

The Current Sentiment of the Global Electronics Manufacturing Supply Chain

Monitoring the Pulse of the Global Electronics Industry

November 2024

ipc.org -

Executive Summary



> Subdued Electronics Industry Sentiment Continues in November

 The electronics industry faced a mixed sentiment in November, with modest improvements in demand overshadowed by rising cost pressures.

> Demand Shows Signs of Recovery Amid Persistent Weakness

The Demand Index rose 2.6% in November, but remains subdued for the third consecutive month. The Backlog Index, already in contraction, fell an additional 2 points to reach a new record low. Capacity Utilization returned to expansionary territory, while the New Orders Index improved slightly but stayed in contraction for the third straight month. The Shipment Index rose 3 points, signaling some positive movement.

> Cost Pressures Intensify

 The Labor Costs Index remained flat at its all-time low. However, the Material Costs Index climbed to its highest level since June 2024, highlighting renewed cost pressures. A majority of firms continue to report rising material and labor costs, adding strain to operations.

> Industry Outlook Remains Positive in November Despite Cost Concerns

 Industry outlook remains optimistic, with expectations for demand improving. However, concerns over rising costs weigh on confidence as firms brace for continued pressures..

> AI: A Critical Gap in Workforce Preparedness

 69% of respondents agree that a broad understanding of AI will be essential for the workforce, yet only 11% of employees have received AI training to date, indicating a significant gap between perceived importance and current investment in skills development.

Current Conditions for the Electronics Supply Chain



Notably, there are no significant differences in current conditions across all geographic regions.

Diffusion Index[^] Material costs 48% 1% 51% 124 Labor costs 48% 1% 51% 124 Nearly half of electronics manufacturers are Inventory available to your customers 30% 61% 8% 111 currently experiencing rising material (48%) and Shipments 21% 32% 47% 105 labor costs (48%). Inventory available to you from your suppliers 21% 12% 67% 105 At the same time, ease of Capacity utilization Expanding 28% 54% 19% 105 recruitment, backlogs, Contracting profit margins, and orders Orders 99 28% 42% 31% Profit margins 14% 56% 92 31% Backlogs 17% 45% 38% 89 Ease of recruiting/finding skilled talent 10% 55% 35% 88 Declining

Current Direction of Key Business Indicators -- Total --

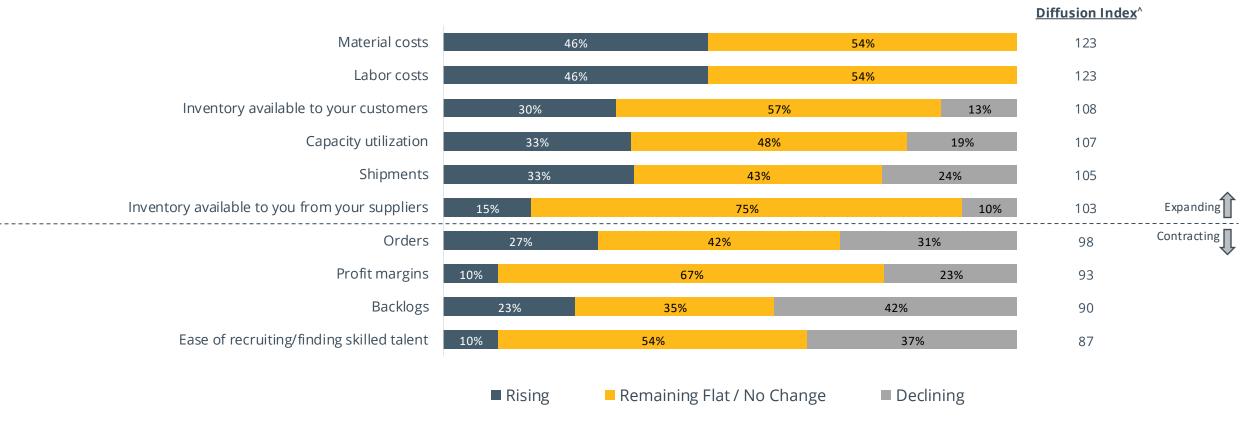
> Rising Remaining Flat / No Change

^A diffusion index is a statistical measure used to detect economic turning points.

The View From Companies Primarily Operating in North America

Current Direction of Key Business Indicators



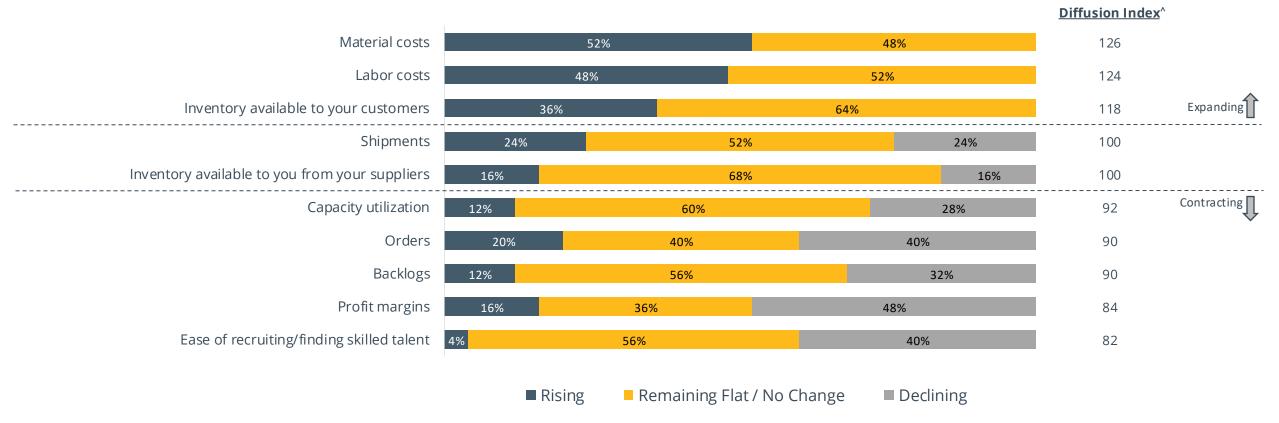


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The View From Companies Primarily Operating in Europe

Current Direction of Key Business Indicators

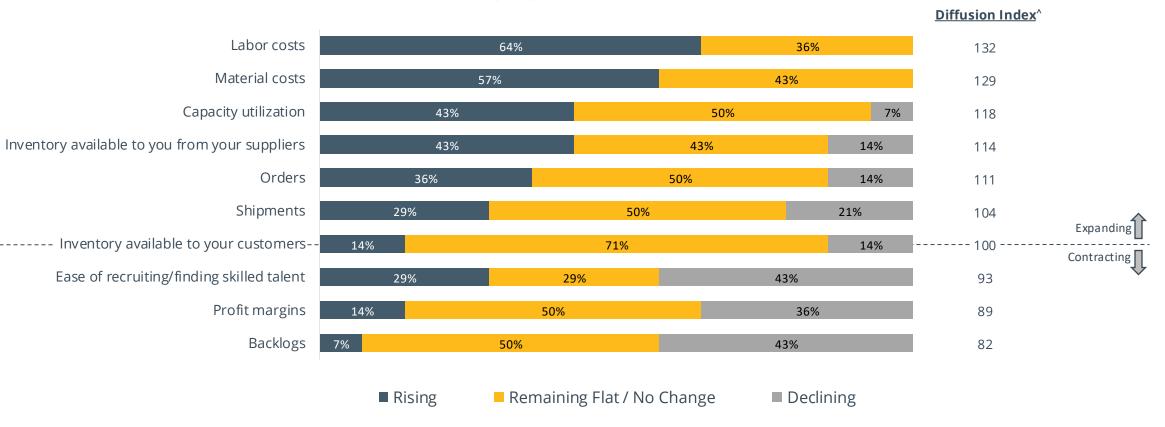




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The View From Companies Primarily Operating in APAC

Current Direction of Key Business Indicators



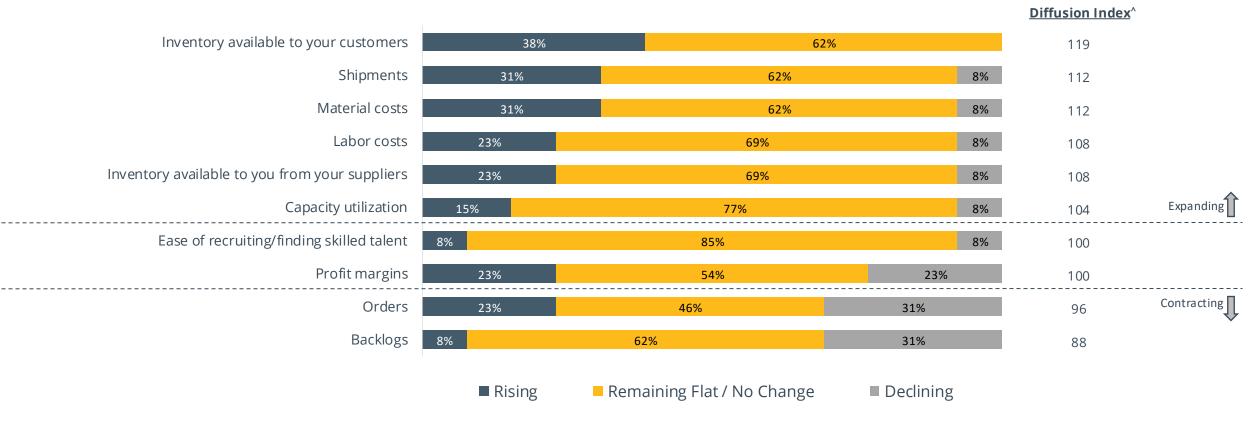
-- Primary Region: APAC --

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The View From Companies Primarily Operating Globally





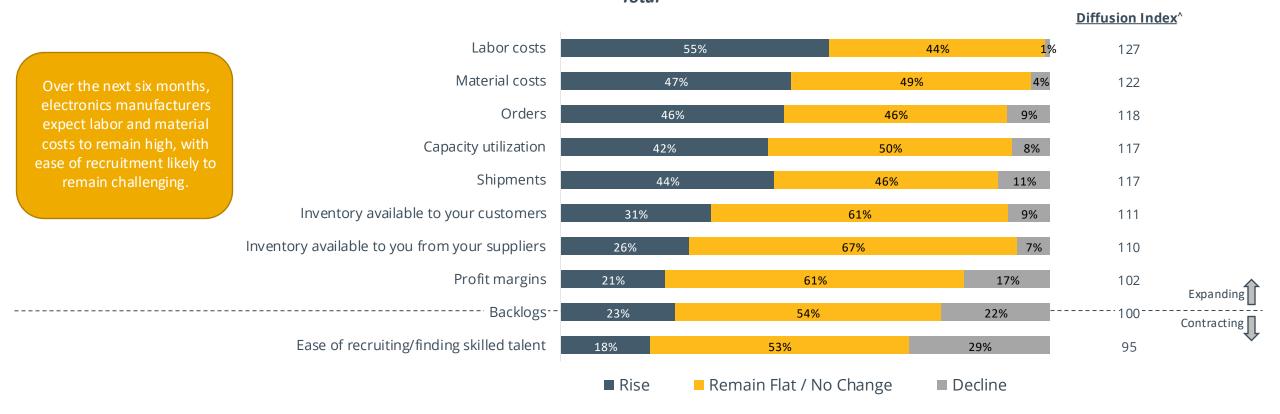


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The Outlook for the Next 6 Months



Anticipated Direction of Key Business Indicators – Next Six Months -- Total --



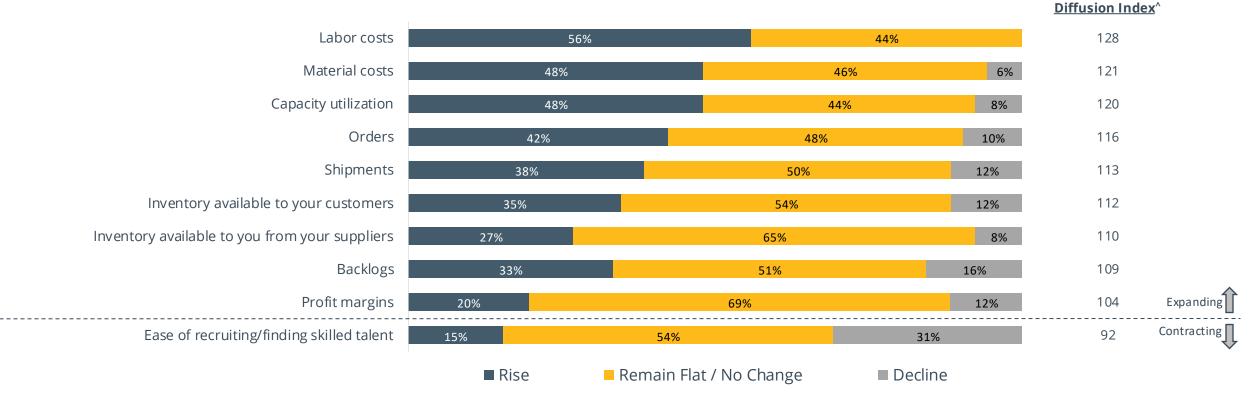
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Regional Differences in the Outlook



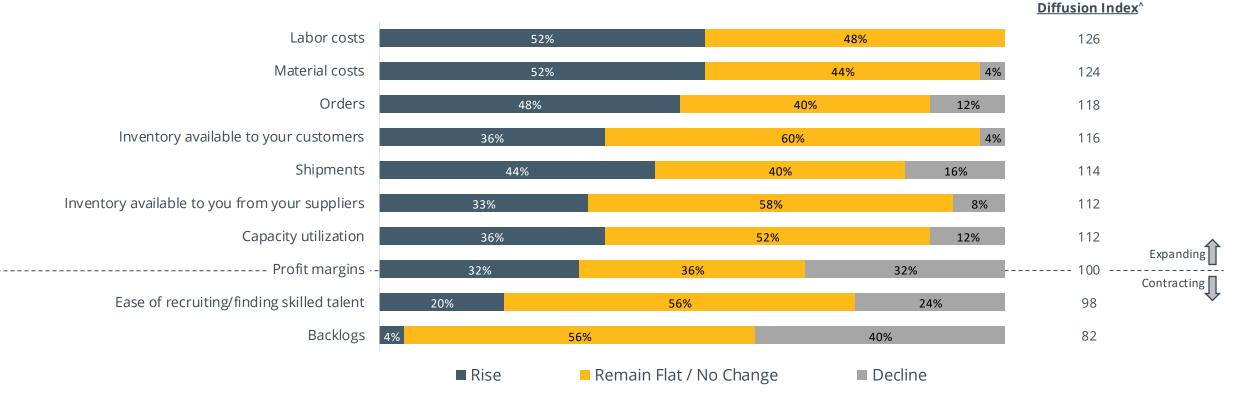
- Electronics manufacturers in North America expect backlogs to rise more so over the next six months when compared to European firms.
 - One-third (33%) of electronics manufacturers in North America anticipate backlogs to rise over the next six months, which compares to a significantly lower 4% among firms in in Europe.
- Capacity utilization is expected to increase more among electronics manufacturers in APAC and North America vs. firms that operate globally.
 - Nearly three-fifths (57%) of electronics manufacturers in APAC, along with half (48%) of North American manufacturers, expect capacity utilization to increase over the next six months, which is significantly higher than the 8% increase expected among those operating globally.

Anticipated Direction of Key Business Indicators – Next Six Months -- Primary Region: North America --



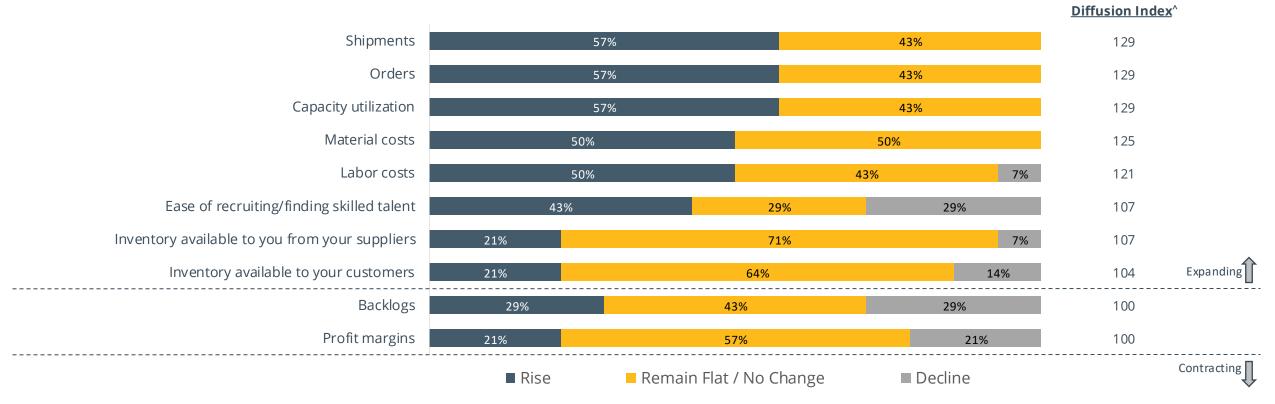
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Anticipated Direction of Key Business Indicators – Next Six Months -- Primary Region: Europe --



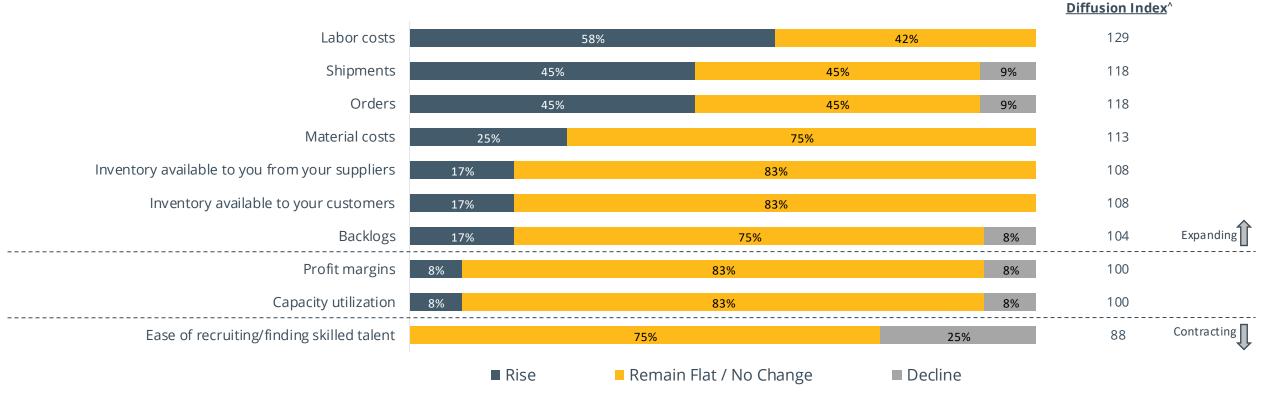
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Anticipated Direction of Key Business Indicators – Next Six Months -- Primary Region: APAC --



^A diffusion index is a statistical measure used to detect economic turning points.

Anticipated Direction of Key Business Indicators – Next Six Months -- Primary Region: Global --



^A diffusion index is a statistical measure used to detect economic turning points.

Orders, Shipments, Capacity Utilization, Backlogs, Profit Margins, Ease of Recruitment, and Supplier Inventory are Expected to Rise Over the Next Six Months

All other key business indicators are expected to remain relatively stable.

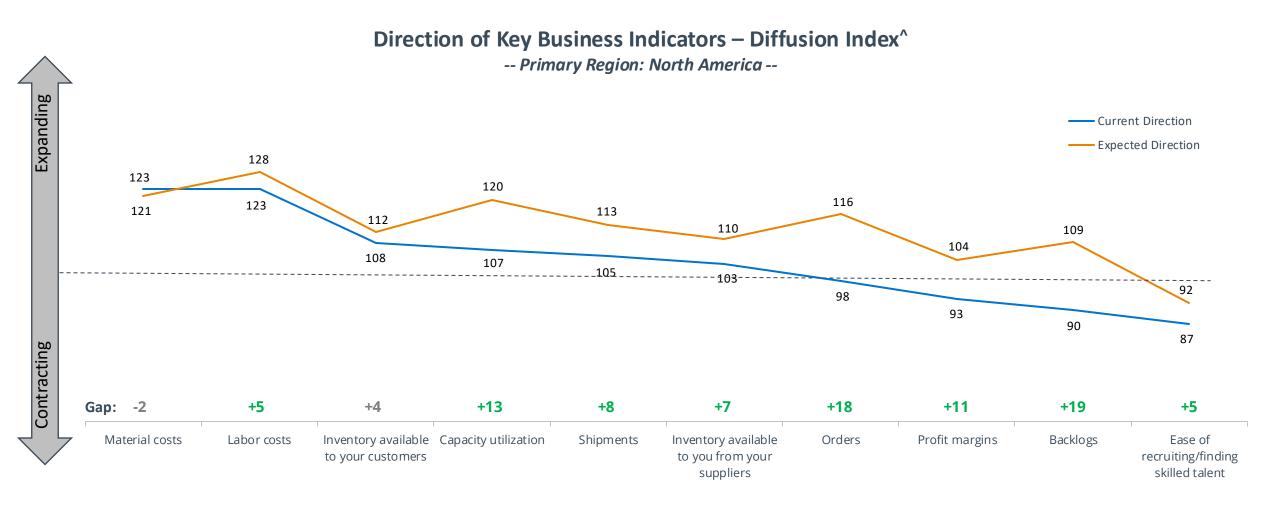


Direction of Key Business Indicators – Diffusion Index[^]



The View From Companies Primarily Operating in North America

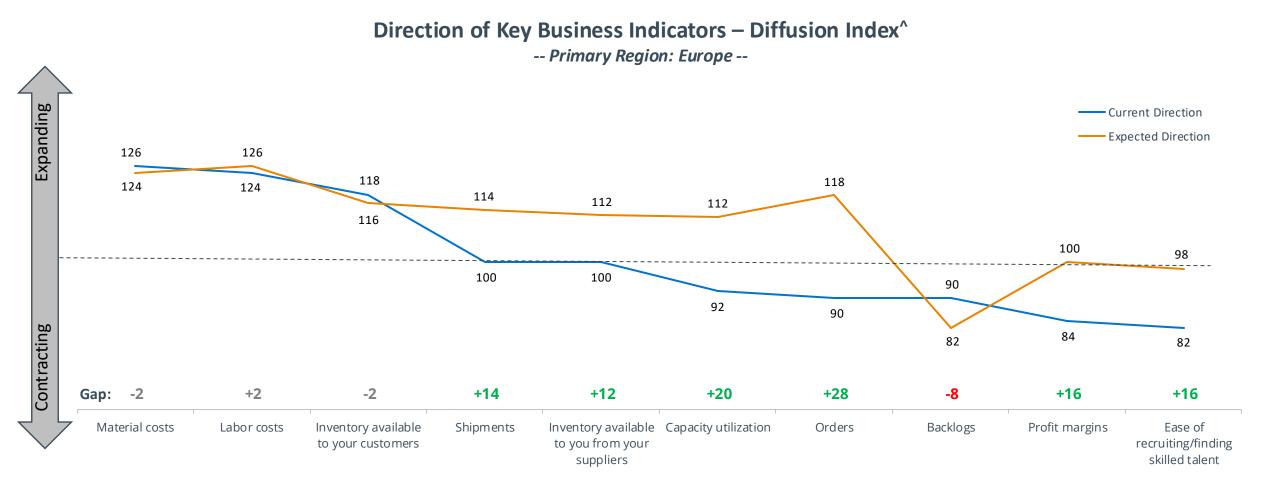




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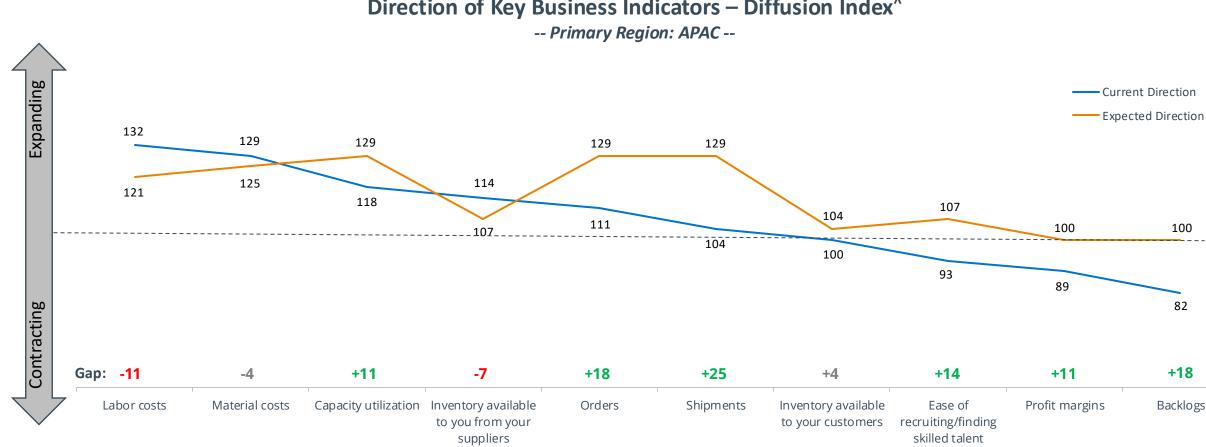
The View From Companies Primarily Operating in Europe





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The View From Companies Primarily Operating in APAC

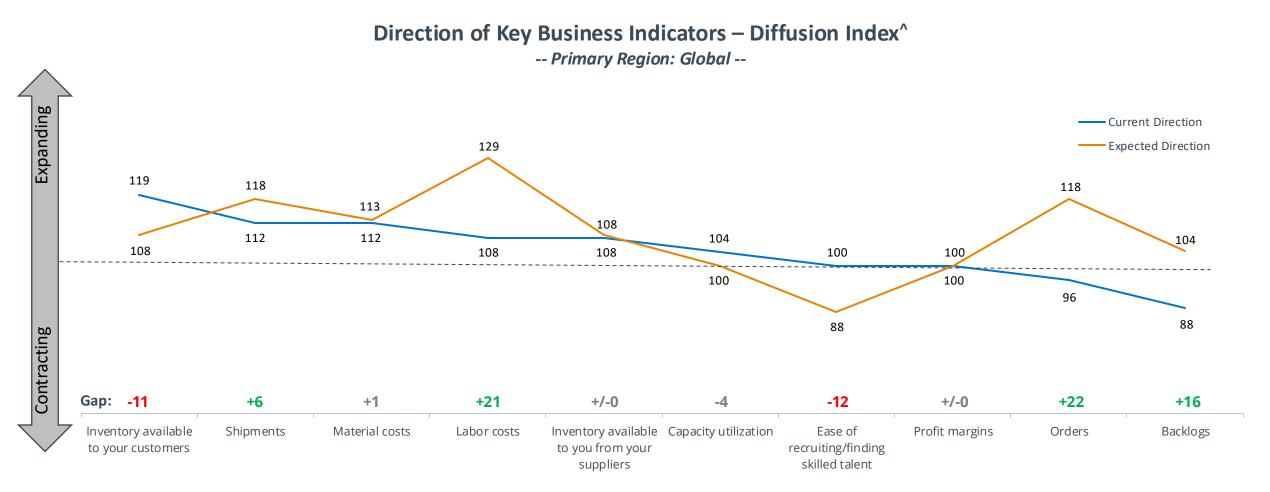


Direction of Key Business Indicators – Diffusion Index[^]

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The View From Companies Primarily Operating Globally





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November 2024 Special Questions

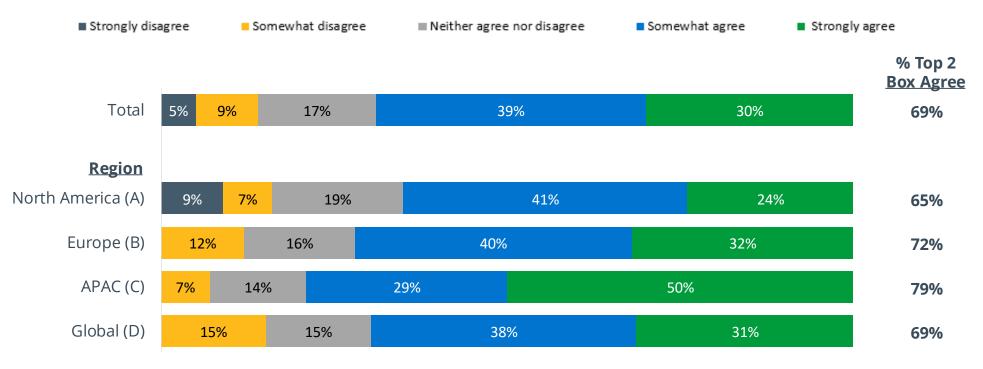
Seven in Ten (69%) Electronics Manufacturers Agree There Will be a Broad Need for Most of the Workforce to Have a Basic Understanding of AI Skills in the Future



While this sentiment is directionally higher among manufacturers in APAC (79%), the difference is not statistically significant.

Agreement With Statement:

There will be a broad need for most of our workforce to have at least basic understanding of AI skills in the future.

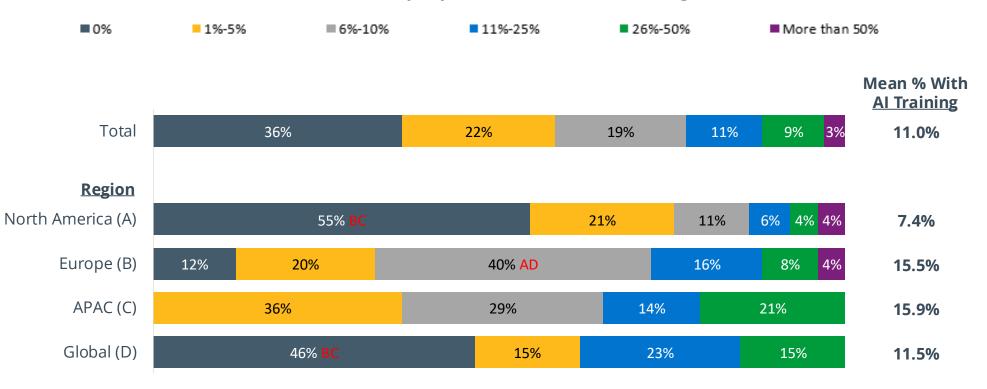


BUILD ELECTRONICS BETTER

Despite the Perceived Need for the Workforce to Have a Basic Understanding of AI Skills in the Future, on Average, Only One-Tenth (11%) of the Employee Base Has Been Trained



Notably, the proportion of electronics manufacturers reporting that zero percent of their employee base has received AI training is significantly higher among firms in North America (55%) and those that operate globally (46%) when compared to manufacturers in Europe (12%) and APAC (0%).



Percent of Employee Base With AI Training

Q: What percent of your employee base has had or been provided AI training?

A/B/C/D Statistically significant at 90% confidence interval

BUILD ELECTRONICS BETTER

Appendix

Current Conditions Diffusion Indices

Past 12 Month Comparisons (TOTAL)

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	November 2023	December 2023	January 2024	February 2024	March 2024	April 2024	May 2024	June 2024	July 2024	August 2024	September 2024	October 2024	November 2024
Shipments	107	105	110	105	113	112	107	106	105	108	95	102	105
Orders	105	101	102	105	113	111	106	104	102	105	95	96	99
Profit margins	94	95	96	95	96	97	89	90	95	95	89	84	92
Backlogs	96	94	94	94	98	101	99	97	93	96	93	91	89
Ease of recruiting/finding skilled talent	87	88	88	89	90	92	92	91	92	91	91	91	88
Material costs	118	119	119	118	121	117	121	127	122	121	120	115	124
Labor costs	130	128	128	133	130	126	129	127	125	124	129	124	124
Capacity utilization	106	106	106	104	109	108	107	99	99	104	100	99	105
Inventory available to you from your suppliers	112	111	116	113	108	116	112	112	103	108	107	108	105
Inventory available to your customers	107	110	118	110	113	114	115	111	108	108	110	109	111

 \triangle +5 points or more vs. previous month

 \triangle -5 points or more vs. previous month

Outlook Diffusion Indices

Past 12 Month Comparisons (TOTAL)



	November 2023	December 2023	January 2024	February 2024	March 2024	April 2024	May 2024	June 2024	July 2024	August 2024	September 2024	October 2024	November 2024
Shipments	116	116	117	123	124	121	122	116	115	119	113	114	117
Orders	114	116	120	121	127	122	125	117	117	119	114	114	118
Profit margins	102	100	105	103	106	101	101	100	96	100	96	97	102
Backlogs	104	97	97	102	106	104	101	97	98	106	100	95	100
Ease of recruiting/finding skilled talent	89	93	94	95	92	93	90	98	92	95	93	93	95
Material costs	116	116	116	116	119	119	118	122	120	119	114	114	122
Labor costs	132	130	129	129	127	128	124	122	121	125	119	123	127
Capacity utilization	114	114	117	116	124	117	117	115	113	113	114	113	117
Inventory available to you from your suppliers	112	114	116	113	111	110	112	110	106	107	107	109	110
Inventory available to your customers	111	115	117	114	114	115	112	110	106	113	110	112	111

 \triangle +5 points or more vs. previous month

 \triangle -5 points or more vs. previous month

Methodology

- > Each month, IPC surveys executives in the electronics manufacturing sector across the globe with the goal of assessing the current state of the industry.
- > The results contained herein are based upon the findings of IPC's The Current State of Electronics Manufacturing Survey, which was fielded between the dates of October 15 and October 31, 2024.





Questions? Please contact:

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