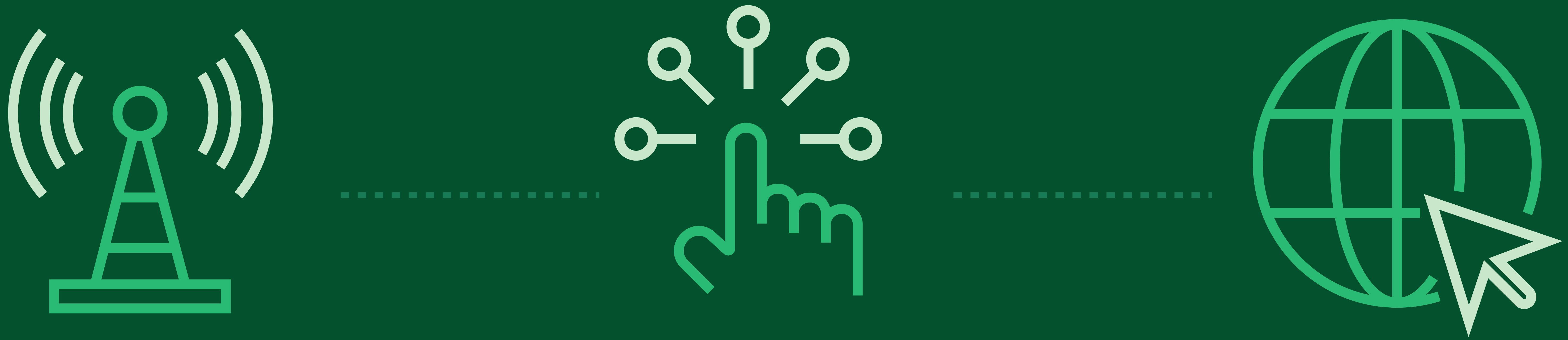
TECHNOLOGY HARDWARE

The Rates of Success, Goals, and Future Priorities of Digital Transformations, by Sector



The key findings for hardware devices, components, and semiconductor companies

More than half of technology hardware companies have executed a winning digital transformation that met their transformation objectives and created sustainable change—a figure 50% higher than the cross-industry average of 35%.

Hardware companies outscore other industries on individual success factors, especially leadership and strategy, but they struggle on agile governance, indicating that agile at scale remains a heavy lift for physical goods companies.

Hardware companies emphasize customer experience less than companies in other industries, instead making their top priorities growth and business model innovation and sales and marketing acceleration.

Successful digital players are prioritizing areas that are good fits with AI solutions, such as automated lead generation, dynamic pricing, predictive maintenance, and demand forecasting.

ESG considerations—especially energy consumption reduction, data privacy, and cyber resilience—are becoming more important in the digital agenda.

Source: BCG analysis.

The data in more depth

Rates of success in digital transformation

Topics of focus for hardware (devices and components)

Top priorities for the future

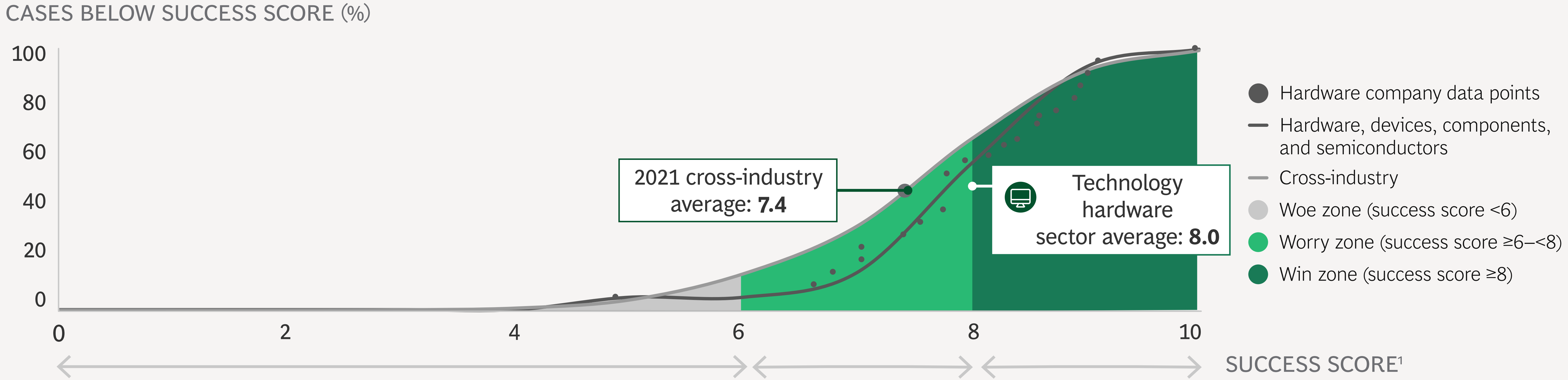
The critical human and tech enablers

The role of ESG in digital transformation

Source: BCG analysis.

RATES OF SUCCESS

Half of hardware companies reach the win zone, which is 1.5 times the cross-industry average



2021 BCG Global Digital Transformation Survey overall	**13%**	**52%**	**35%**	
Hardware, devices, components, and semiconductor sector	**5%** Limited value created (<50% of target); no sustainable change	**43%** Value created but total targets not met; limited long-term change	**52%** Target value met or exceeded; sustainable change created	**1.5x cross-industry average**

Source: 2021 BCG Global Digital Transformation Survey.
Note: Survey question: "Across the following dimensions, please rate your organization's digital transformation experience to date on a scale of 1 to 10, using the guidelines in the table below."
[1]Success score is calculated from respondents' answers on six dimensions of transformation: strategy; leadership; talent; agility; monitoring; and tech and data.

RATES OF SUCCESS

Hardware companies clear the bar on integrated strategy and leadership commitment; they struggle most with employing an agile governance mindset

DISTRIBUTION OF SUCCESS SCORES ON INDIVIDUAL KEY FACTORS[1]

Source: 2021 BCG Global Digital Transformation Survey.

Note: Survey question: "Across the following dimensions, please rate your organization's digital transformation experience to date on a scale of 1 to 10 using the guidelines in the table below."

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TOPICS OF FOCUS

Transformation priorities for hardware companies include growth and business model innovation and customer-oriented topics

Strategic objectives

SHARE OF RESPONDENTS (%)

Scope of digital transformation[1]

SHARE OF RESPONDENTS (%)		CROSS-INDUSTRY AVERAGE (%)
Growth and business model innovation	79	72
Sales and market acceleration	74	71
Customer experience and journeys	68	81
Marketing and dynamic pricing	66	41
Digital manufacturing and operations	66	50
Digital procurement	63	54
Building resilience via cybersecurity and compliance	61	54
Supply chain	61	48
Digital ecosystem and partnerships	55	65
Digitizing support functions	55	45
New business venture	42	45

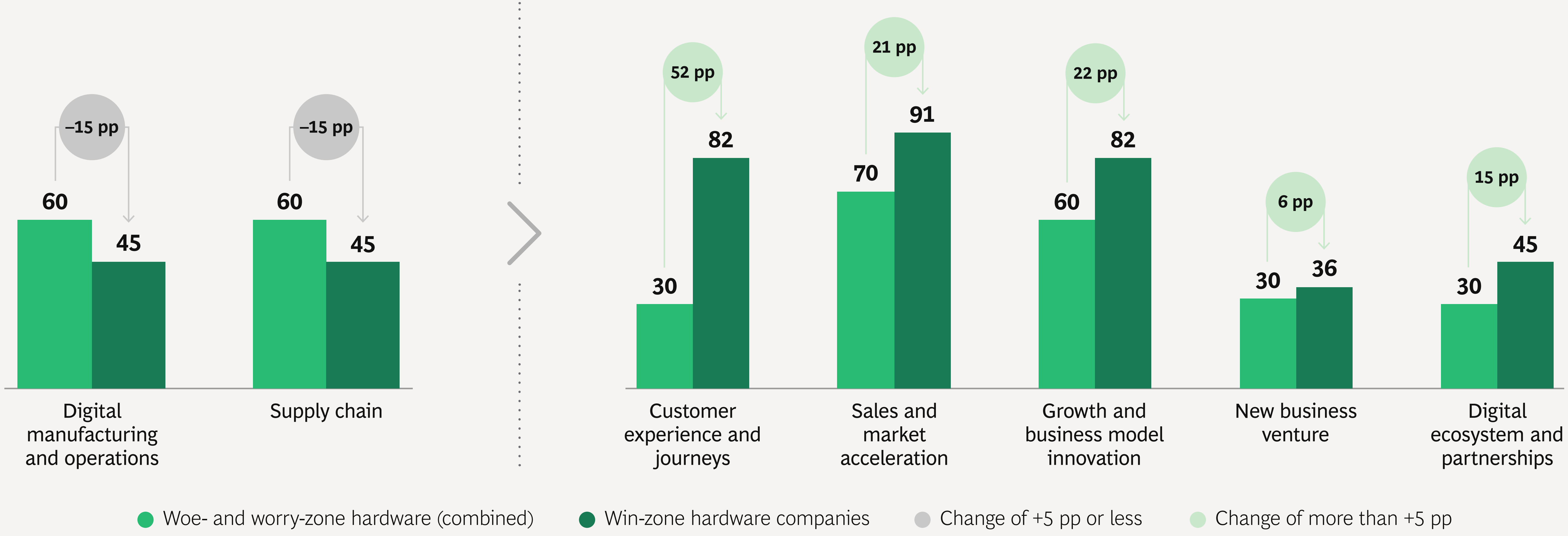
Source: 2021 BCG Global Digital Transformation Survey.
Note: Because of rounding, the percentages given for the strategic objectives do not add up to 100%.
[1]Respondents were asked to select all priorities that applied.

TOPICS OF FOCUS

Win-zone hardware companies are shifting their focus from core operations to sales and marketing and innovation-oriented business outcomes

Scope of digital transformation

SHARE OF RESPONDENTS (%)

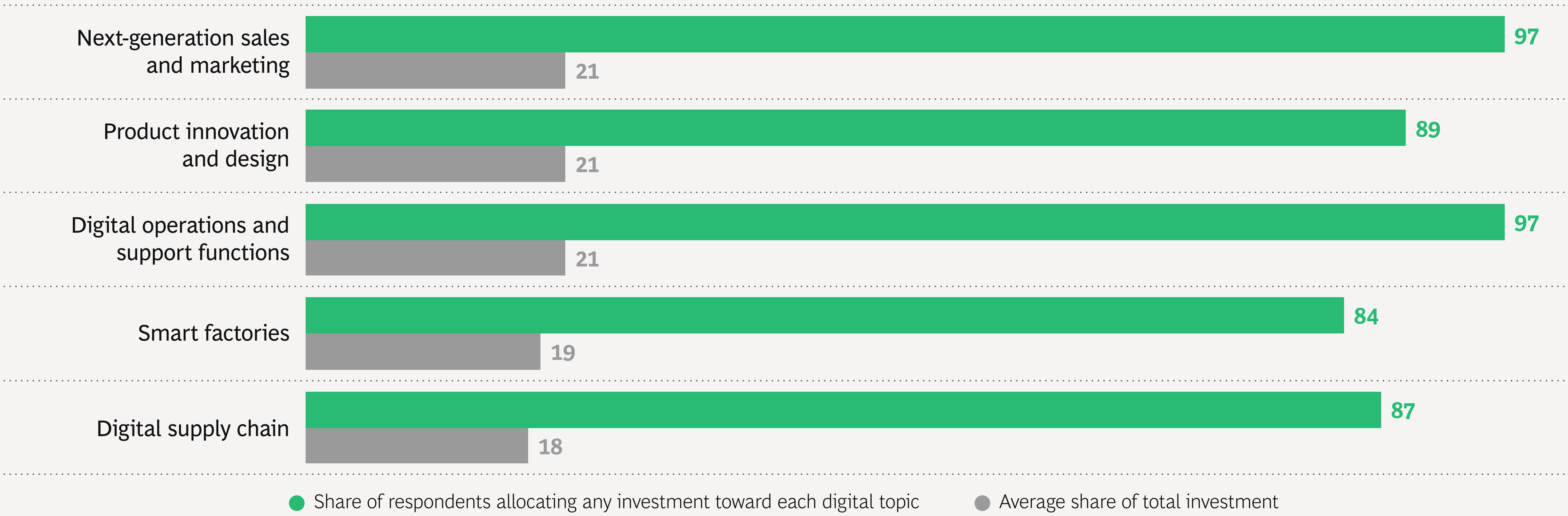


Source: 2021 BCG Global Digital Transformation Survey.
Note: Survey question: “From the list of most common digital outcome areas and enablers in digital transformation, please help us identify the scope of your digital transformation (select all that apply).”

TOP PRIORITIES FOR THE FUTURE

Nearly all hardware companies intend to invest about 40% of their investments toward next-generation sales and marketing and digital operations and support functions

PLANNED SHARE OF WALLET SPENDING ALLOCATED ACROSS DIGITAL TOPICS IN THE NEXT TWO TO THREE YEARS (%)[1]



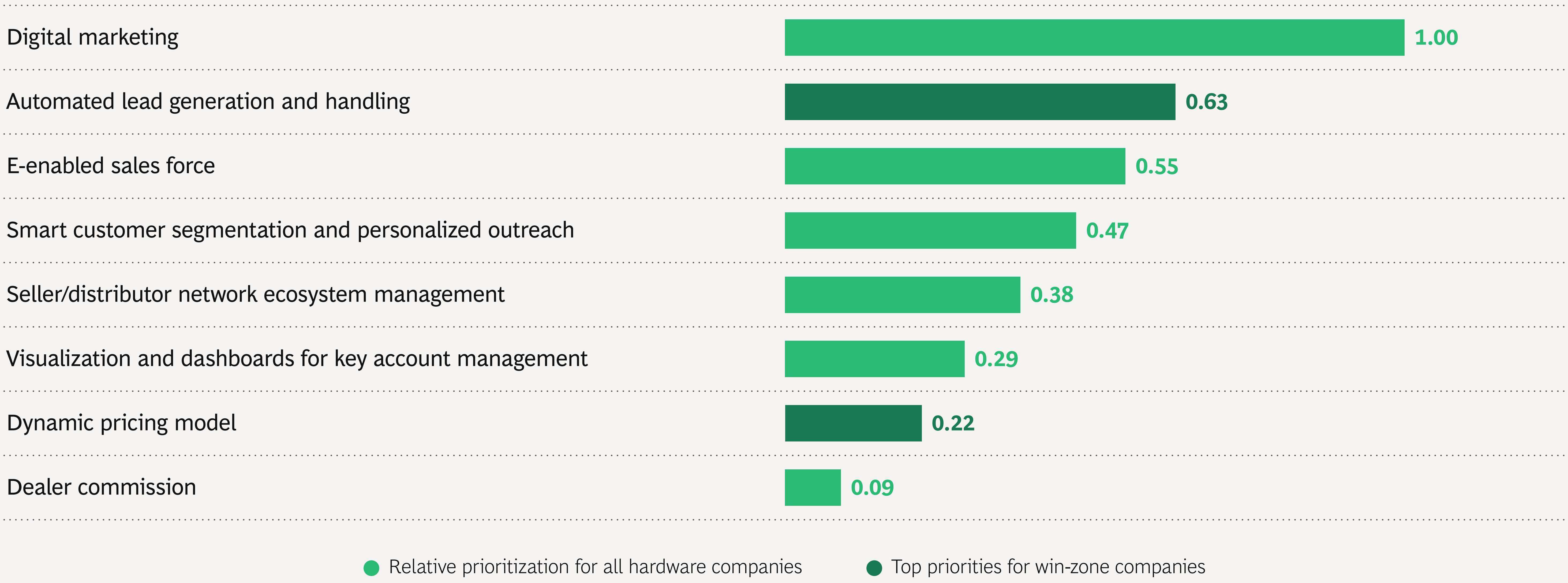
Source: 2021 BCG Global Digital Transformation Survey.

[1]For example, the uppermost pair of bars can be read as "97% of hardware répondent plan to invest in next-generation sales and marketing, allocating an average 21% of total digital investment."

TOP PRIORITIES FOR THE FUTURE

Hardware companies’ digital priorities: Next-generation sales and marketing

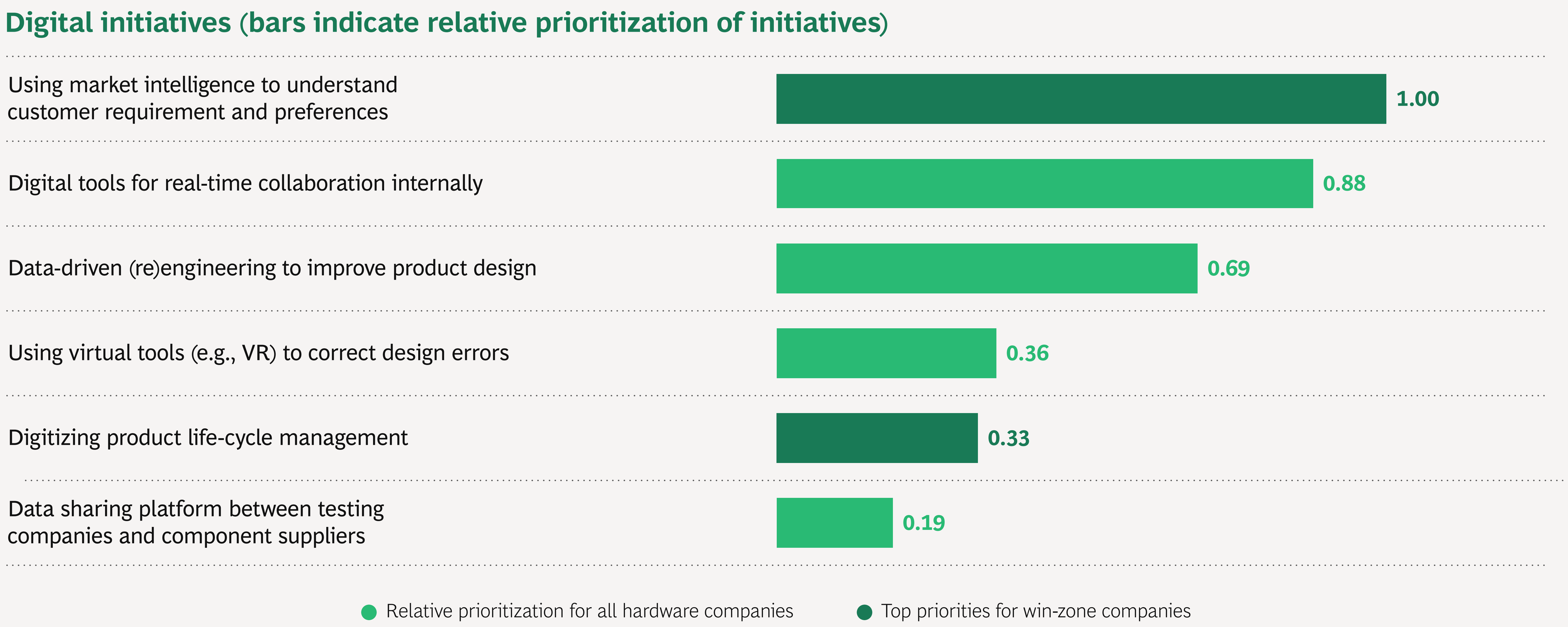
Digital initiatives (bars indicate relative prioritization of initiatives)



Source: 2021 BCG Global Digital Transformation Survey, n = 37.

TOP PRIORITIES FOR THE FUTURE

Hardware companies’ digital priorities: Product innovation and design

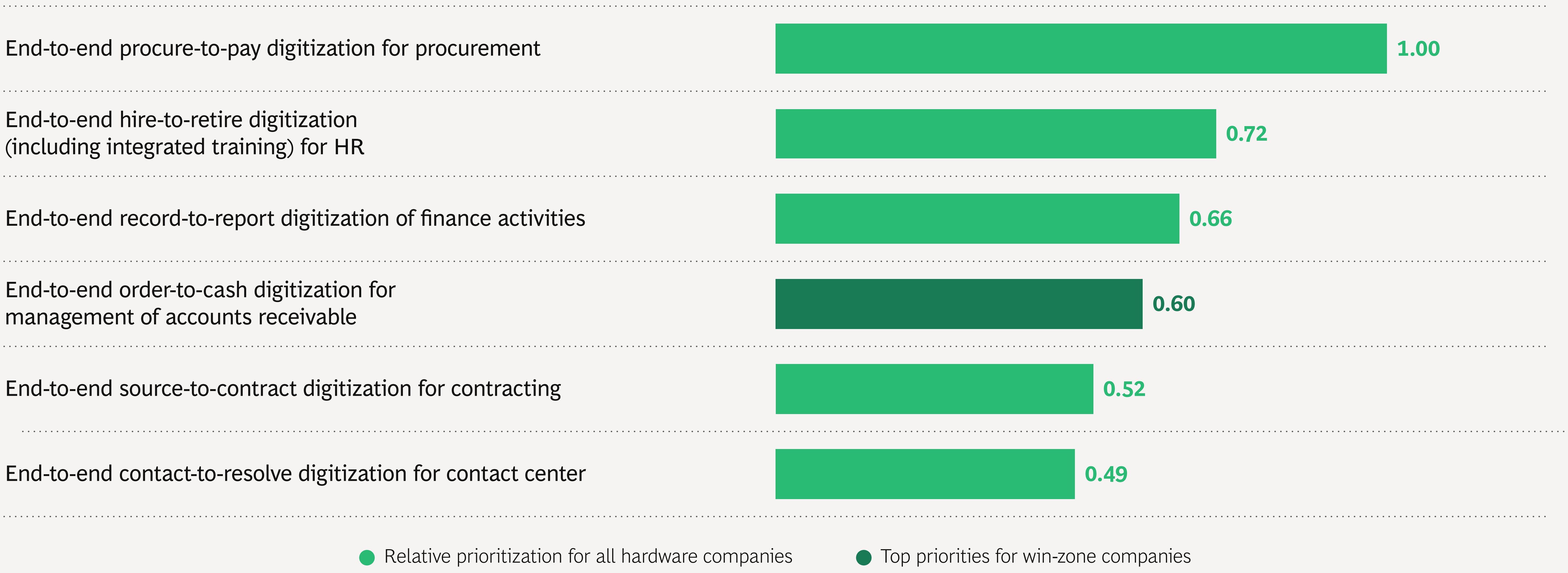


Source: 2021 BCG Global Digital Transformation Survey, n = 37.

TOP PRIORITIES FOR THE FUTURE

Hardware companies’ digital priorities: Digital support functions and operations

Digital initiatives (bars indicate relative prioritization of initiatives)

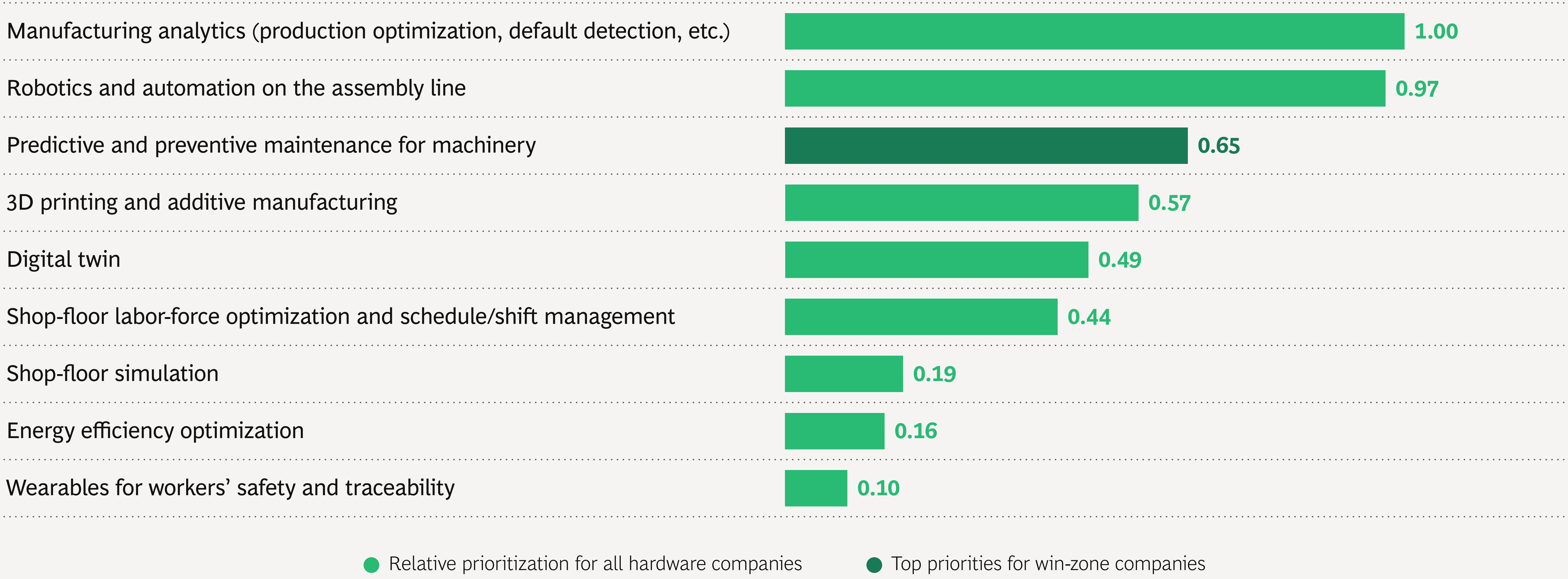


Source: 2021 BCG Global Digital Transformation Survey, n = 37.

TOP PRIORITIES FOR THE FUTURE

Hardware companies’ digital priorities: Smart factories

Digital initiatives (bars indicate relative prioritization of initiatives)

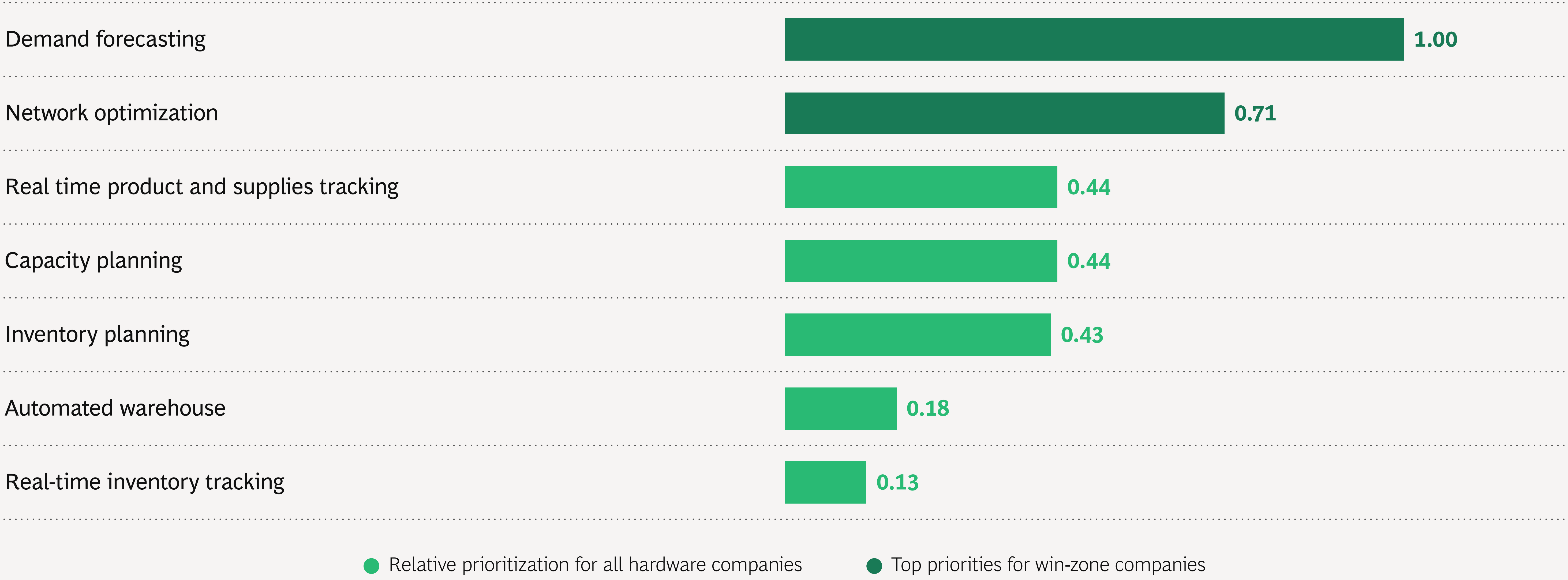


Source: 2021 BCG Global Digital Transformation Survey, n = 37.

TOP PRIORITIES FOR THE FUTURE

Hardware companies' digital priorities: Digital supply chain

Digital initiatives (bars indicate relative prioritization of initiatives)



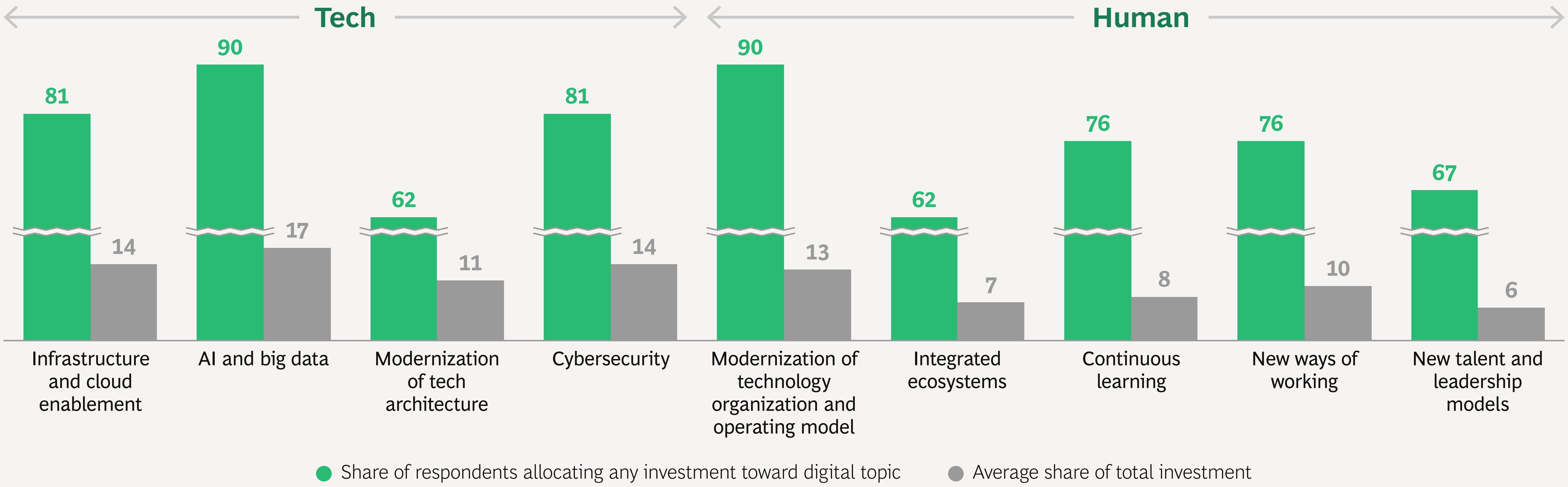
Source: 2021 BCG Global Digital Transformation Survey, n = 37.

THE CRITICAL ENABLERS

Hardware companies intend to invest across a broad range of tech and human enablers

Nine out of ten hardware companies plan to invest in AI and big data, and modernization of tech organization and operating model, allocating about 30% of their total digital enablers spending to these areas

PLANNED SHARE OF WALLET SPENDING ALLOCATED ACROSS ENABLER DIGITAL TOPICS IN THE NEXT TWO TO THREE YEARS (%)[1]



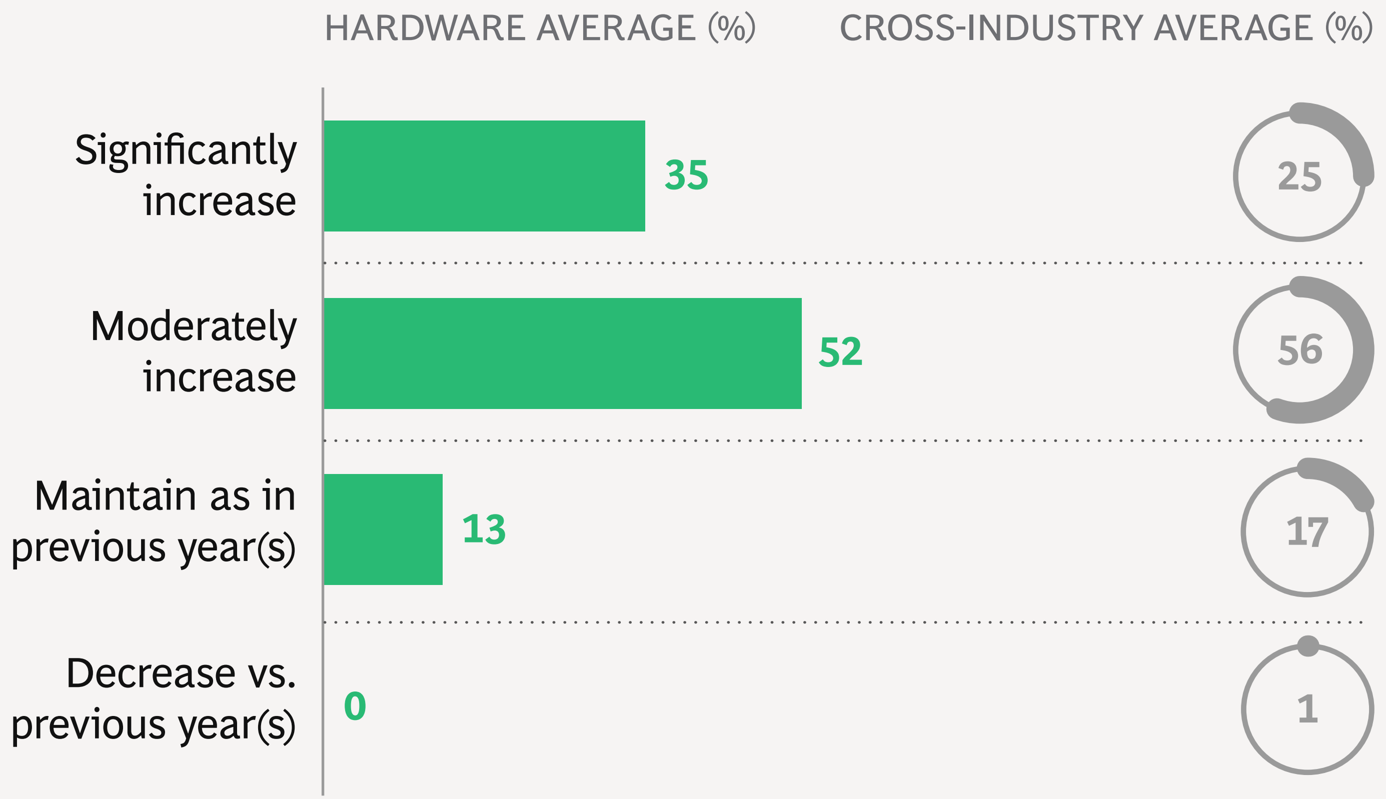
Source: 2021 BCG Global Digital Transformation Survey, n = 38.

[1]For example, the leftmost pair of bars can be read as "81% of hardware respondents plan to invest in Infrastructure and cloud enablement, allocating an average 14% of their total digital enabler spending."

ROLE OF ESG IN DIGITAL TRANSFORMATION

About 87% of hardware companies plan to increase investments in ESG (above cross-sector averages)

Share of respondents planning to increase/decrease/ maintain investment toward ESG in coming years



… with greater emphasis on S and G dimensions

Leading digital initiatives being prioritized to support E, S, and G goals

		SHARE OF RESPONDENTS PRIORITIZING (%)
Environment	· Reduction in energy consumption in offices and buildings · Digital supply chain optimization	~43
Social	· Ensuring protection of clients', employees', and/or customers' data · Reducing employee risk	~58
Governance	· Critical risk incident management, building cyber resilience · Active management of operationally linked environment KPIs/metrics	~42

Source: 2021 BCG Global Digital Transformation Survey, n = 39.

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