE

Electro-Mechanical Average (9/18/20)
Electro-Mechanical Average (8/17/20)
Electro-Mechanical Average (7/15/20)
Passives Average (9/18/20)
Passives Average (8/17/20)
Passives Average (7/15/20)
Semiconductors Average (9/18/20)
Semiconductors Average (8/17/20)
Semiconductors Average (7/15/20)

0% 5% 10% 15% 20% 25% 30% 35% 40% 45% 50%

Severe Serious Moderate Minimal None Do Not Know
COVID-19 Supply Chain Impact – September Status

The impact of government quarantine orders and directives on your company's workforce and operations
COVID-19 Supply Chain Impact – September Status

Index of "impact level of the Coronavirus / COVID-19 on market demand"

SCALE: Strong Increase = 100; No Change = 50; Strong Decrease = 0

- Computers & Data Processing
- Automotive
- Defense / Aerospace
- Consumer
- Industrial
- Telecom Infrastructure
- Medical
- Overall Average


Electronic Components Industry Association
Best Practices Development – Industry Intelligence

The Human Version of AI

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Expected Percent of Employee Time Working Remotely / Telecommuting - Near Term (Through End of 2020)

<table>
<thead>
<tr>
<th>Department</th>
<th>0%</th>
<th>10%</th>
<th>25%</th>
<th>50%</th>
<th>75%</th>
<th>90%</th>
<th>100%</th>
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<td>Sales - External and Internal</td>
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<td>Marketing / Accounting / Legal</td>
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Has Company Established an Internal Advisory Group for COVID-19 Infection Prevention Policy Recommendations?

- Yes, 81%
- No, 19%
Lessons Learned – Proactive Risk Management

“Every 3.7 years on average, businesses can expect a supply chain disruption that lasts at least a month, and the most serious of these can have severe financial consequences”

2020 McKinsey Analysis

“Amnesia and misaligned incentives may be among our worst enemies when it comes to building supply chain resilience for the long haul. Managers would do well to assess their top risks and understand the corresponding risk profiles for each supplier.”

Lynn Torrel, Chief Supply Chain and Procurement Officer, Flex
# Lehigh University Supply Chain Risk Index – Q4 2020

<table>
<thead>
<tr>
<th>Risk Type</th>
<th>Risk Index</th>
<th>Trend</th>
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<tbody>
<tr>
<td>Economic Risk</td>
<td>78.26</td>
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<tr>
<td>Supplier Risk</td>
<td>74.38</td>
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<tr>
<td>Cybersecurity and Data Risk</td>
<td>72.13</td>
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<tr>
<td>Customer Risk</td>
<td>70.66</td>
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<td>Government Intervention Risk</td>
<td>70.43</td>
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<td>Transportation Disruption Risk</td>
<td>69.60</td>
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<tr>
<td>Operational Risk</td>
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<tr>
<td>Environmental Risk</td>
<td>59.13</td>
<td></td>
</tr>
<tr>
<td>Technological or Competitive Risk</td>
<td>58.26</td>
<td></td>
</tr>
<tr>
<td>Quality Risk</td>
<td>56.80</td>
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<tr>
<td><strong>Average Risk Index</strong></td>
<td><strong>66.97</strong></td>
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</tbody>
</table>

Source: Lehigh Univ, CSCMP

[Graph showing risk index by industry and risk type]
October ECST Forecast Outlook Index Summary

Sales Outlook for coming month compared to current month

- Electro-Mechanical / Connectors
- Passives
- Semiconductors
- Overall Component Average
- End Markets

100 = Stable


Electronic Components Industry Association
Electronic Component Revenue Growth

Source: World Semiconductor Trade Statistics (WSTS), World Passive Trade Statistics (WPTS)
Semiconductor Long-Term Growth Trends

Source: WSTS
Semiconductor Growth Trends – By Region

Source: WSTS
Semiconductor Growth Trends – Memory Amplifies

Quarter-over-Quarter Growth

Source: WSTS
Semiconductor Growth Trends – Spaghetti View

Quarter-over-Quarter Growth

Source: WSTS
Semiconductor & Passive Market Correlation

![Graph showing correlation between Semiconductor and Passive Components in $s]

- **Semiconductors vs. Passive Components in $s**

![Graph showing World Sales % Change Yr\Yr ($s)]

- **World Sales % Change Yr\Yr ($s)**

**Electronic Components Industry Association (ECIA)**

*Connect. Influence. Optimize.*
U.S. GDP Swings

Level of GDP

3Q 2020: $18.58 trillion

- 9.0% Q1 to Q2

+ 7.4% Q2 to Q3

Contributions to percentage-point change in real GDP

- Consumer spending on services
- Consumer spending on goods
- Change in private inventories
- Business investment
- Residential investment
- State and local government spending
- Federal government spending
- Net trade

Note: Adjusted for inflation and seasonality at annual rate
Source: Commerce Dept.

Historic alignment between economy and electronics

Semiconductor Alignment Continues

Source: WSTS, IMF, OMDIA
IHS Markit U.S. Manufacturing PMI – October

Key Results

Index reaches highest level since January 2019

- U.S. Manufacturing (PMI™) posted 53.4 at the start of the fourth quarter, up slightly from 53.2 in September.
- Continued rise stems largely from rates of output and new order growth accelerating, despite export orders contracting.
- Signs of reduced pressure on capacity led to a slower rise in employment, with business confidence also historically subdued.
- Contributing to the rise in the headline figure was a quicker upturn in production in October. The rate of output growth accelerated to the sharpest since November 2019.
- Companies often stated that greater output was driven by stronger client demand and higher new order inflows.
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

Source: IMF
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

Re-Shoring

- 93% are implementing or strengthening contingency plans.
- 70% expect COVID-19 will lead to less focus on sourcing from the lowest-cost supplier.
- 43% have already withdrawn from China or are planning to do so.
- 62% expect less focus on just-in-time (JIT) manufacturing models.

Source: Foley & Lardner LLP
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
Thank you!

Dale Ford – Chief Analyst
dford@ecianow.org
Year End Activities – Visit www.ecianow.org

November 18th: the ITR Economics webinar series continues. Open to ECIA members only.

December 8 & 9: Engineering the Conversation by Lectrix, an ECIA service partner. The virtual conference is designed to guide Sales and Marketing Managers in the B2B Electronics Industry. Join in for a number of informative sessions.

Follow us on LinkedIn, Facebook & Twitter

Summary

Thanks to our Board, Councils, Committees, and Members!

Please get involved!

Council calls
Committees: GIPC, Marketing, Standards, Statistics
EDS
Executive Conference

Polling Question
