



BUILD ELECTRONICS BETTER

The Current Sentiment of the Wire Harness and Cable Assembly Industry

Monitoring the Pulse of the Global Electronics Industry

October 2023

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Executive Summary



> Demand remains very fragile

- The New Order Index rose 4 points, moving from contraction to a neutral level.
- The Shipment Index rose 3 points but remains in negative territory
- The Backlog Index inched slipped notably, falling from 83 to 77. This is a new low, suggesting future production will be very dependent on new orders
- The Capacity Utilization Index fell 8 points to 100.

> Costs improved significantly this month

- Both the Material Costs Index and the Labor Costs Index fell notably this month. The Material Costs Index dropped 15 points and the Labor Cost Index dropped 7 points. Both reached new lows.

> This month we asked a special question about the use of Artificial Intelligence (AI) in wire harness and cable manufacturing

- AI is expected to be most useful for predictive maintenance, product development, demand prediction, office support, and supply chain management over the next 3 years
- Fewer respondents believed AI would be useful for quality control, lights -out facilities and sustainability

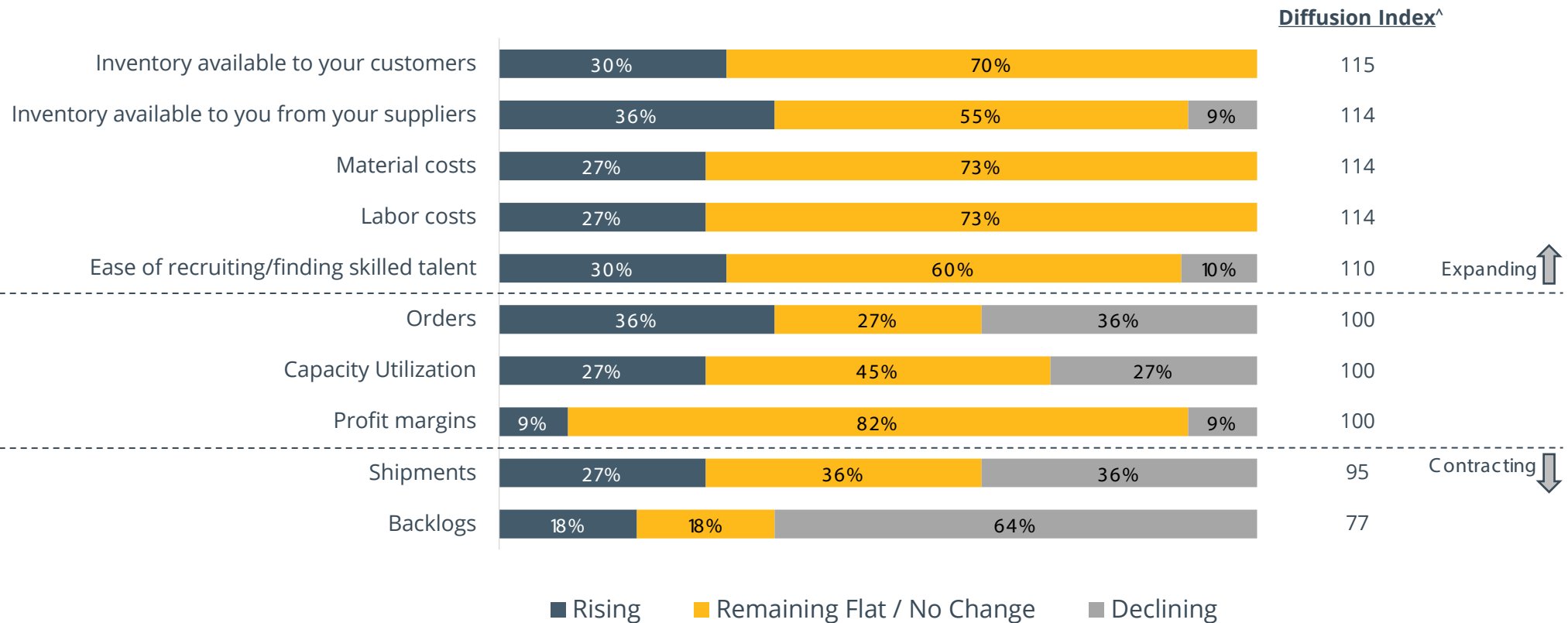
Current Supply Chain Conditions for Wire Harness and Cable Assembly Manufacturers



Current Direction of Key Business Indicators

Approximately a third of Wire Harness and Cable Assembly Manufacturers are currently experiencing rising customer (30%) and supplier (36%) inventories.

Concurrently, backlogs and shipments are presently declining.



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

Differences in Current Conditions by Industry Segment



- PCB Board Fabricators/Suppliers indicate labor costs are rising more so than for Wire Harness and Cable Assembly Manufacturers.
 - Nearly nine in ten (87%) PCB Board Fabricators/Suppliers are currently experiencing rising labor costs, which compares to a significantly lower 27% among Wire Harness and Cable Assembly Manufacturers, who instead are more likely to indicate labor costs are holding steady (73% vs. 13% among PCB Board Fabricators/Suppliers).

The Outlook for the Next 6 Months

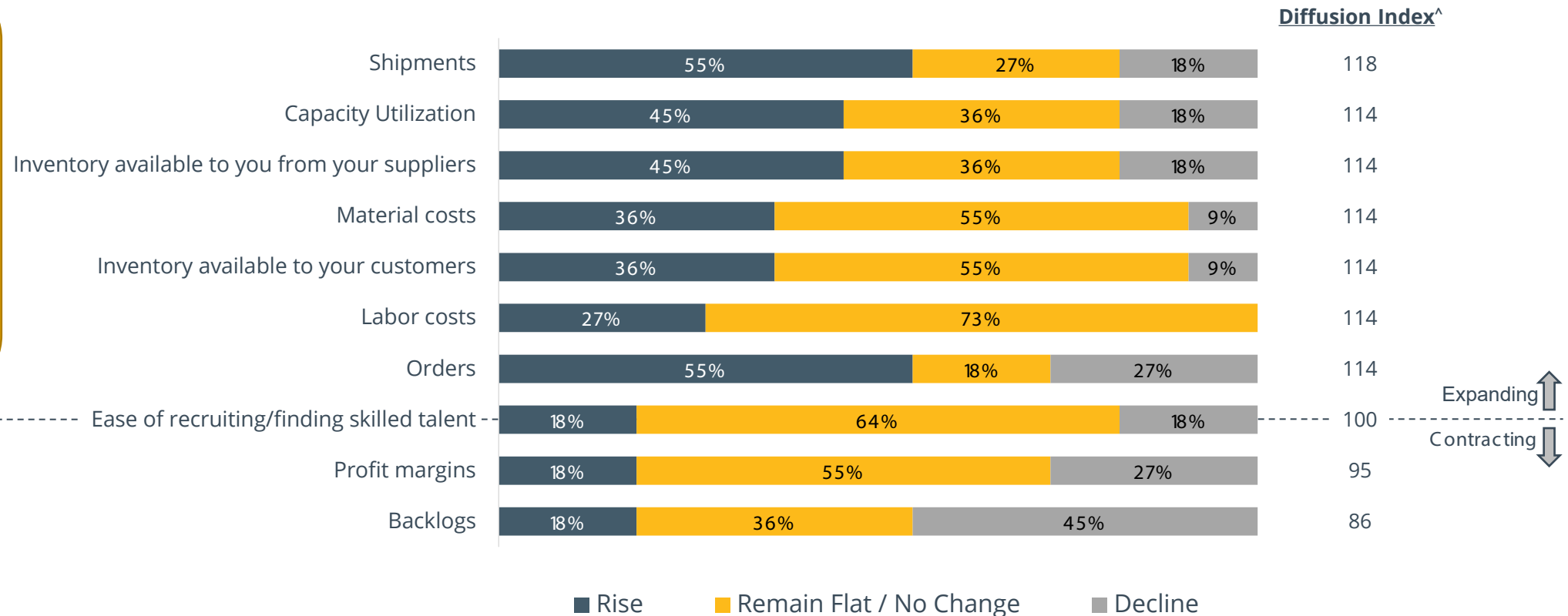


Notably, there are no significant differences in expected conditions between Wire Harness and Cable Assembly Manufacturers and all other industry segments.

Anticipated Direction of Key Business Indicators Next Six Months

As a result of increased inventories, Wire Harness and Cable Assembly Manufacturers expect to see considerable increases in both shipments and capacity utilization over the next six months.

At the same time, Wire Harness and Cable Assembly Manufacturers anticipate backlogs and profit margins to be challenging.



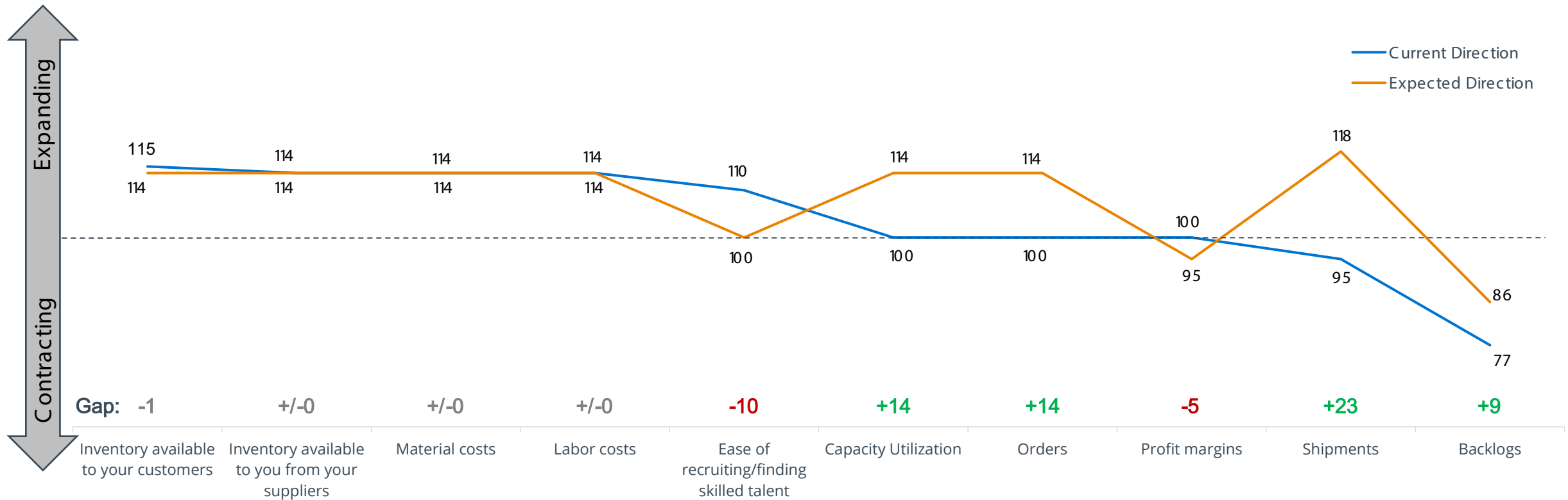
[^]A diffusion index is a statistical measure used to detect economic turning points.

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



At the same time, material costs, labor costs, and inventories, both customer and supplier, are expected to remain relatively stable.

Direction of Key Business Indicators Diffusion Index



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

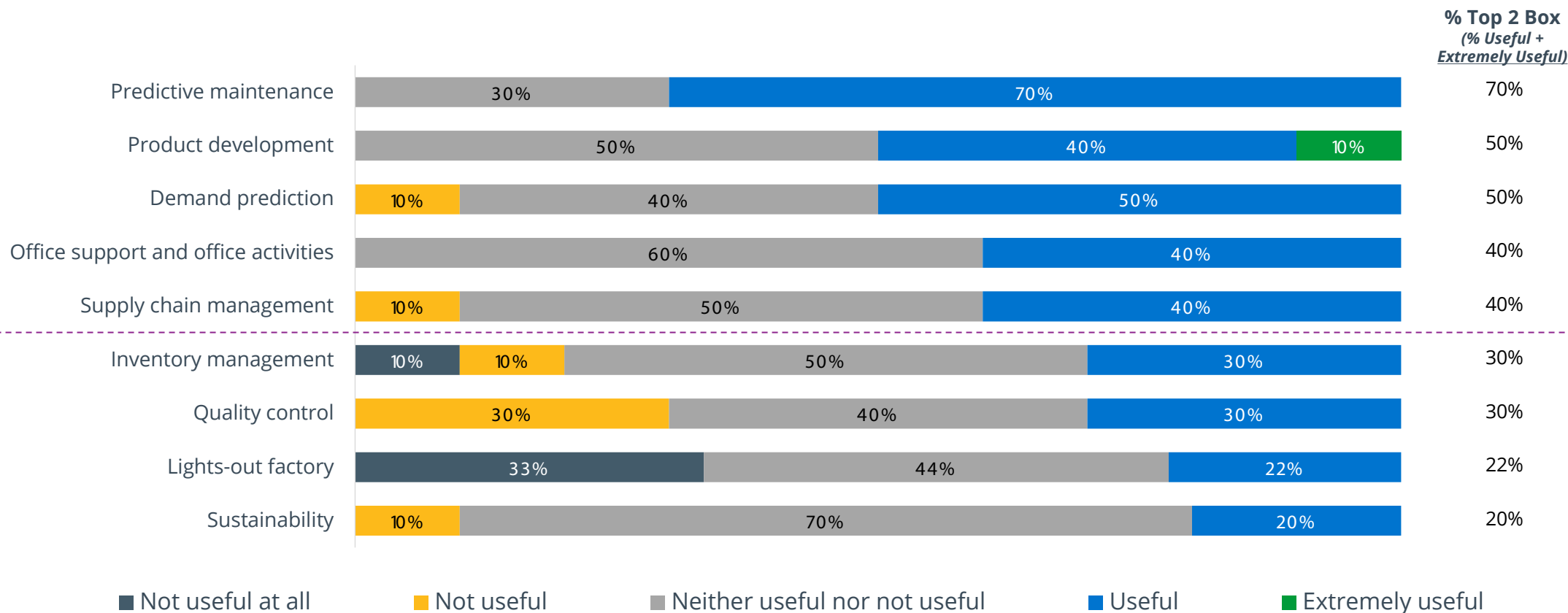
October 2023 Special Questions

Artificial Intelligence is Expected to be Most Useful to Predictive Maintenance, Product Development, Demand Prediction, Office Support/Activities, and Supply Chain Management Over the Next 3 Years



Notably, there are no significant differences in expected usefulness of AI in supporting operational functions between Wire Harness and Cable Assembly Manufacturers and all other industry segments.

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



Appendix

Current Conditions Diffusion Indices

Past 12 Month Comparisons



	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	116	111	128	114	117	111	108	103	108	98	103	92	95
Orders	120	113	113	113	106	108	105	83	111	93	105	96	100
Profit margins	100	103	97	102	96	94	97	106	106	89	108	96	100
Backlogs	115	108	113	96	98	105	83	97	89	100	92	83	77
Ease of recruiting/finding skilled talent	82	90	88	85	79	90	95	97	92	89	89	96	110
Material costs	143	148	140	139	138	140	134	125	131	132	129	129	114
Labor costs	143	134	135	133	135	139	129	122	125	130	132	121	114
Capacity utilization	110	113	118	111	102	108	103	106	111	100	111	108	100
Inventory available to you from your suppliers	107	92	113	113	108	116	111	111	100	105	116	112	114
Inventory available to your customers	112	105	108	107	113	115	121	103	117	93	111	113	115

Δ+5 points or more vs. previous month

-5 points or more vs. previous month

Outlook Diffusion Indices

Past 12 Month Comparisons



	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	125	116	115	124	119	116	111	125	109	111	116	114	118
Orders	123	111	124	117	120	113	111	106	106	110	124	123	114
Profit margins	108	106	108	102	110	98	100	114	100	98	100	100	95
Backlogs	101	105	105	109	106	102	95	106	92	102	108	109	86
Ease of recruiting/finding skilled talent	94	108	95	105	100	98	95	97	100	91	95	91	100
Material costs	137	137	135	124	119	129	124	121	125	125	126	127	114
Labor costs	137	132	130	133	131	128	134	121	125	125	126	132	114
Capacity utilization	115	116	123	126	115	113	113	106	114	109	121	118	114
Inventory available to you from your suppliers	113	116	110	113	121	116	116	117	108	114	119	114	114
Inventory available to your customers	126	108	113	124	131	113	113	112	114	114	116	127	114

Δ+5 points or more vs. previous month

-5 points or more vs. previous month

- > 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:

Shawn DuBravac,
IPC Chief Economist

ShawnDuBravac@ipc.org