BUILD ELECTRONICS BETTER

The Current Sentiment of the Global Electronics Manufacturing Supply Chain

Monitoring the Pulse of the Global Electronics Industry

October 2023

ipc.org

Executive Summary

- **Industry sentiment was relatively unchanged last month**
  - There were no major trend shifts over the last month
- **Demand remains steady…for now**
  - The New Order Index slipped one point, falling to 100. This is the lowest level for this index since data collection began. The index remains out of negative territory, but a further decline could be imminent.
  - The Shipment Index declined two points but remains in positive territory
  - The Backlog Index inched up one point but remains depressed, suggesting future production will be more dependent on new orders
  - The Capacity Utilization Index slipped two points to 102.
- **Costs continue to improve**
  - Both the Material Costs Index and the Labor Costs Index fell two points this month. This is a new low for the material costs measure.
- **This month we asked a special question about the use of Artificial Intelligence (AI) in electronics manufacturing**
  - AI is expected to be most useful for predictive maintenance, inventory management, quality control, supply chain management, and office support/activities over the next 3 years
  - Fewer respondents believed AI would be useful for product development, lights-out facilities and sustainability

Current Conditions for the Electronics Supply Chain

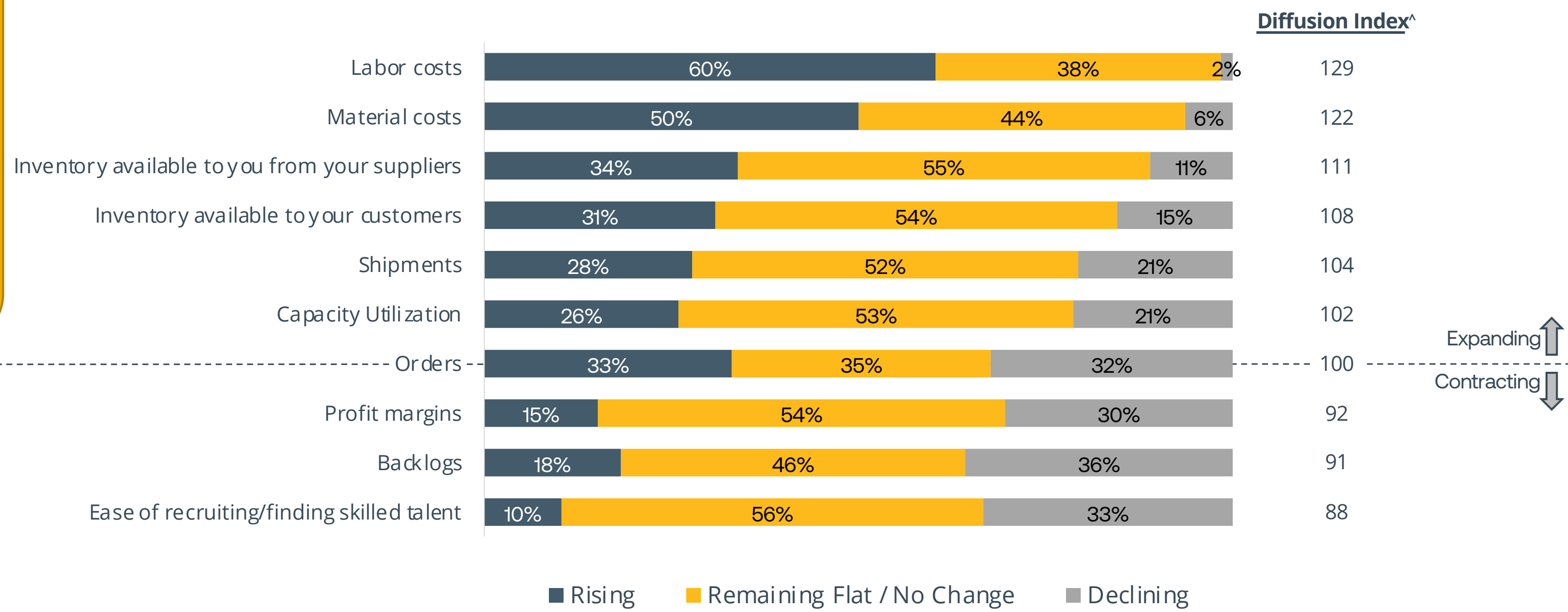
Notably, there are no significant differences in current conditions across all geographic regions.

Three-fifths (60%) of electronics manufacturers are currently experiencing rising labor costs, with half (50%) reporting rising material costs.

At the same time, ease of recruitment, backlogs, and profit margins are presently declining.

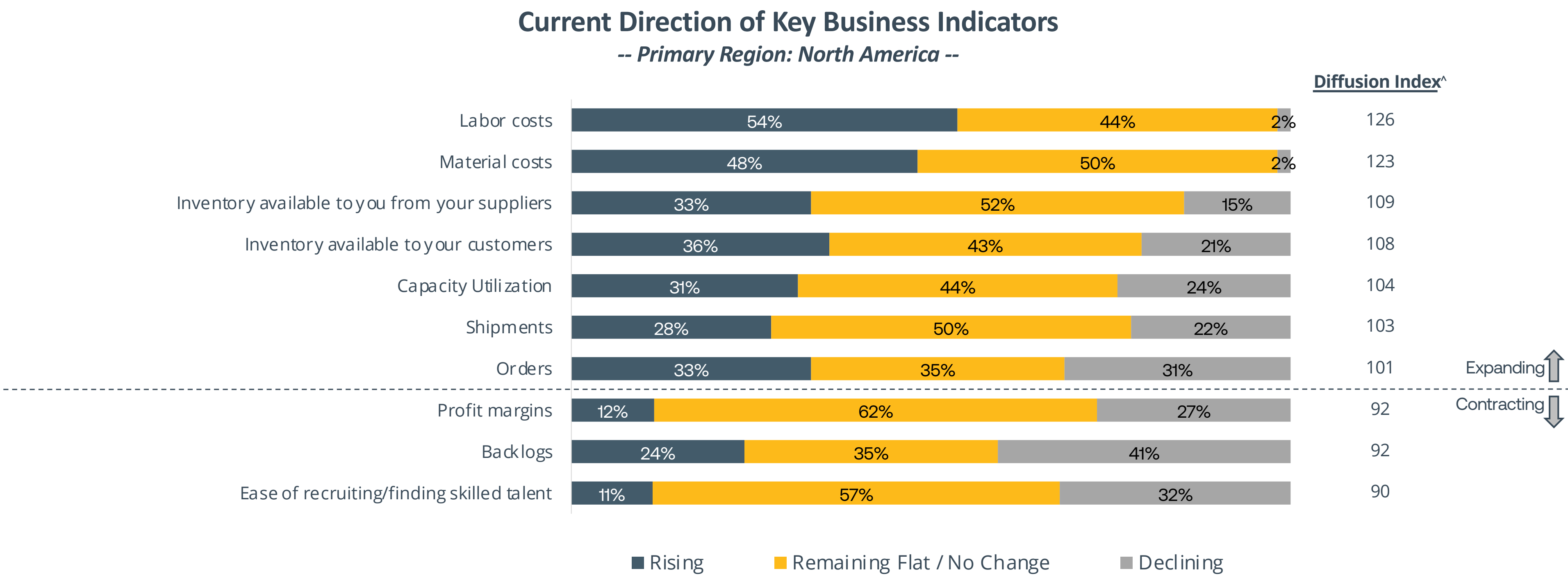
Current Direction of Key Business Indicators

-- Total --



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

The View From Companies Primarily Operating in North America



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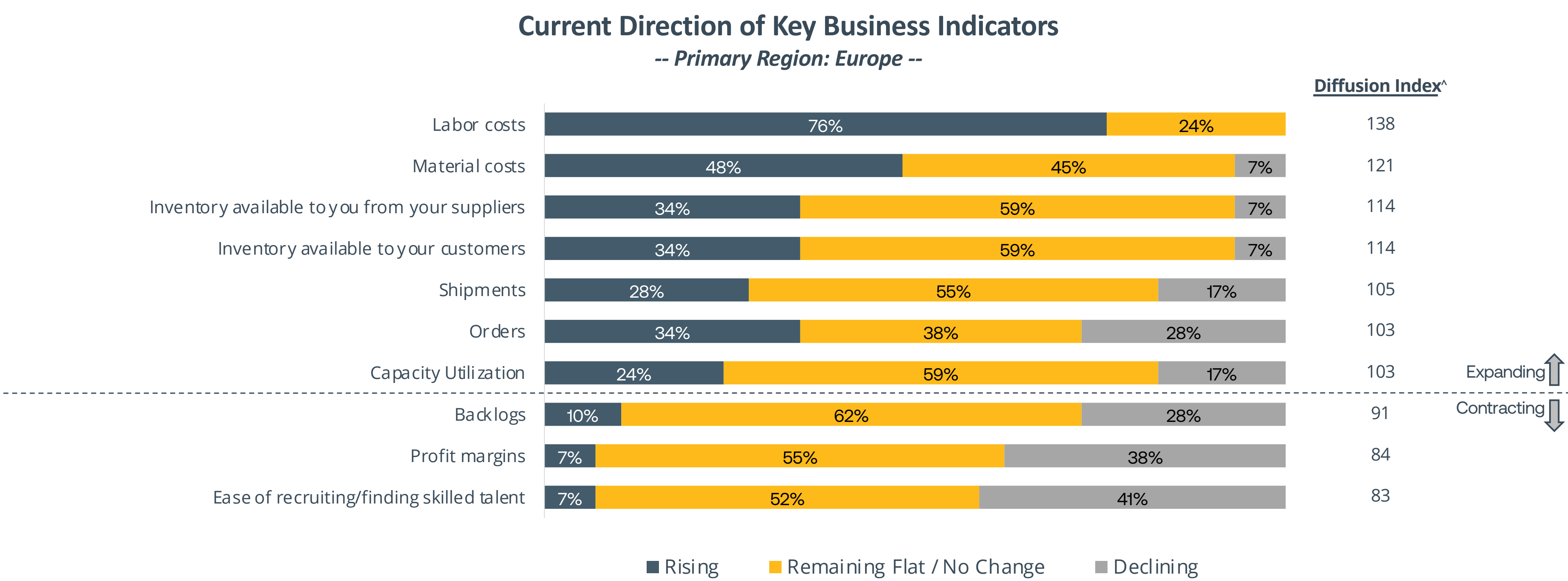
The View From Companies Primarily Operating in Europe



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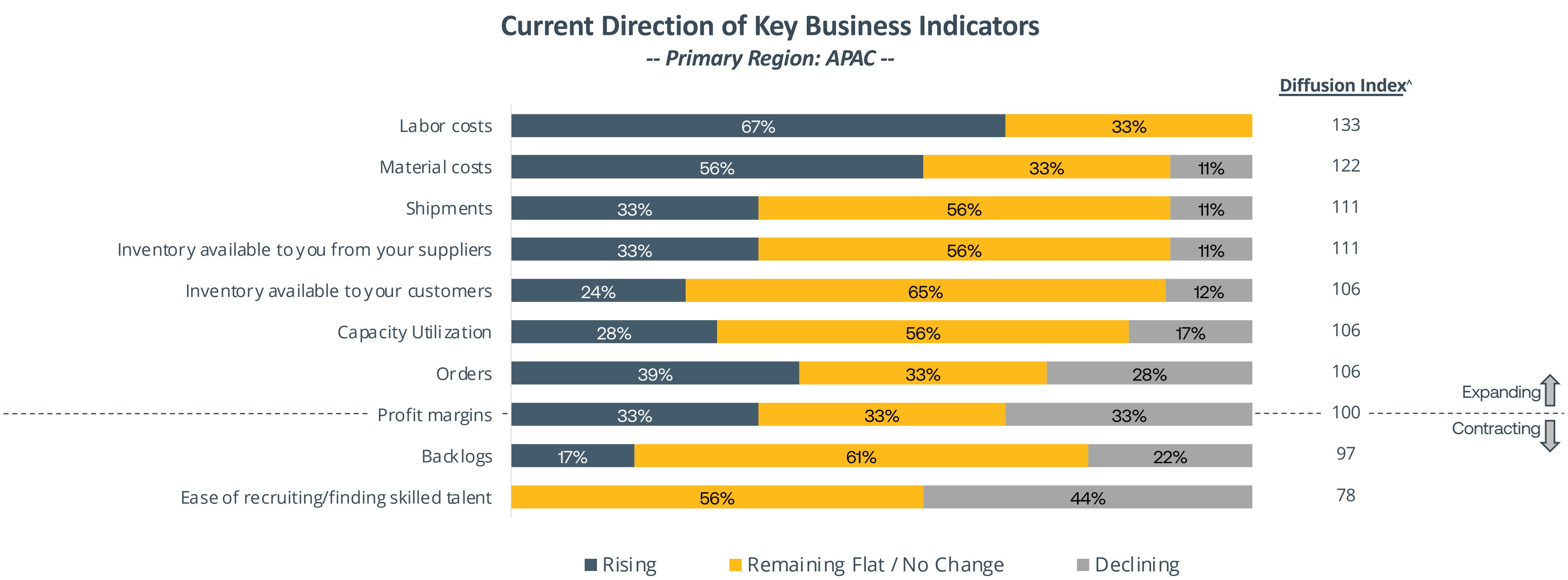
The View From Companies Primarily Operating in APAC



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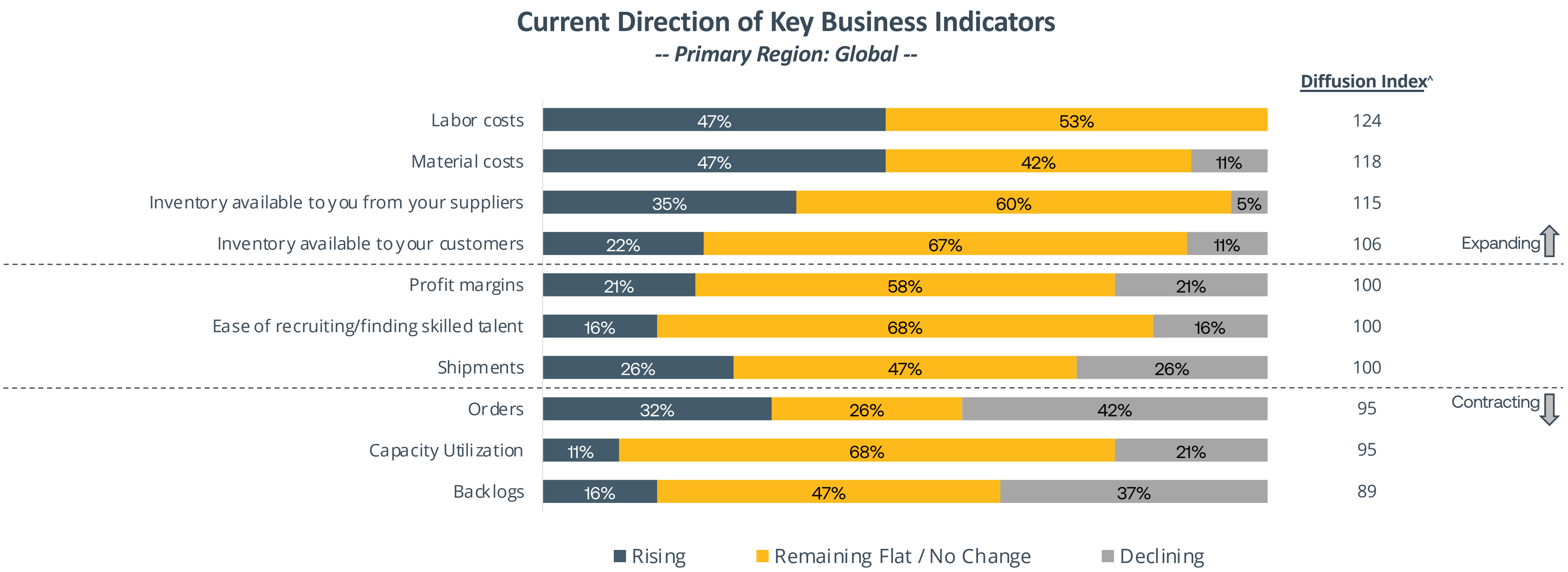
The View From Companies Primarily Operating Globally



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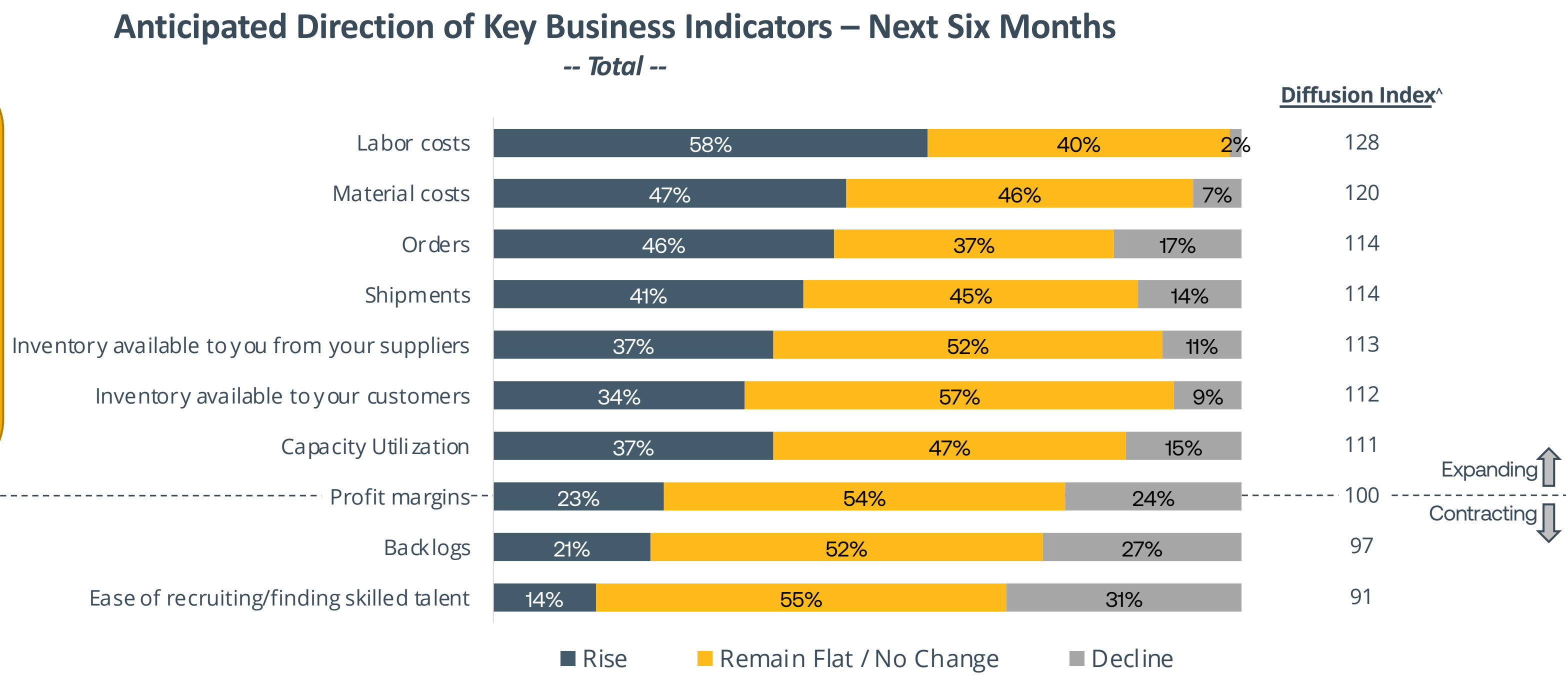
The Outlook for the Next 6 Months

Over the next six months, electronics manufacturers expect to see continued, albeit relatively stable, increase in both labor and material costs.

At the same time, while profit margins are expected to improve, backlogs and ease of recruitment are likely to remain challenging.



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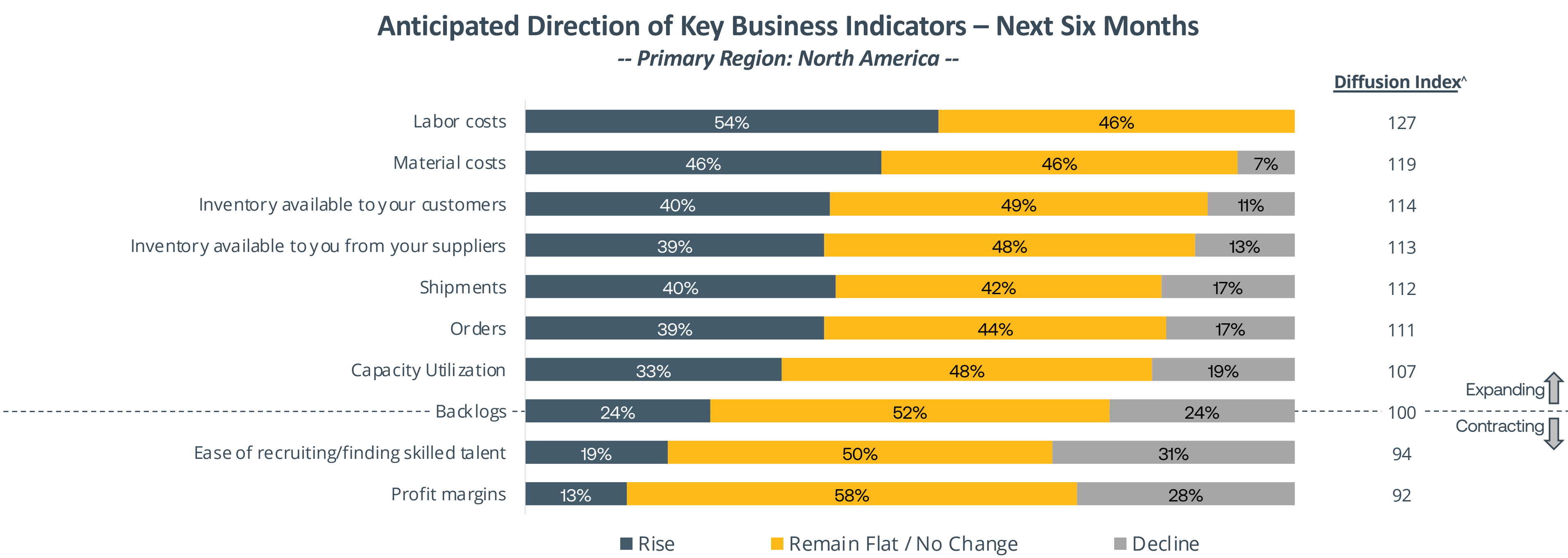
Regional Differences in the Outlook

- **Backlogs are expected to rise more so among firms primarily operating in APAC, North America, and Globally when compared to firms in Europe.**
  - Two-fifths (39%) of firms in APAC, along with a quarter of those in North America (24%) and those operating Globally (26%) are expecting backlogs to rise over the next six months, which compares to only 3% in Europe.

The View From Companies Primarily Operating in North America



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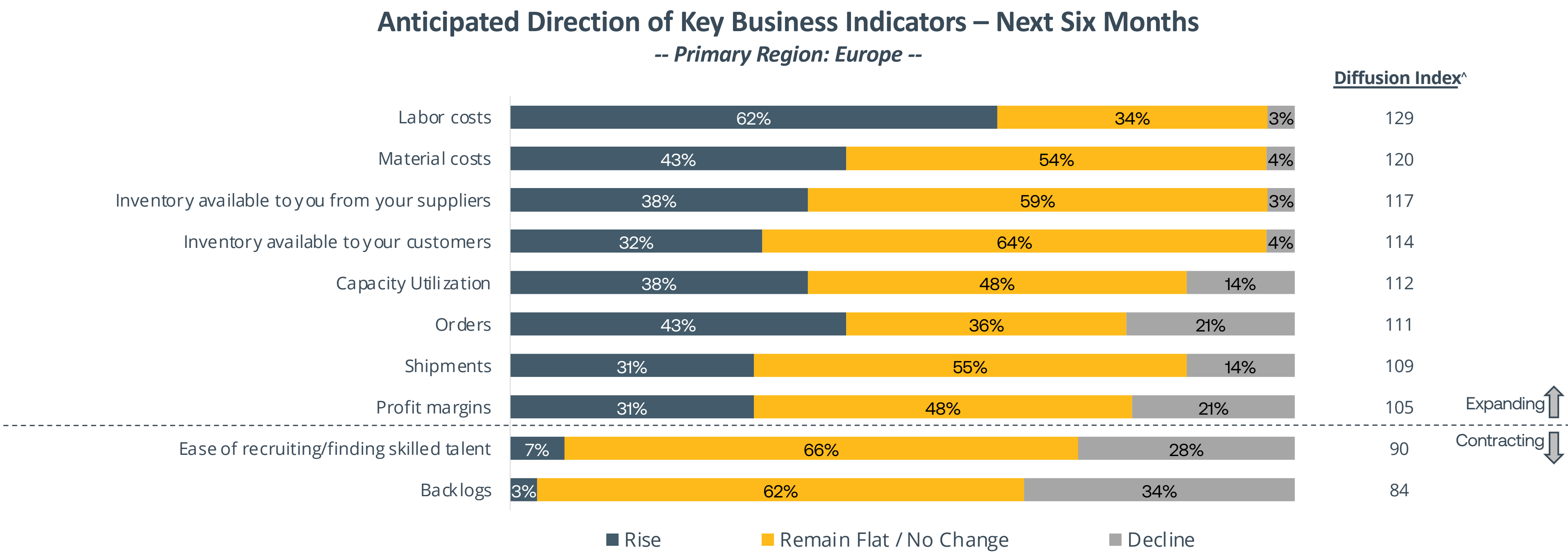
The View From Companies Primarily Operating in Europe



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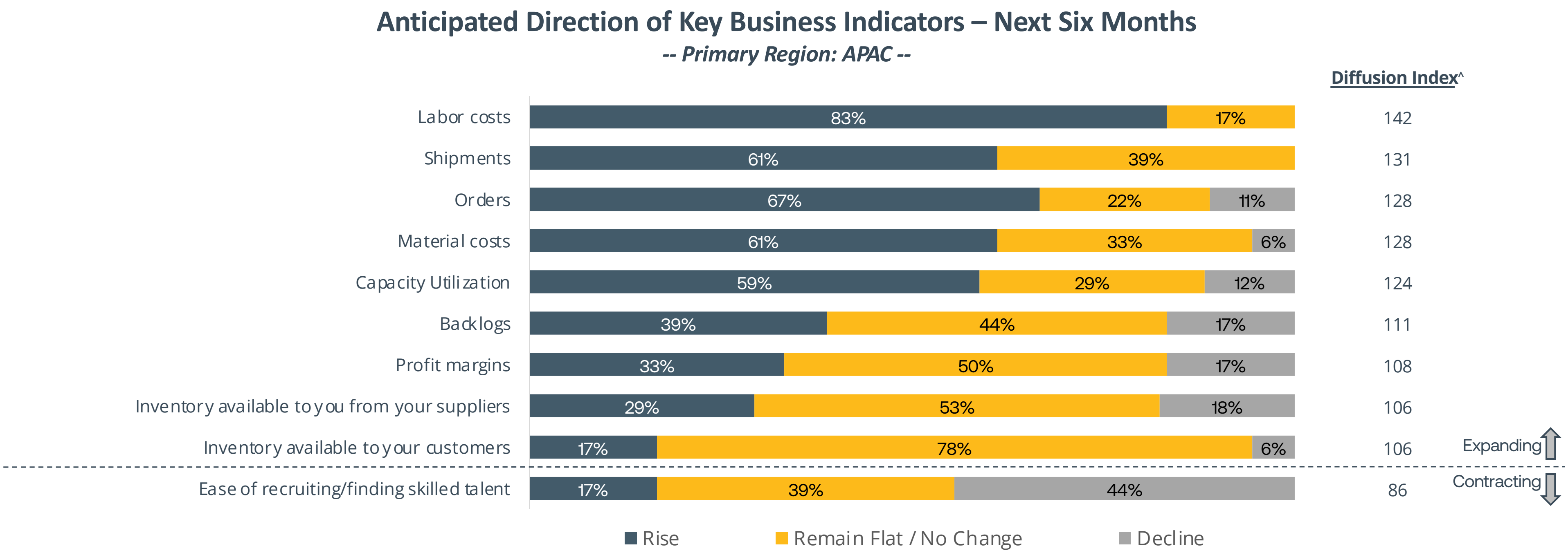
The View From Companies Primarily Operating in APAC



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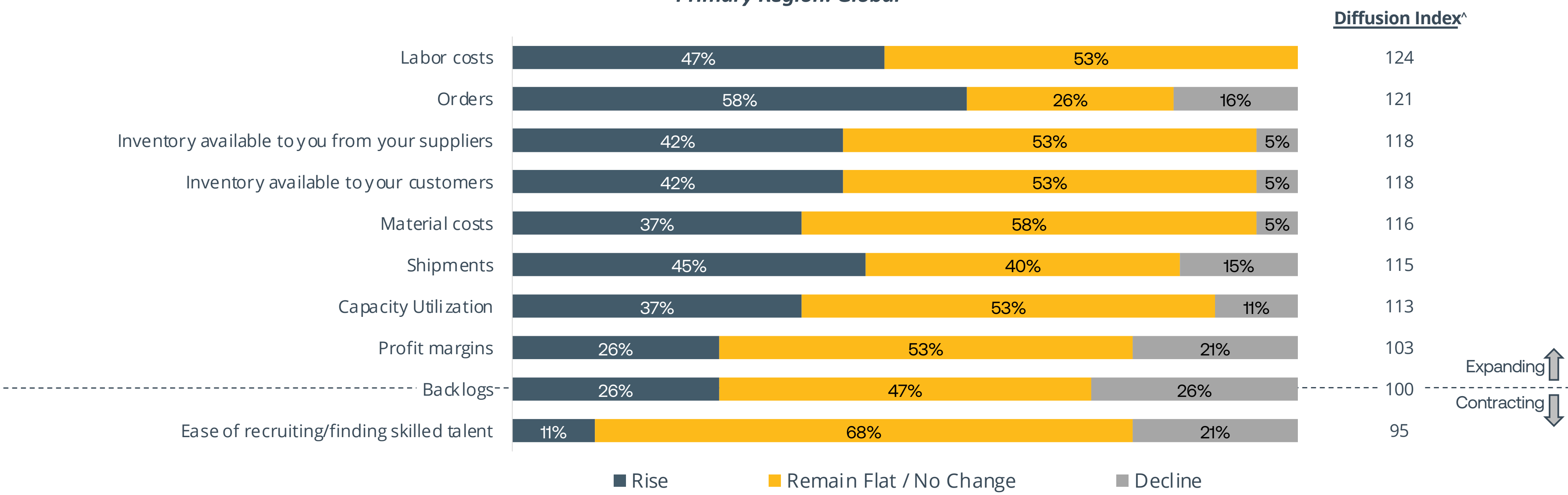
The View From Companies Primarily Operating Globally

Anticipated Direction of Key Business Indicators – Next Six Months

-- Primary Region: Global --



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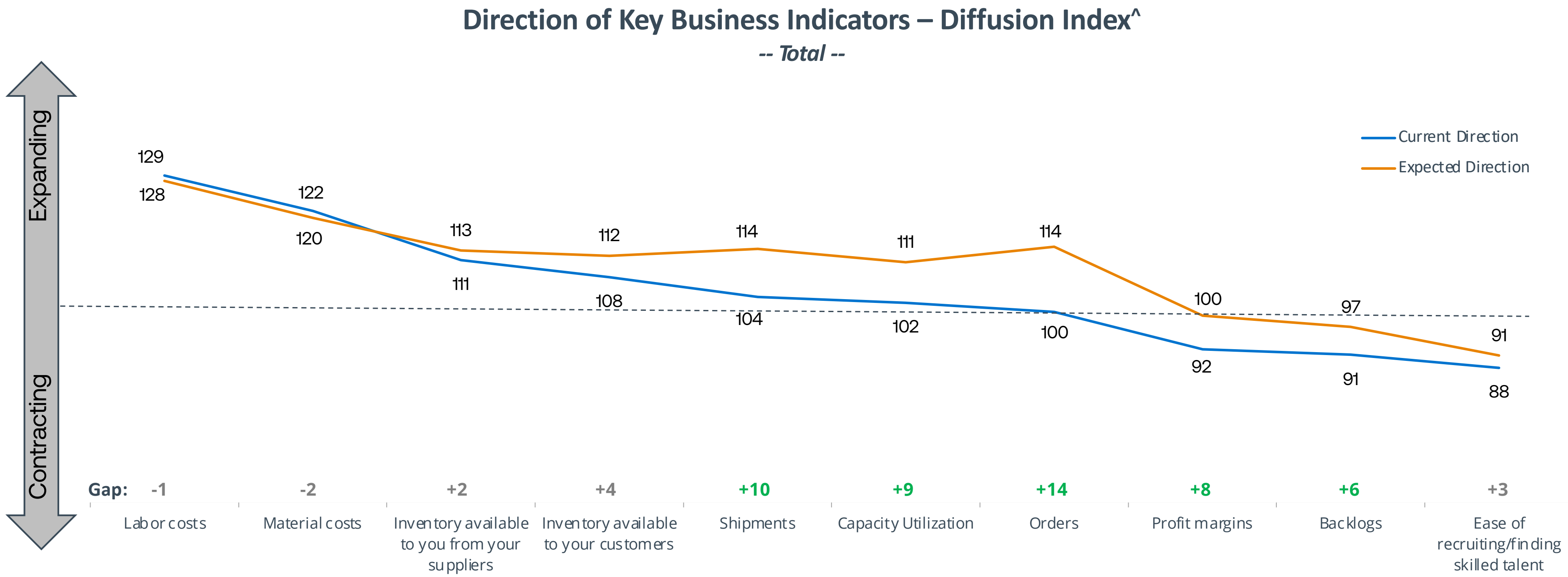
Orders, Shipments, Capacity Utilization, Profit Margins, and Backlogs are Expected to Rise Over the Next Six Months, While All Other Key Business Indicators are Expected to Remain Relatively Stable



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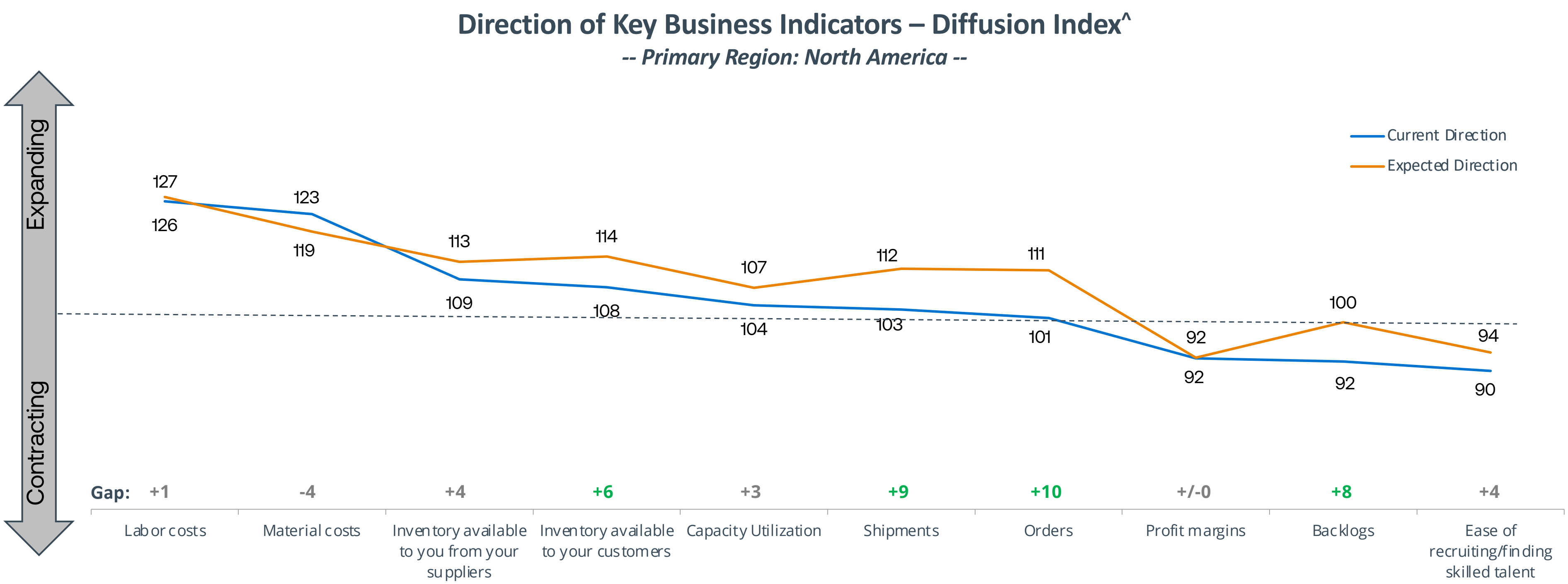
The View From Companies Primarily Operating in North America



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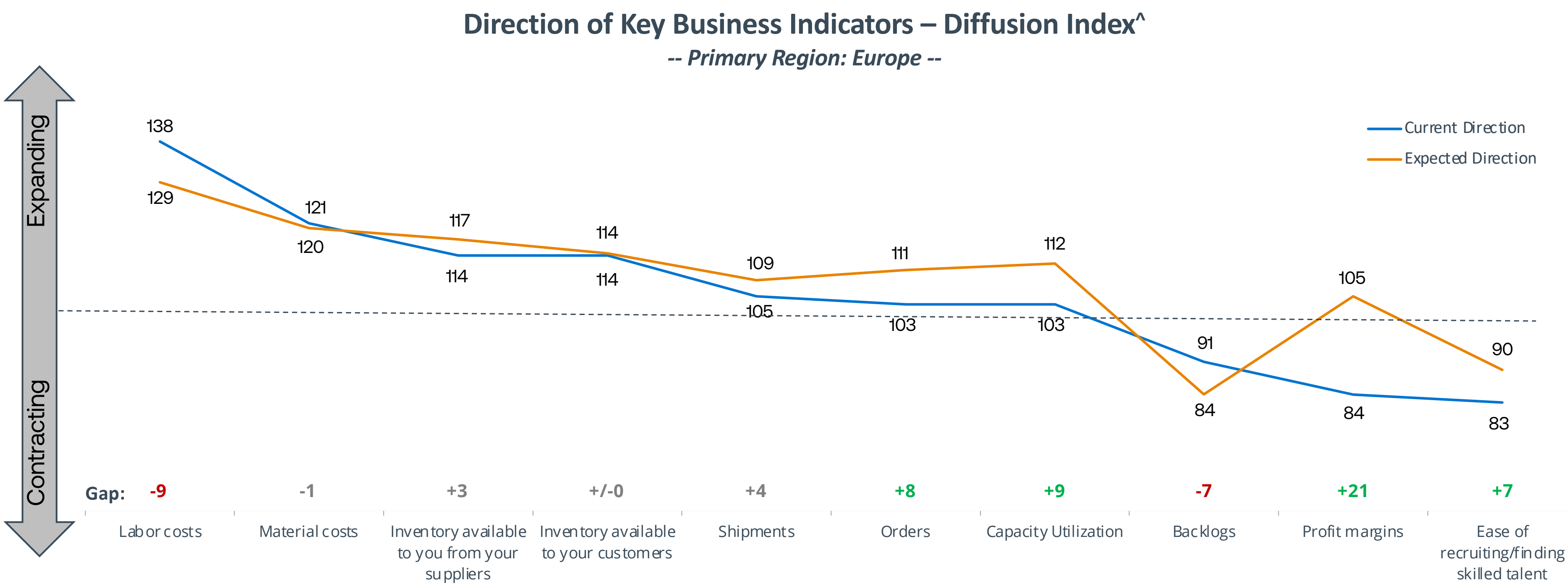
The View From Companies Primarily Operating in Europe



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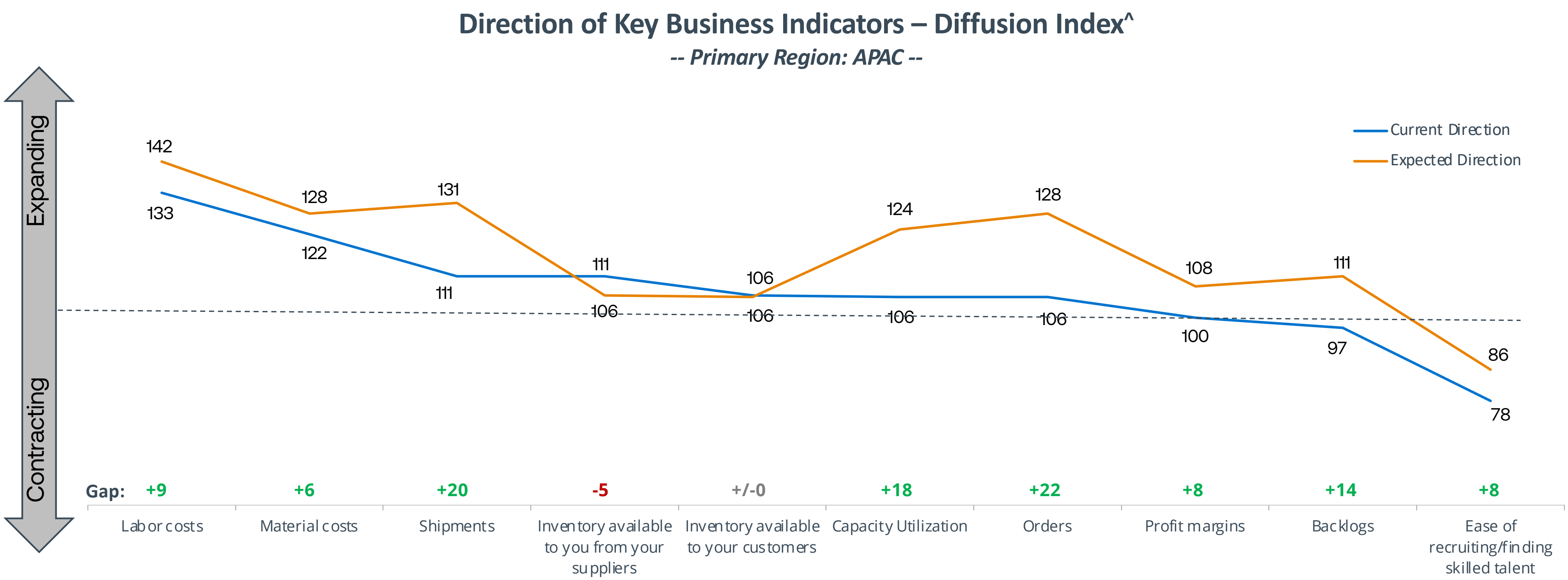
The View From Companies Primarily Operating in APAC



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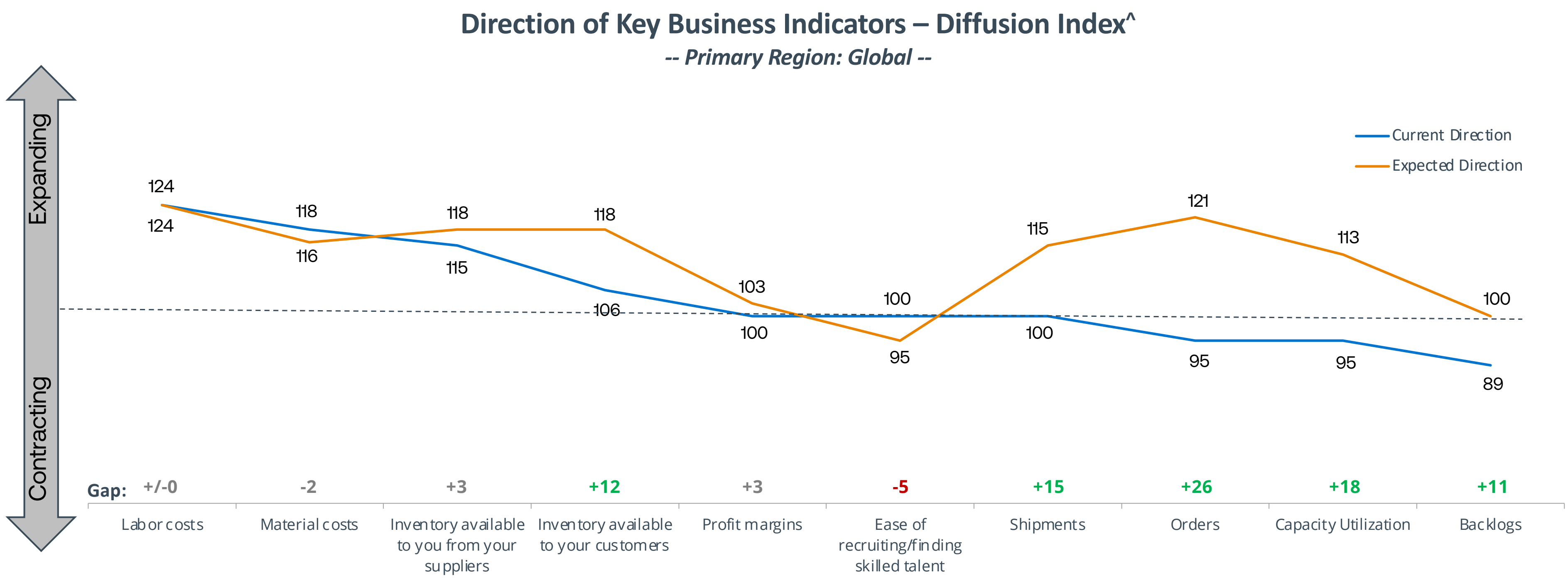
The View From Companies Primarily Operating Globally



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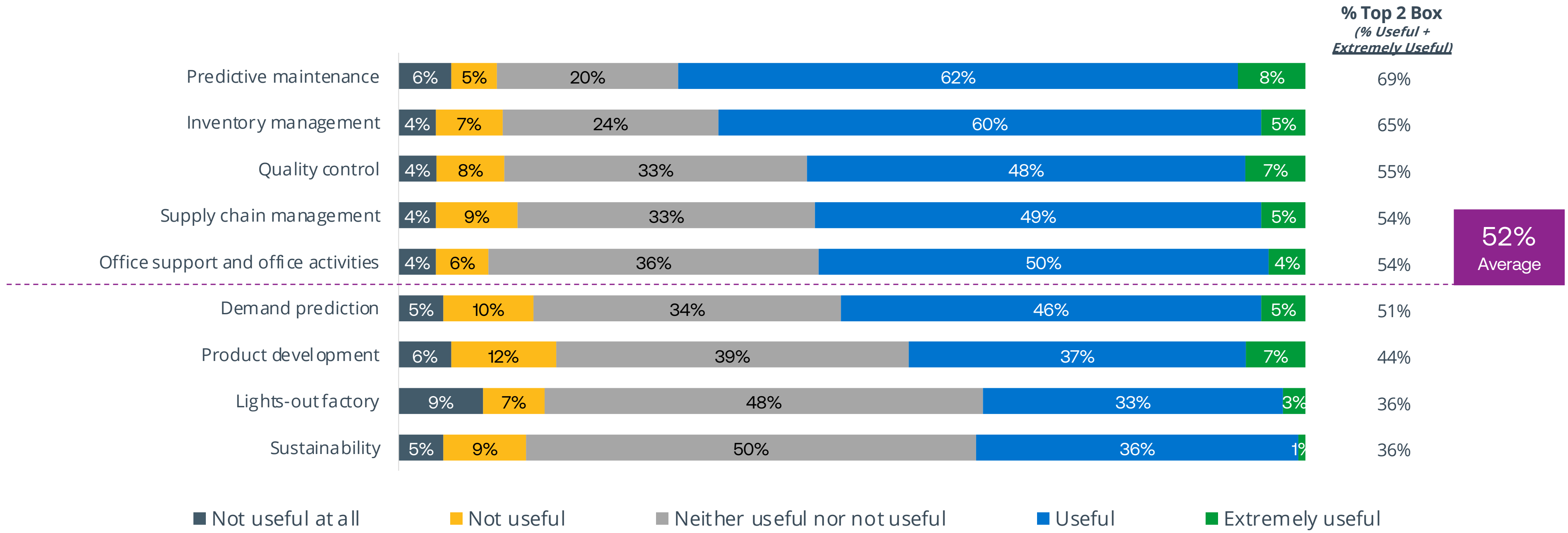
October 2023 Special Questions

Artificial Intelligence is Expected to be Most Useful for Predictive Maintenance, Inventory Management, Quality Control, Supply Chain Management, and Office Support/Activities Over the Next 3 Years

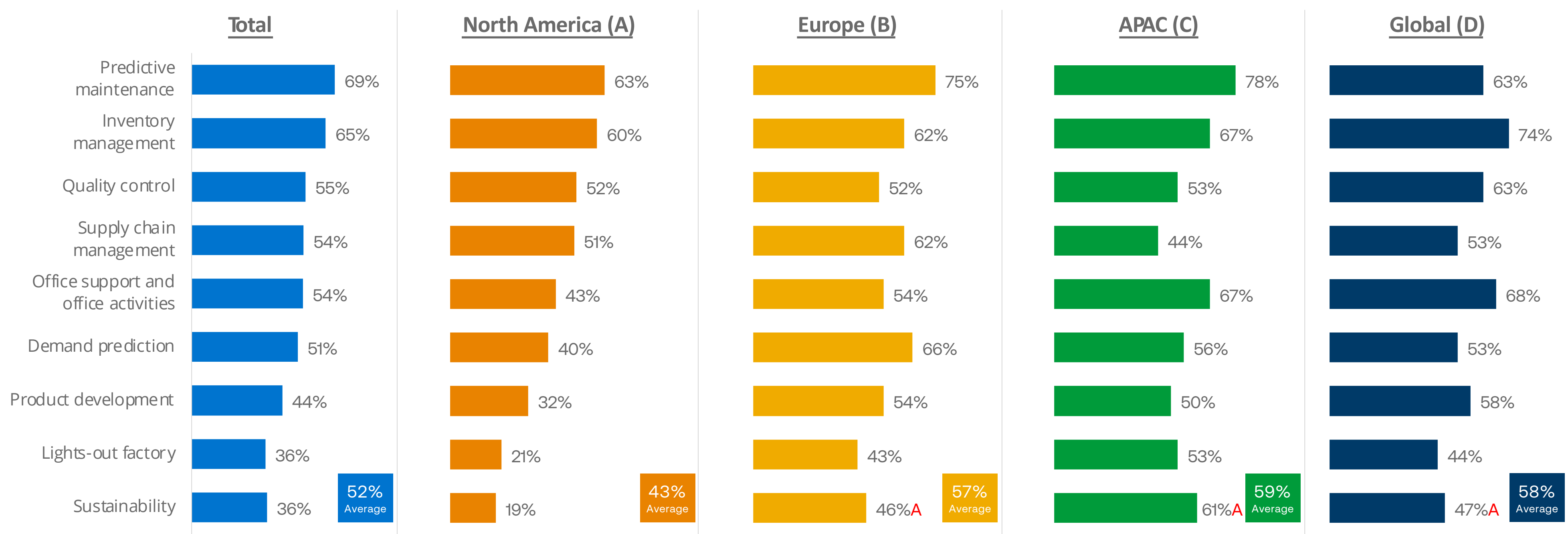
Usefulness of Artificial Intelligence to Operational Functions Over the Next Three Years



Firms Primarily Operating in Europe and APAC, Along With Those Operating Globally, Expect to Benefit More From Artificial Intelligence for Sustainability Efforts Than do Firms in North America

Usefulness of Artificial Intelligence to Operational Functions Over the Next Three Years by Region

% Top 2 Box (Extremely Useful + Useful)



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

Appendix

Current Conditions Diffusion Indices

Past 12 Month Comparisons (TOTAL)

	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	October 2023
Shipments	111	106	109	112	110	111	110	109	108	103	110	106	104
Orders	112	109	107	112	111	112	105	101	107	103	104	101	100
Profit margins	89	87	90	89	86	90	93	95	96	91	96	93	92
Backlogs	110	108	105	99	101	104	97	99	95	93	98	90	91
Ease of recruiting/finding skilled talent	84	84	88	87	84	91	89	92	90	92	92	89	88
Material costs	141	139	138	136	135	133	130	128	126	123	128	124	122
Labor costs	136	139	136	136	137	136	131	128	129	129	133	131	129
Capacity utilization	110	107	105	111	108	110	105	103	108	103	108	104	102
Inventory available to you from your suppliers	99	98	102	104	102	106	108	110	112	112	110	109	111
Inventory available to your customers	101	102	105	111	106	108	111	116	115	109	109	108	108

∆+5 points or more vs. previous month

∆-5 points or more vs. previous month

Outlook Diffusion Indices

Past 12 Month Comparisons (TOTAL)

	October 2022	November 2022	December 2022	January 2023	February 2023	March 2023	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	October 2023
Shipments	114	112	112	120	119	116	118	118	112	115	117	110	114
Orders	108	110	113	116	116	114	118	111	111	116	117	113	114
Profit margins	95	94	98	97	100	98	98	99	99	96	104	100	100
Backlogs	100	100	99	100	97	100	95	93	92	98	100	95	97
Ease of recruiting/finding skilled talent	86	90	93	95	95	93	95	95	93	95	95	91	91
Material costs	134	131	131	130	127	128	126	122	123	120	123	122	120
Labor costs	136	135	133	135	133	134	132	124	128	126	126	129	128
Capacity utilization	112	111	111	118	115	115	112	110	111	113	115	114	111
Inventory available to you from your suppliers	108	110	108	113	113	112	113	113	113	118	113	113	113
Inventory available to your customers	114	106	109	117	114	111	110	114	111	117	112	112	112

Δ+5 points or more vs. previous month

Δ-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 September 14 and September 29, 2023.

Questions? Please contact:

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