



Working Capital Roundup

Cash-generation opportunities:
What we learned from 2022

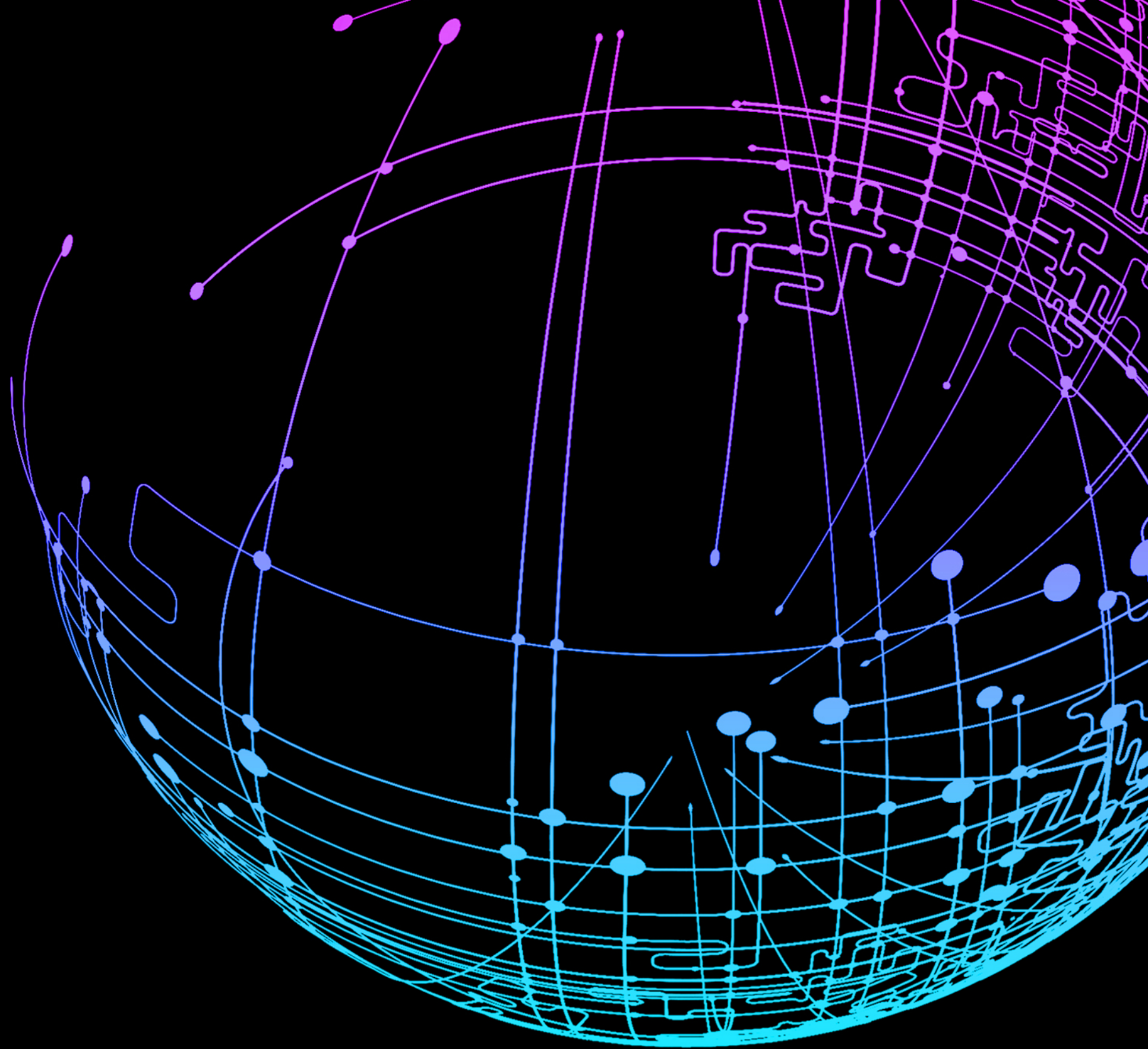


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Glossary of terms

AP	Accounts payable
AR	Accounts receivable
CAPEX	Capital expenditures
CCC	Cash conversion cycle
COGS	Cost of goods sold
DIO	Days inventory outstanding
DPO	Days payables outstanding
DSO	Days sales outstanding
EBITDA	Earnings before interest, taxes, depreciation, and amortization
ER&I	Energy, resources, and industrials
FCF	Free cash flow
GDP	Gross domestic product
LSHC	Life sciences and health care
PQ	Prior quarter
Q	Quarter
QoQ	Quarter over quarter
TME	Telecom, media, and entertainment
TMT	Technology, media, and telecommunications
WC	Working capital
YoY	Year over year

Basis of preparation and assumptions

- We reviewed the financial and WC performance of all publicly listed companies in the United States¹ with data publicly available as of March 20, 2023.
- Our review included 3,076 companies, looking at their working capital performance and related key indicators.
- We also looked at shifts in performance on a quarterly and annual basis.
- Due to their varying WC trends and profiles, we excluded the following industries from our analysis: financial services, government & public services, and others.

Executive summary

Key statistics (YoY Q4 2021 to Q4 2022)²

Number of companies



Change in revenue



Change in EBITDA



Net income



Cash from operations



Free cash flow



Change in DSO



Change in DIO



Change in DPO



Executive summary (cont.)

Overview

In the 2022 issue of the annual Working Capital Roundup, Deloitte analyzed the working capital performance of more than 3,000 companies across four main industries to understand the trends and changes across AR, inventory, and AP. Given the continued marketplace dynamics, uncertainty around interest rates, and macroeconomic conditions, this year's Working Capital Roundup also includes analysis on free cash flow performance across different sectors, to highlight the key movements and influencing factors, including changes in net income, capital expenditures, and cash from operations.

Revenue and margin

The total revenue of organizations covered reached \$23.3 trillion, representing an increase of 13.8% when compared to 2021. This increase highlights the considerable organizational resilience and focus that companies have demonstrated to produce higher revenue results across all industries, while benefiting from some key tailwinds, including the continued opening of the global economy and significant price inflation across labor and key commodities. However, across many other financial metrics, the story becomes less clear with volatility at the macro and subsector level.

Throughout 2022, the core message across earnings calls and investor presentations was that revenue was growing and that management teams were passing on successfully price increases to consumers and customers. With the twin impacts of inflation and the conflict in Ukraine hitting multiple areas including energy, food, and fuel, the first goal was often to inform investors and analysts that these increases could be passed along, which boosted top-line revenue. With revenue growing at 13.8% compared to GDP growth of only 2.2%, these efforts appear to have been successful.

Annual EBITDA growth of 11.2% was lower than in 2021 but was still positive, demonstrating that while many companies were able to pass on price increases to consumers, they were also reasonably successful in reducing costs and protecting margins.

Free cash flow

From an income statement performance perspective, net income was down 3.5% YoY. However, in terms of company's ability to convert income to cash, cash from operations held up well and increased YoY by 3.1%. This would indicate that for many organizations, effective working capital management has played a role in helping them offset significant headwinds elsewhere and remain cash generative.

Free cash flow in total was down 5.7% when comparing full-year results for 2022 to 2021, largely driven by what appears to be increased capital expenditures. While overall cash from operations increased moderately, capital expenditure as a percentage of net income increased significantly from 65.8% to 79.7%, driven largely by substantial investments in the energy and chemicals and power, utilities, and renewables sectors. Overall, free cash flow as a percentage of revenue dropped from 9.0% to 7.4%.

Executive summary (cont.)

Overview (cont.)

With the strength in revenue and increases in capital expenditures, many organizations will be expected to continue to improve free cash flow in 2023. For companies that saw working capital as a headwind in 2022, there has never been a better time to optimize this lever.

Conflict in Europe

Financial forecasts and operating plans for 2022 were largely developed under the assumption that, while tensions were escalating in Europe, additional conflicts were considered highly unlikely. As such, when the risk crystalized with the Russia-Ukraine conflict beginning in February 2022, the direct impact of disruptions to key commodities such as gas and grain, as well as the need to rapidly unwind operations in sanctioned locations, meant that before Q1 was even over, many forecasts for 2022 had to be rapidly adjusted.

Furthermore, conflict has delivered what the Organisation for Economic Co-operation and Development referred to as a “massive and historic energy shock”³ that is expected to be felt well into 2023 and 2024, meaning attempts to ride out the disruption will not be enough. For many organizations, fundamental changes will be required to address the near perfect storm of “persistent inflation, high energy prices, weak real household income growth, falling confidence and tighter financial conditions.”⁴

However, while forecast restatements are hard to track, what was notable was the number of management teams that chose to demonstrate “stability” by doubling down on previous forecasts as opposed to opting to restate. This meant that, for many businesses, the remainder of 2022 became a battle to recover plans and to develop alternative paths to targets; and this, in turn, meant cost and working capital challenges to address.

Supply chain disruptions

Partly because of regional conflicts and partly driven by the natural untangling of COVID restrictions, 2022 was a story of two halves for many supply chains. Plans built on assumptions of scarcity and the need for resilience were buffeted as scarcity increased in some areas, while in others supply chains rebounded at varying speeds.

This can be clearly seen in the increased inventory levels observed across many sectors. DIO increased, across all sectors by 1.8 days, equating to an additional \$1.3 trillion increase in inventory on balance sheets from 2021 to 2022. While the impacts varied by subsector, supply volatility and planning challenges affected raw material purchases and labor shortages across all industries. In addition, missing key components had an impact on work-in-progress and demand fluctuations, while logistics headwinds affected finished goods, all of which, when combined, created significant complexity.

Interest rates

In last year’s Working Capital Roundup, we noted that interest rates were coming off a historically low base and companies should again start thinking about the rising financing cost in the years ahead,⁵ which proved to be a key part of the story of 2022. At the time of writing, the Federal Reserve had raised interest rates 10 times since March 2022,⁶ and although the pace of increases has begun to slow, these rates still represent the highest levels in more than 15 years. Not only does this represent a significant increase in the relative value of trapped balance-sheet cash, it also significantly redefines the business case for the operational transformations required to release additional working capital. With increased interest expenses, companies have a renewed focus on limiting additional borrowings.

Impact of the economic recovery on key financial metrics

- Analyzed companies experienced a **strong annual revenue growth of 13.8% in 2022; however, as expected, such annual revenue growth did not match the annual revenue growth of 23.6% in 2021, affected by the recovery from the COVID period of the prior year.** From an industry perspective, the growth was led by ER&I, which grew by 23.8%, followed by consumer and LSHC with 14.8% and 9.1% growth, respectively. TMT grew 8.6% annually. While annual growth was still very strong, the quarterly revenue performance was more volatile with strong quarters and weaker ones throughout the year. Q1 2022 performance was affected by the high baseline of Q4 2021 and geopolitical turmoil in Europe. After zero-revenue growth in Q1 2022, companies returned to growth in Q2 2022 (4.2%), followed by reduced growth of 0.9% and 1.5% in Q3 and Q4, respectively. We saw increases in revenue in several sectors including automotive, industrial products, consumer, and TMT at the end of the year. On the other side of the spectrum, we had several sectors showing revenue declines in Q4 2022, with transportation, hospitality, and services and energy and chemicals having revenue decline 3.7% and 4.5%, respectively.
- EBITDA grew at a much slower rate than in 2021 as well, with companies reporting an **11.2% increase in EBITDA, following an increase of 37.8% in 2021,** indicating the ability for some companies to pass along higher pricing from inflation in some sectors. The highest annual EBITDA growth was reported in the ER&I and consumer sectors with 29.5% and 5.2%, respectively. We see a different picture in LSHC, which had an EBITDA increase of 0.3% and in TMT, where EBITDA declined by 0.7%. In addition, **2022 annual net income fell by 3.5% YoY,** with ER&I being the only industry that was able to grow net income in 2022.
- After a year of improvement in revenue and EBITDA, we see a **5.9% increase in net debt and a 3.1% increase in operating cash flow,** accompanied by a

- reduction in cash and cash equivalents (8.3%)** in 2022, indicating an increased pressure on liquidity in an environment of elevated interest rates.
- **DSO continued to improve, with a decline of 0.4 days in Q4 2022 YoY after a 3-day improvement in Q4 2021 YoY and is currently at the lowest level in four years.** The improvement is visible across all industries. Only four out of 11 sectors saw deterioration in DSO, led by the technology sector, which grew 1.8 days.

- **After a 2.8-day YoY improvement in Q4 2021, DIO deteriorated by 1.8 days YoY in Q4 2022.** The largest increase was in the TMT industry, which saw a 5-day increase, followed by ER&I and consumer with 1.2 and 0.8 days, respectively. The LSHC industry remained unchanged YoY.
- **DPO experienced further annual declines as it decreased by 1.4 days YoY in Q4 2022 after 2.9 days in Q4 2021.** The negative trend is visible in eight out of 11 sectors with a decline between 0.4 days in technology and 5.5 days in power, utilities, and renewables.

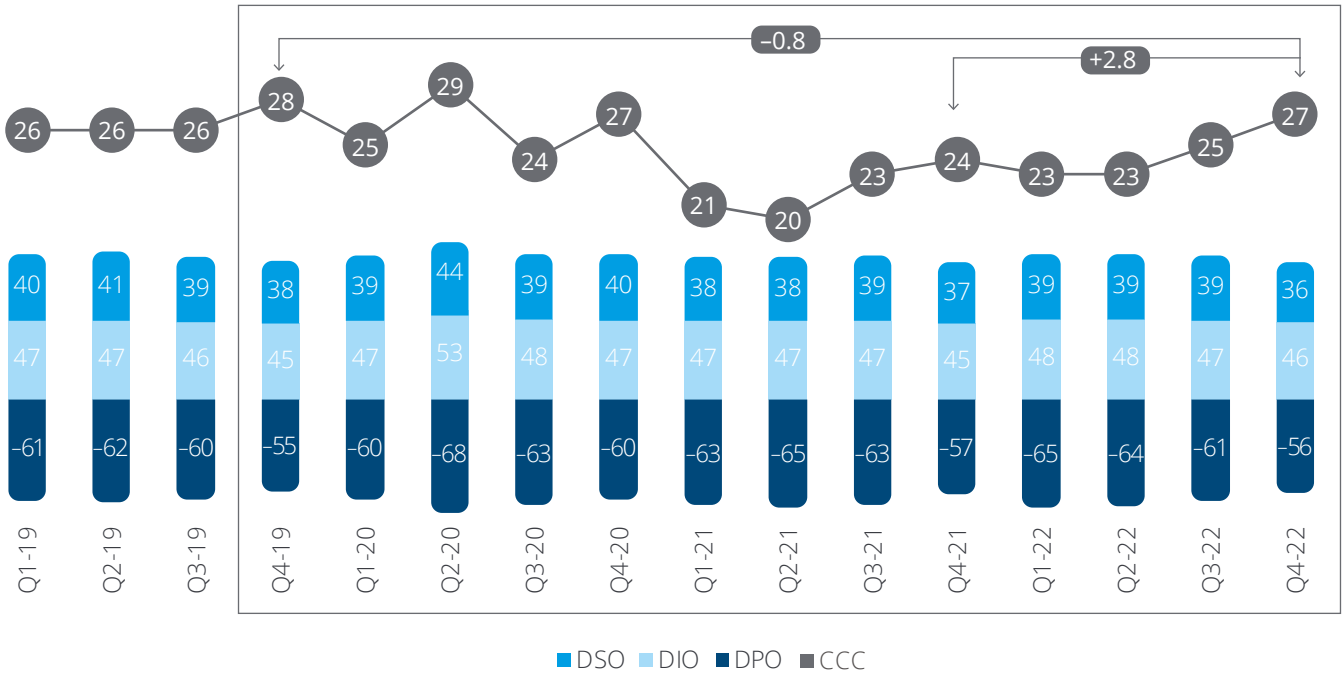
Impact on key financial metrics–quarterly view⁷

	Actual Q4-22	Actual Q4-21	YoY Q4-21 to Q4-22	
Revenue	\$6.0T	\$5.6T	6.6%	⬆️
EBITDA	\$1.1T	\$1.0T	3.2%	⬆️
FCF as % of revenue	7.9%	9.1%	-	
CCC	26.7 days	23.9 days	2.8 days	⬆️
DSO	36.4 days	36.8 days	-0.4 days	⬆️
DIO	46.3 days	44.6 days	1.8 days	⬆️
DPO	56.0 days	57.4 days	-1.4 days	⬆️

Working capital performance

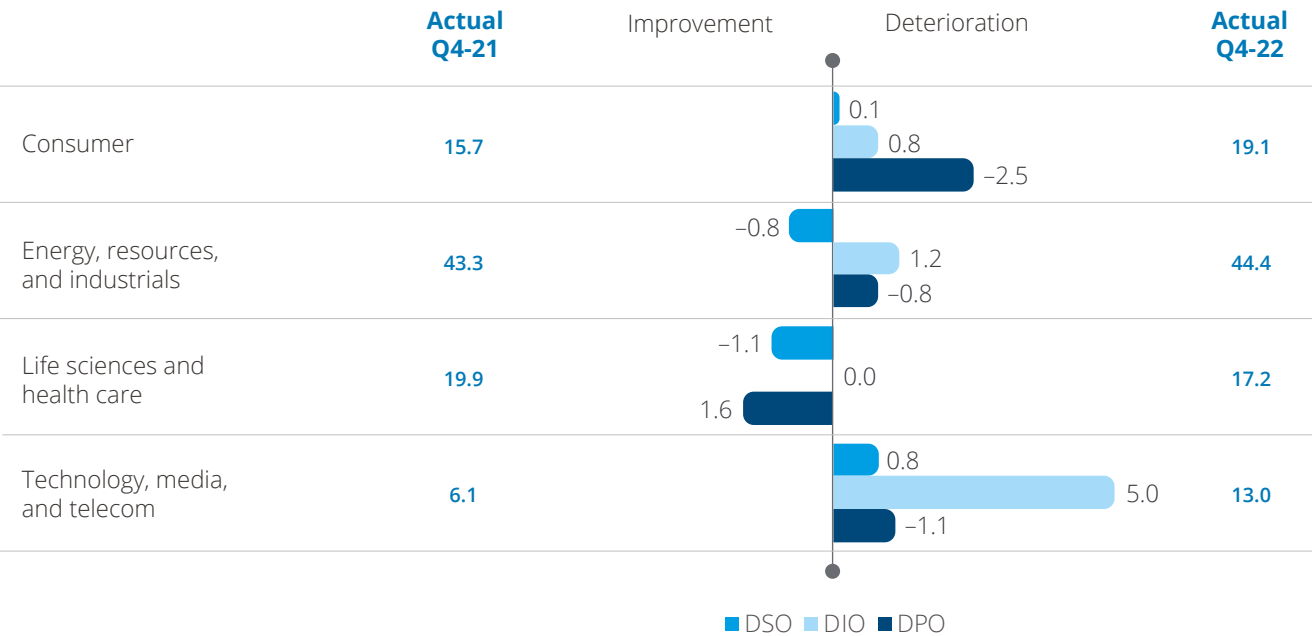
- Quarterly CCC days deteriorated by 2.8 days YoY between Q4 2021 to Q4 2022, and 1.3 days when compared to Q3 2022; however, it remains 0.8 days below the pre-pandemic level (Q4 2019).
- The CCC cycle has remained stable in Q4 of each year over the past four years, moving between 27 and 28 days, except for Q4 2021, which ended up at 24 days due to the historically low DIO of 44.8 days and the second-best DSO of 36.8 days that year.
- In Q4 2022, we see the usual quarterly deterioration of WC performance, as companies make their annual year-end pushes. This year the decline in DPO from 61 days in Q3 to 56 days drove the deterioration. This resulted in CCC to increase from 25 to 27 days in the last quarter of 2022.

Developments in CCC by quarter (days)



- When breaking down CCC results by industry, we can see a deteriorating WC trend across almost all sectors, led by TMT with a 6.9-day increase, followed by consumer and ER&I sectors with 3.4 days and 1.1 days, respectively. The only sector that saw an improvement was LSHC with a 2.7-day CCC reduction.
- Across all industries, the main driver for working capital deterioration was DPO, which recorded a decline between 0.8 days and 2.5 days across all industries except LSHC with a 1.6-day improvement, and DIO also increased between 0.8 days and 5 days in the same industries, led by the technology sector. Increased inventory levels were, in many cases, driven by growing economic activity and increased order intake at the year end.

CCC in days by industry from Q4-21 to Q4-22



Source data: S&P Global Market Intelligence, public financial data, quarterly earnings report

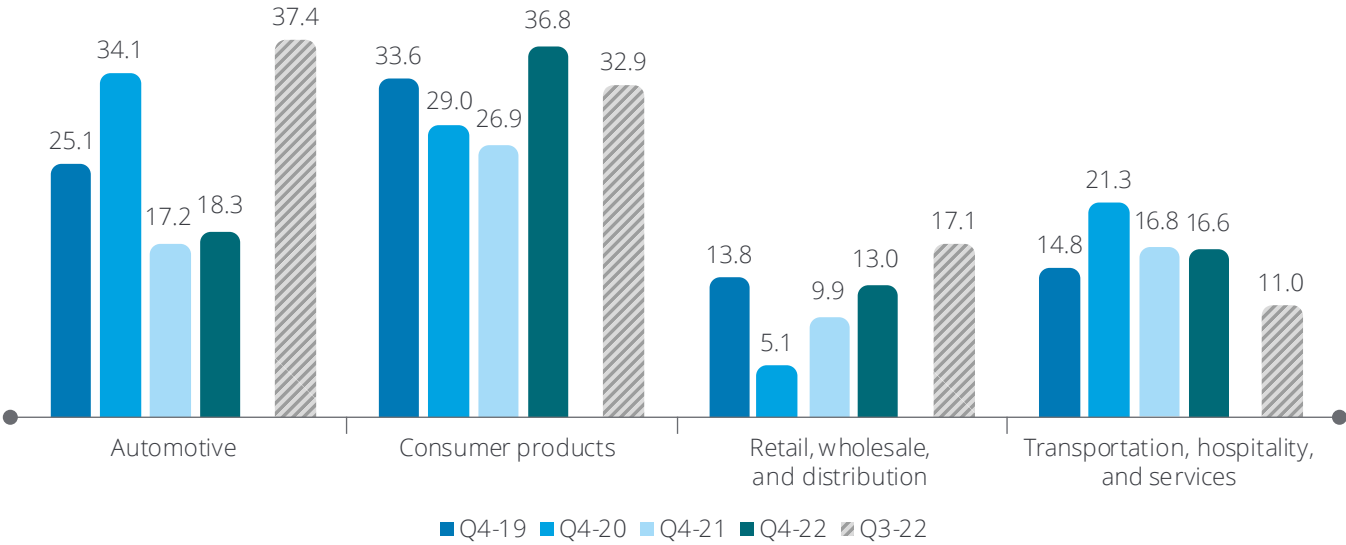
Industry findings: Consumer

Actual Q4-22



- Against the backdrop of a potential recession, the **consumer** industry displayed its strength as three out of the four sectors, **automotive** (18.8%), **consumer products** (19.1%), and **retail, wholesale, and distribution** (45.3%), experienced revenue growth in 2022. **Transportation, hospitality, and services** (16.8%) posted revenue decline partially due to corporate travel unable to rebound as quickly as leisure travel, as well as softening demand for logistics companies.
- CCC increased by 3.4 days in aggregate (15.7 in Q4 2021 vs. 19.1 in Q4 2022) with the largest increase of 9.9 days observed in consumer products, while THS was the only sector that improved by 0.2 days.

CCC in days by industry from 2019 to 2022



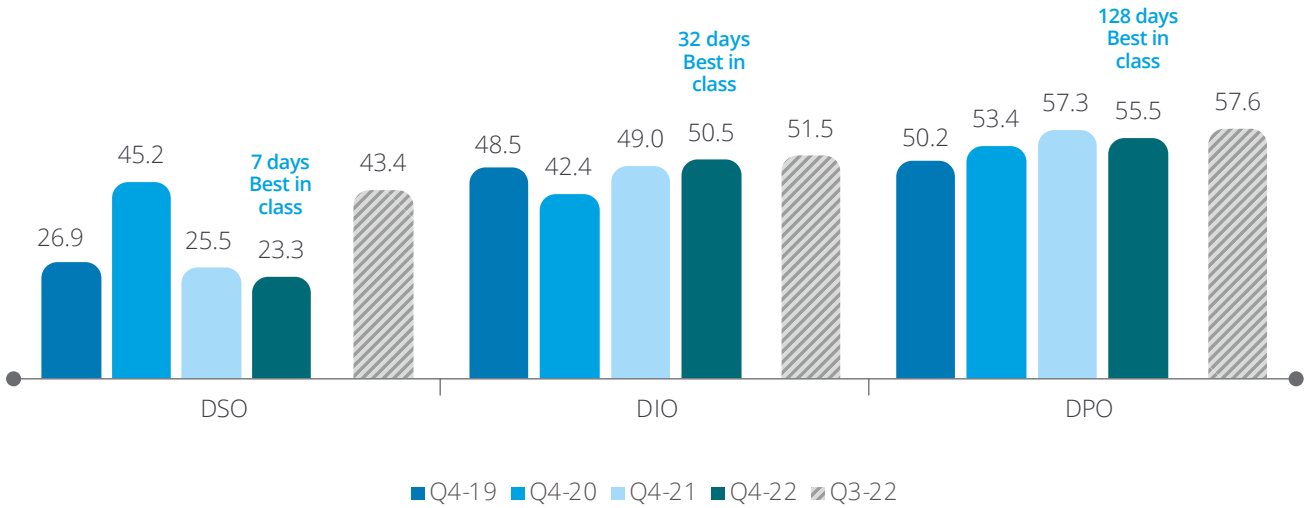
Source data: S&P Global Market Intelligence, public financial data, quarterly earnings report

Industry findings: Consumer (cont.)

Analysis by consumer sector

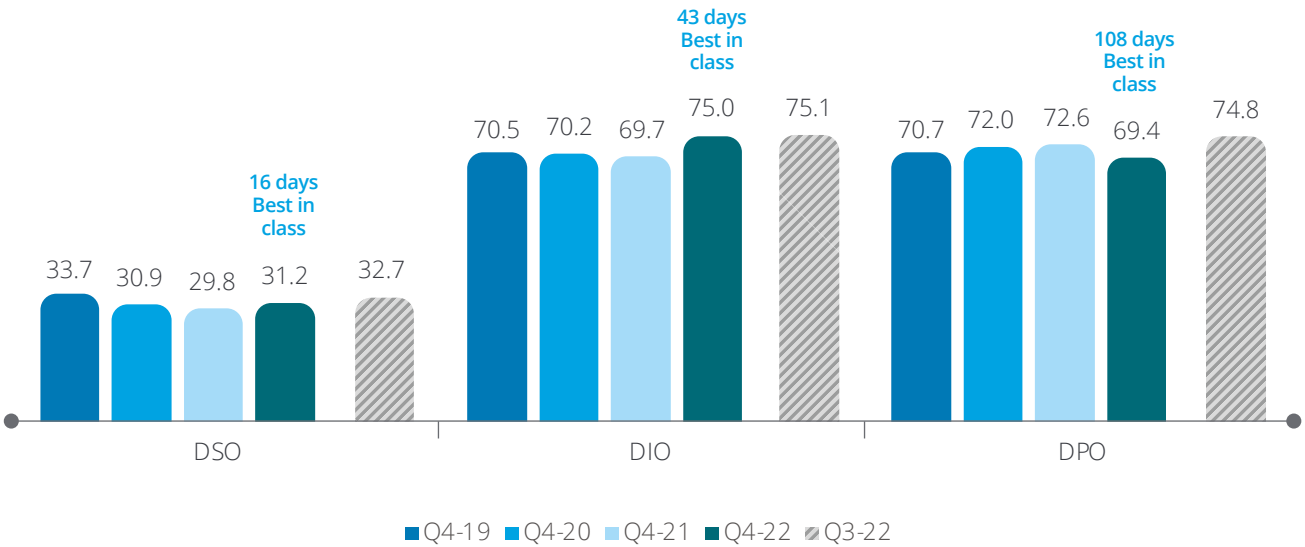
• **Automotive** revved up revenues this past year after the supply chain disruption started to ease, driving record profits for original equipment manufacturers. Suppliers, on the other hand, saw declines in margins and profitability resulting in liquidity challenges and increased leverage.⁸

Automotive



• **Consumer products** demand was more conservative in the past year resulting in lower orders due to increasing interest rates, growing inflation, and supply chain bottlenecks. DIO overall increased by 5.3 days due to potentially planned strategic inventory levels and inventory that wasn't "just in time," but rather "just in case" to avoid losing a sale.

Consumer products



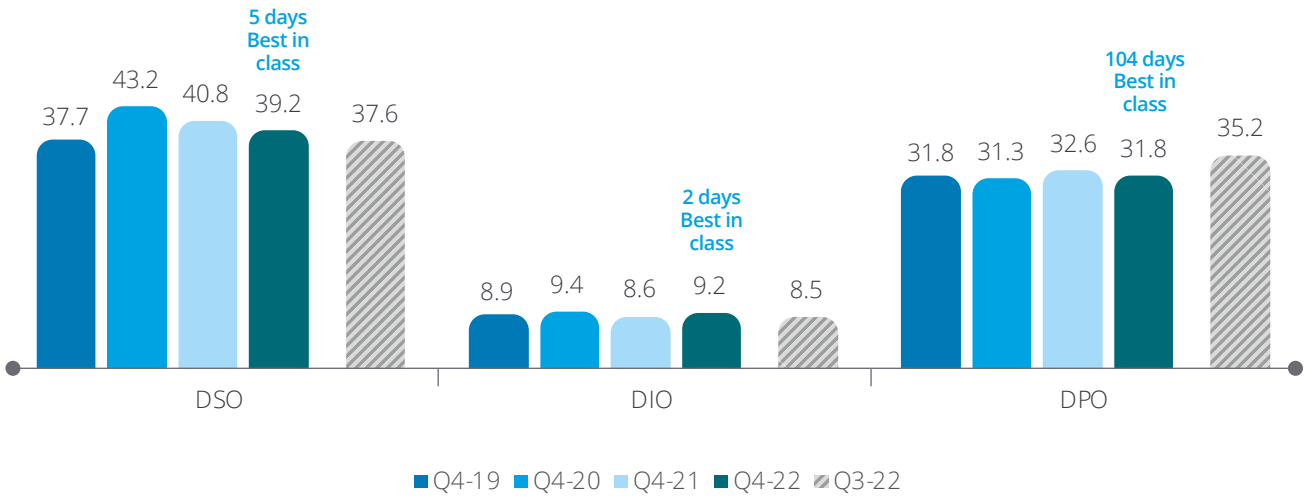
⁸“Best in class” represents top 10% performers.
Source data: S&P Global Market Intelligence, public financial data, quarterly earnings report

Industry findings: Consumer (cont.)

Analysis by consumer sector (cont.)

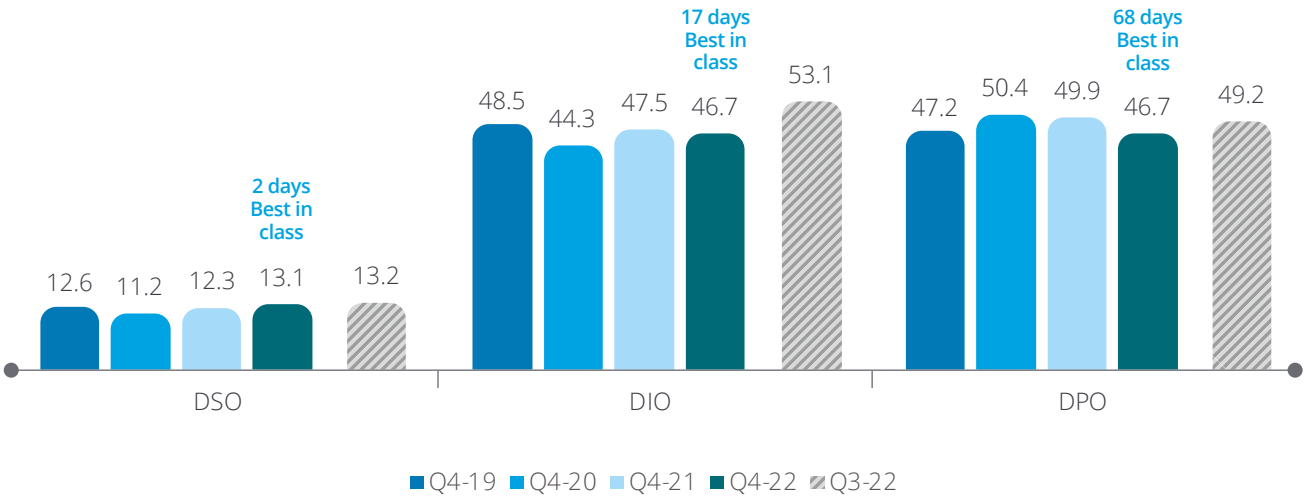
- **Transportation, hospitality, and services** showed its resurgence after the COVID-19 pandemic altered the way our communities move, work, and connect. Nevertheless, in 2022, the sector’s revenue decreased by approximately 16.8%. Airlines and hotels saw pent-up leisure travel pick up, but not the same as for corporate travel, and demand for logistics companies softened as well.

Transportation, hospitality, and services



- For the second year in a row, **retail, wholesale, and distribution** saw revenues increase by 20% versus Q4 2021. Suppliers and retailers passed higher prices on as one-time costs accrued from COVID needed to be flushed through the system. DPO went downhill from 49.9 days in Q4 2021 to 46.7 days in Q4 2022. Companies have had to adapt from a traditional supply-driven model to one that is demand-driven while responding to pressure from suppliers and consumers.

Retail, wholesale, and distribution



“Best in class” represents top 10% performers.
Source data: S&P Global Market Intelligence, public financial data, quarterly earnings report

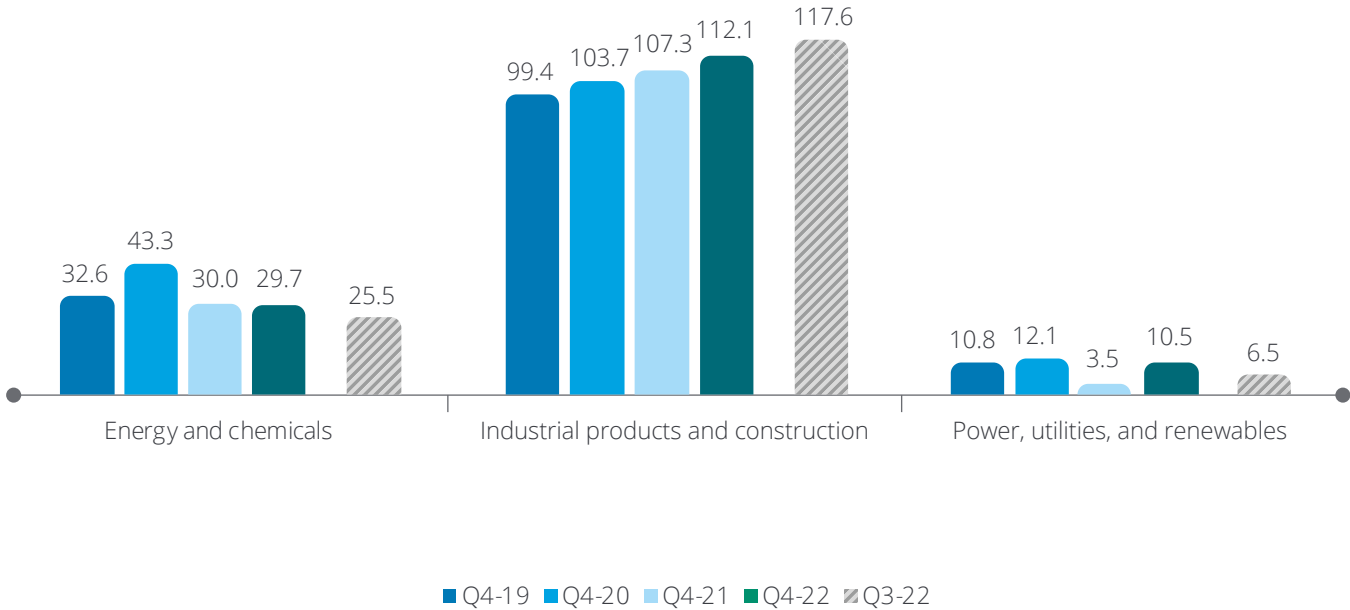
Industry findings: Energy, resources, and industrials

Actual Q4-22



- ER&I saw strong revenue growth for the second year in a row, despite a 2.5% decline in the last quarter of the year. Revenue rose by 26% in 2022 after achieving 38% in 2021, mainly driven by the **energy and chemicals** sector. This sector benefited from a year of increased economic activity and stronger prices and margins, notably from crude oil, natural gas, and refining products.
- **Industrial products and construction** was the only sector that managed to maintain revenue growth in Q4, growing 9.6% annually. The sector benefited from favorable price realization and higher sales volumes. In some cases, the easing supply chain challenges triggered higher revenue growth rates in the latter part of the year.
- All three sectors were able to improve or preserve their profitability in 2022. Increased input prices, lower production efficiency due to supply chain disruptions, higher charges for expedited freights, and increased labor and overhead cost were offset by higher sales volume, better price realization, and, in many cases, a better sales mix.
- ER&I saw a decline of 1.1 days in working capital performance measured by CCC. Both **industrial products and construction** and **power, utilities, and renewables** contributed significantly to the CCC deterioration that was driven by increased DIO and reduced DPO.

CCC in days by industry from 2019 to 2022



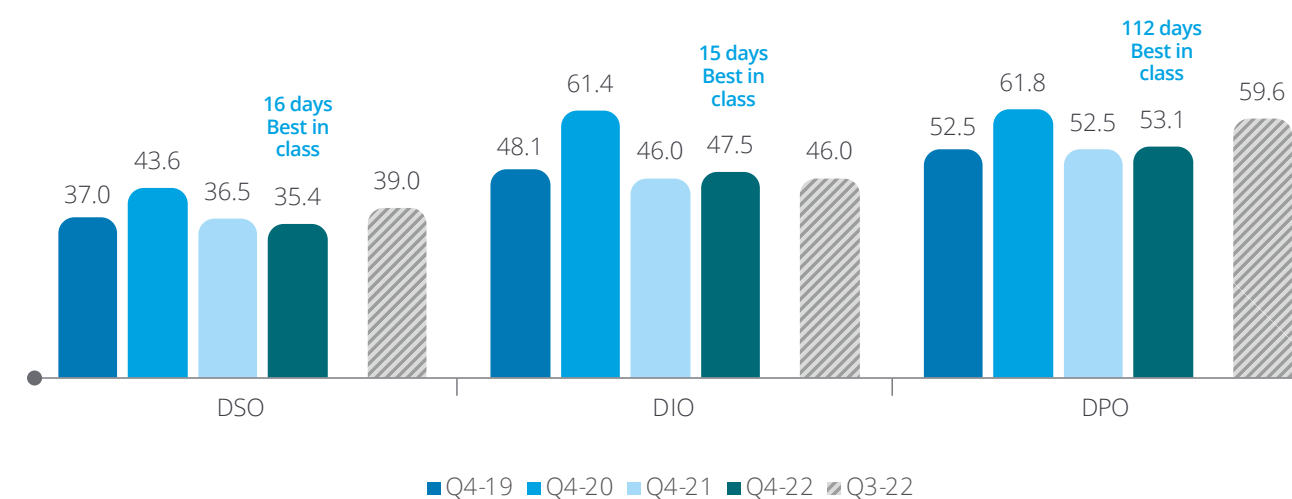
Source data: S&P Global Market Intelligence, public financial data, quarterly earnings report

Industry findings: Energy, resources, and industrials (cont.)

Analysis by energy, resources, and industrials sector

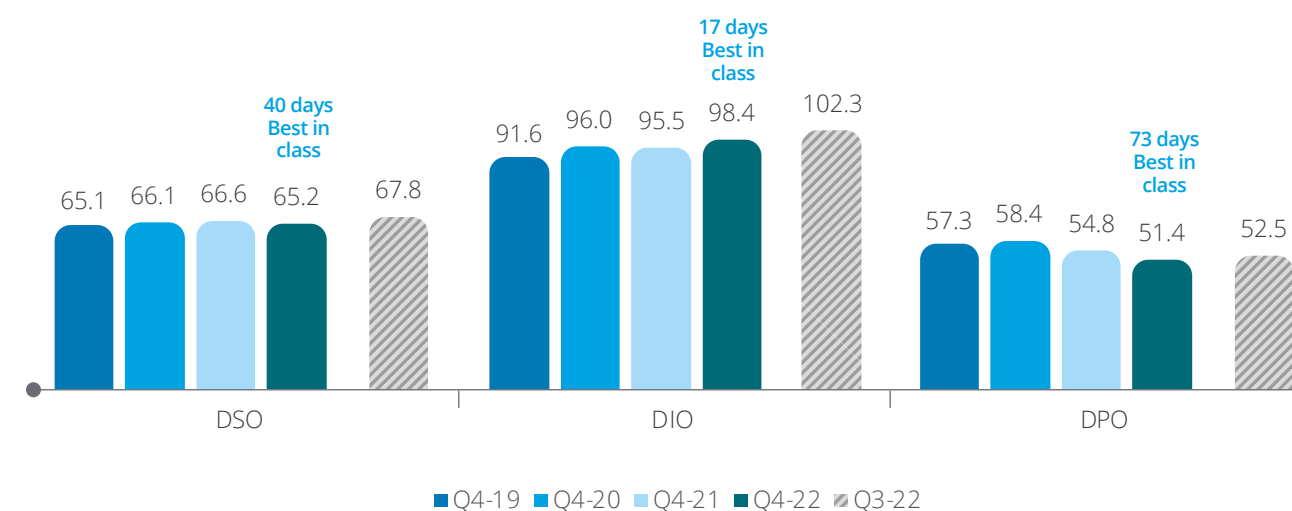
- **Energy and chemicals** saw another strong year and outperformed the other sectors in all analyzed metrics.⁹ The CCC had already surpassed the pre-pandemic year (2019) in 2021 and further improved by 0.3 days in 2022, mainly due to the improvement in DSO. More than 70% of the companies improved their DSO by 10 days on average. DSO was offset by the decline in DPO by approximately 12 days in almost 70% of companies. Companies in the \$500 million to \$1 billion revenue range struggled the most to improve their working capital. Their DSO rose by 19 days or 36% YoY, offset by DPO, which rose by 34 days, and DIO grew by 8 days. All other companies improved their DSO and DIO while reducing the DPO.

Energy and chemicals



- The **industrial products and construction** sector posted the highest increase in CCC in four years, adding 4.8 days, largely because of DIO and DPO deterioration. 67% of companies saw DIO grow by 12 days on average, and 62% saw a decline in DPO of about 16 days. We see the highest decrease in DPO in companies with less than \$1 billion in revenue (18–33 days), compared to a 3- to 4-day decline in companies with more than \$1 billion. DIO rose mainly in companies of revenue size between \$500 million and \$1 billion (+31 days) and significantly underperformed their smaller- and bigger-sized peers (171 days vs. 94–107 days).

Industrial products and construction



⁹“Best in class” represents top 10% performers.

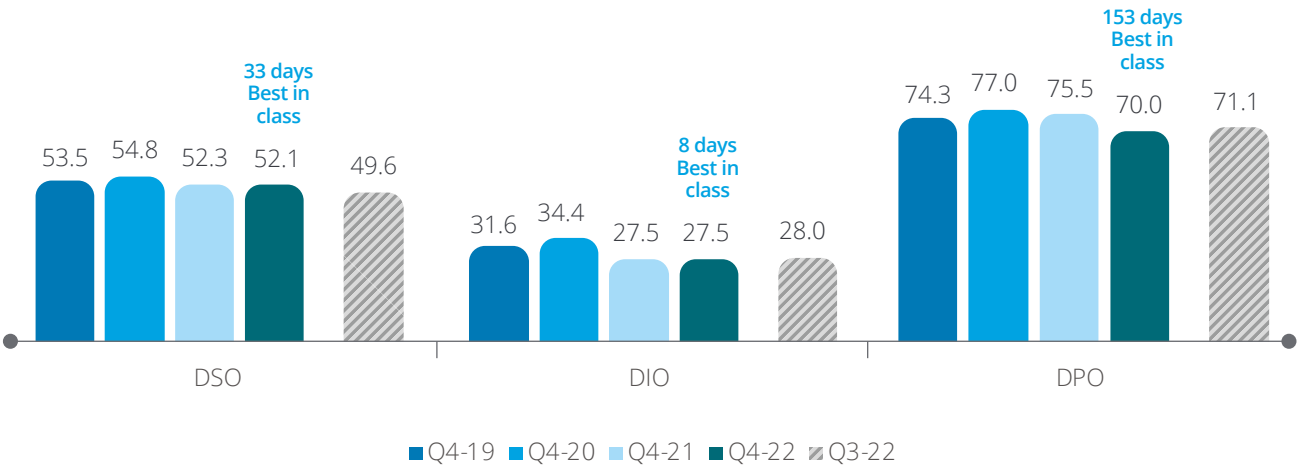
Source data: S&P Global Market Intelligence, public financial data, quarterly earnings report

Industry findings: Energy, resources, and industrials (cont.)

Analysis by energy, resources, and industrials sector

- **Power, utilities, and renewables** experienced a material deterioration in working capital performance in 2022. The 7-day increase in CCC is mainly attributable to the decline in DPO by 5.5 days YoY. 60% of the companies reduced their DPO in 2022 by almost 24 days on average, indicating accelerated payment performance and favorable payment terms with the vendors. The deterioration is visible in all revenue segments.

Power, utilities, and renewables



“Best in class” represents top 10% performers.

Source data: S&P Global Market Intelligence, public financial data, quarterly earnings report

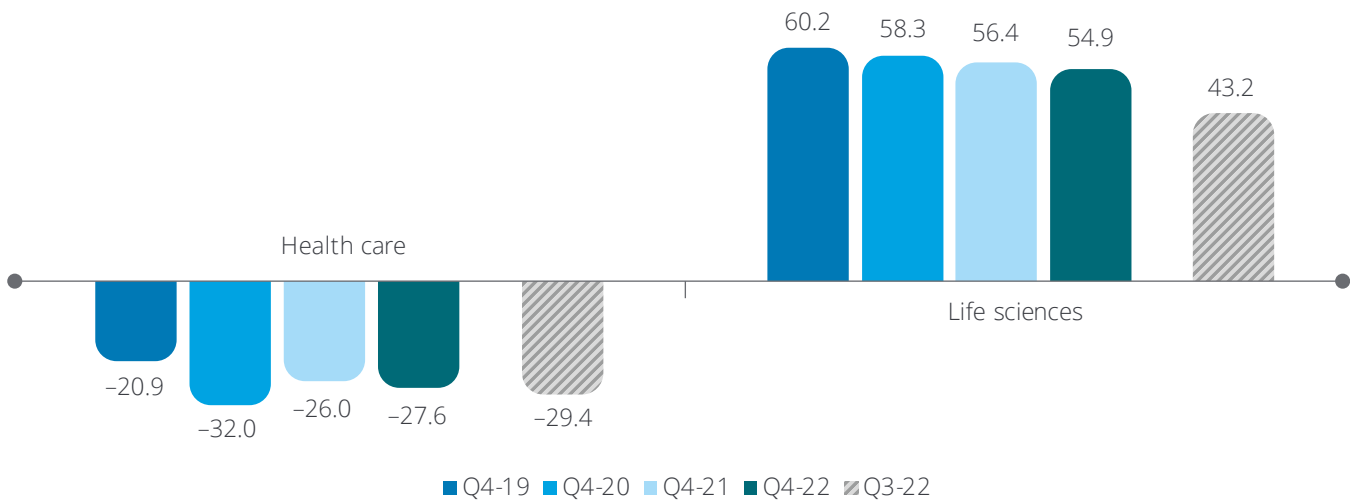
Industry findings: Life sciences and health care

Actual Q4-22



- The **LSHC** industry experienced an improvement in WC performance as CCC decreased by 13.6% (2.7 days) YoY, maintaining momentum over pre-pandemic levels. This was driven by the increase in the industry's DPO of 1.6 days and DSO, which lowered by 1.1 days. DIO YoY remain unchanged.
- The industry saw slower revenue growth of 7.8% in 2022 as compared to 18.2% in 2021. Inflation has heavily influenced overall demand especially in the health care sector. Consumers are reducing their spend for health care by delaying routine care, screenings, preventive care, and other medical needs.¹⁰
- EBITDA growth saw a significant cool down, growing only 0.3% in 2022 compared to 24.8% in 2021. Organizations' bottom lines have been hurt by a tightening labor market and growing supply expenses from a disrupted supply chain.¹¹ These characteristics further impact discretionary budgets and spend for the industry.
- Net debt for the industry grew 2.7%, while cash balances deteriorated 6.5% from 2021 to 2022.

CCC in days by industry from 2019 to 2022



Source data: S&P Global Market Intelligence, public financial data, quarterly earnings report

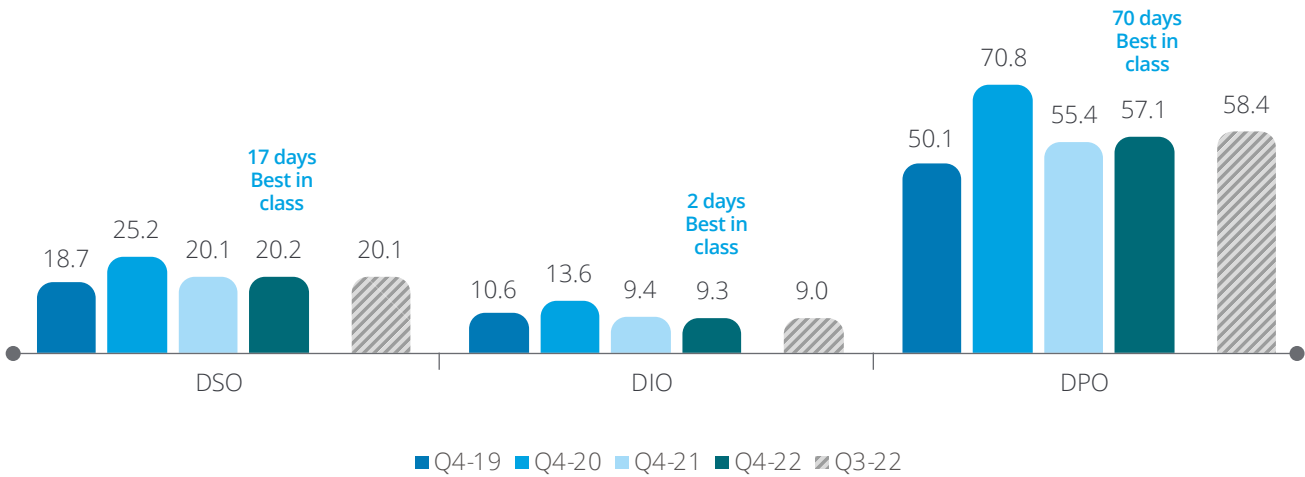
Industry findings: Life sciences and health care (cont.)

Analysis by LSHC sector

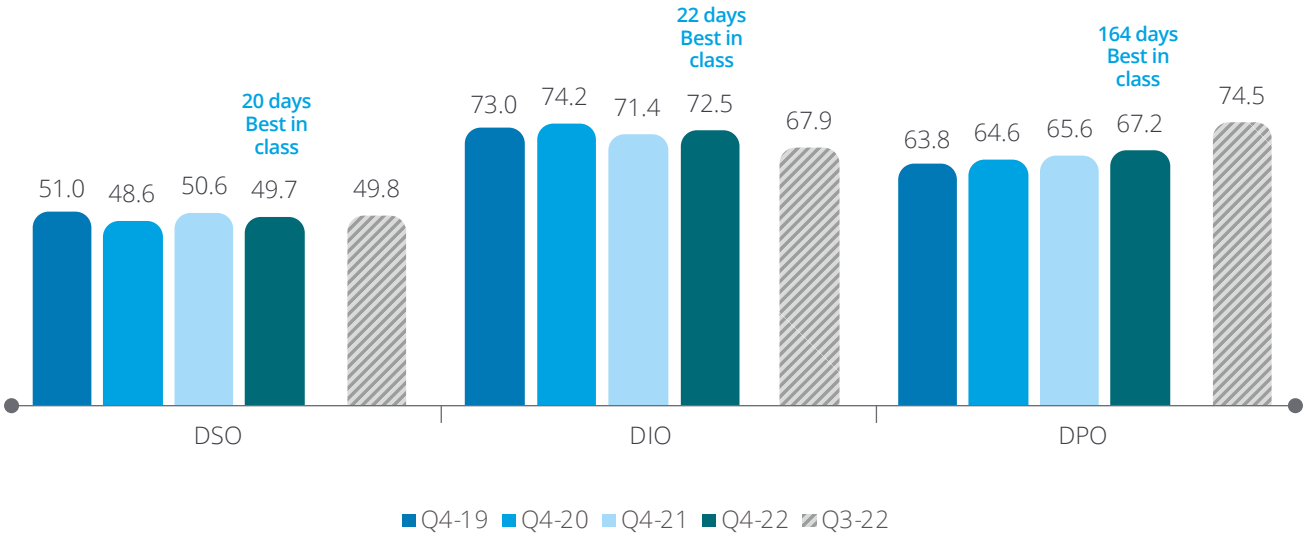
• In the **health care** sector, CCC performance improved YoY by 1.6 days. This is due to a better DIO and DPO performance, which suggests the sector has been able to manage medical supply inventory while improving terms with vendors. The YoY DPO improvement was led by the smallest (less than \$500 million in revenue) and largest (more than \$10 billion in revenue) companies in the sector. Conversely, CCC performance deteriorated QoQ by 1.8 days as all three metrics displayed weakening signals, with DPO being the main driver.

• CCC performance in **life sciences** improved by 1.5 days YoY. DSO and DPO saw improvement, indicating stronger collections while stretching payments. Smaller companies (\$500 million to \$1 billion in revenue) saw the greatest DSO improvement while larger companies (\$5 billion to \$10 billion in revenue) had the most improvement in DPO. In contrast, CCC performance showed weakening signals QoQ by increasing 11.7 days, primarily due to DIO and DPO performance. This may be attributable to lingering supply chain pains as required inventory, such as semiconductors, has forced companies to increase inventory on hand and consider alternative vendors.¹²

Health care



Life sciences



"Best in class" represents top 10% performers.

Source data: S&P Global Market Intelligence, public financial data, quarterly earnings report

Industry findings: Technology, media, and telecom

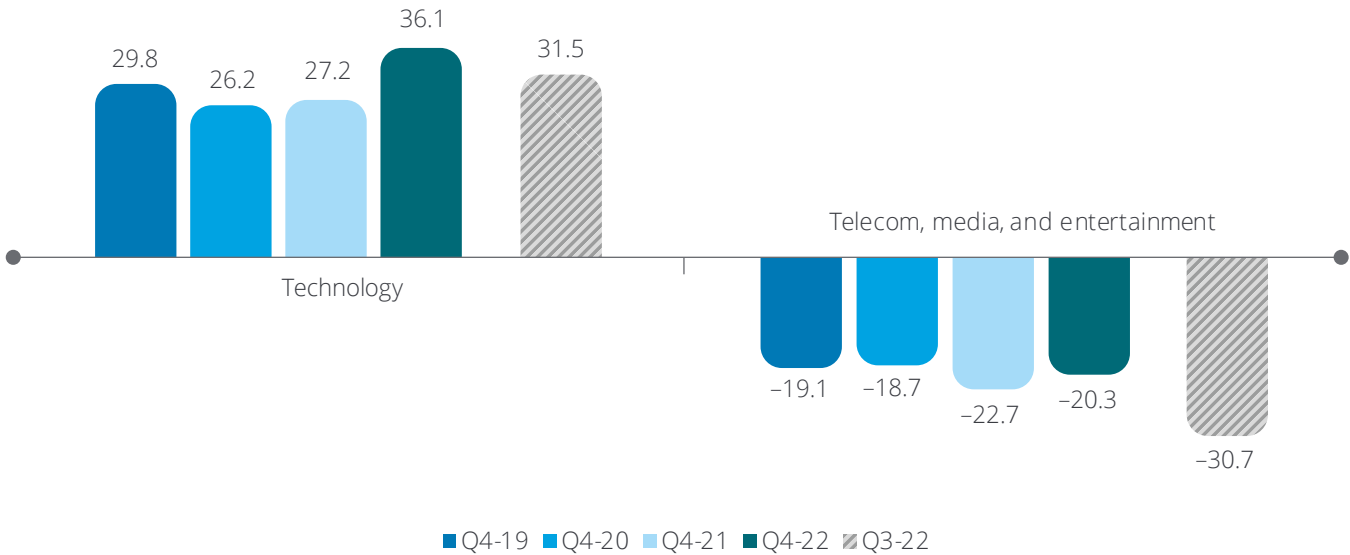
Actual Q4-22



- The **TMT** industry experienced revenue growth decline from 17.4% in 2021 to 5.5% in 2022. The technology sector in 2022 increased by only 9.4% versus 23.9% in 2021, whereas **telecom, media, and entertainment** decreased by 0.1% in 2022 versus a 9.2% increase in 2021.
- The decrease in revenue growth in 2022 was due to economic slowdown, increased regulation, technological disruptions, changing consumer behavior, and geopolitical tensions around the world.

- The **technology** sector outperformed TME in almost all analyzed metrics. The technology sector's EBITDA increased by 2.2% versus TME's EBITDA, which decreased by 4.2% in 2022. The technology sector's capex grew 24.9% versus TME's 7.8% YoY. Cash for the technology sector experienced a 9.0% decrease in 2022 versus 15.9% growth in 2021. TME's cash decreased by 26.1% in 2022 versus 2.7% growth in 2021. The Technology sector's net debt increased to 292% in 2022 versus 255% in 2021. However, TME performed better on net debt with an increase of 3.1% in 2022 versus 6% in 2021.
- The CCC increased 5.9 days YoY, from 6.1 days in 2021 to 13 days in 2022.

CCC in days by industry from 2019 to 2022



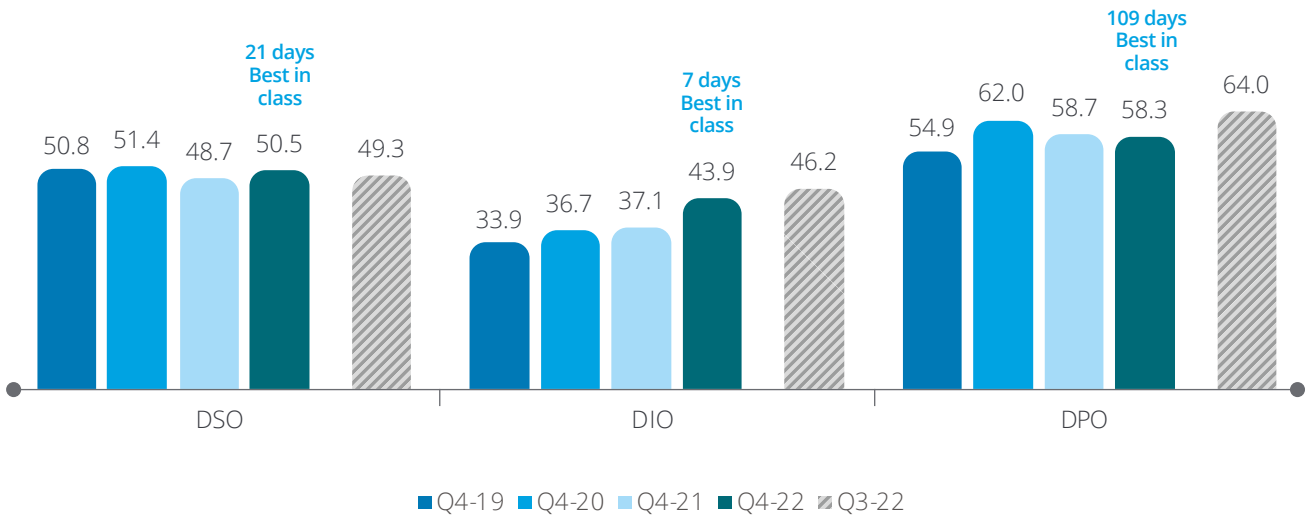
Source data: S&P Global Market Intelligence, public financial data, quarterly earnings report

Industry findings: Technology, media, and telecom (cont.)

Analysis by TMT sector

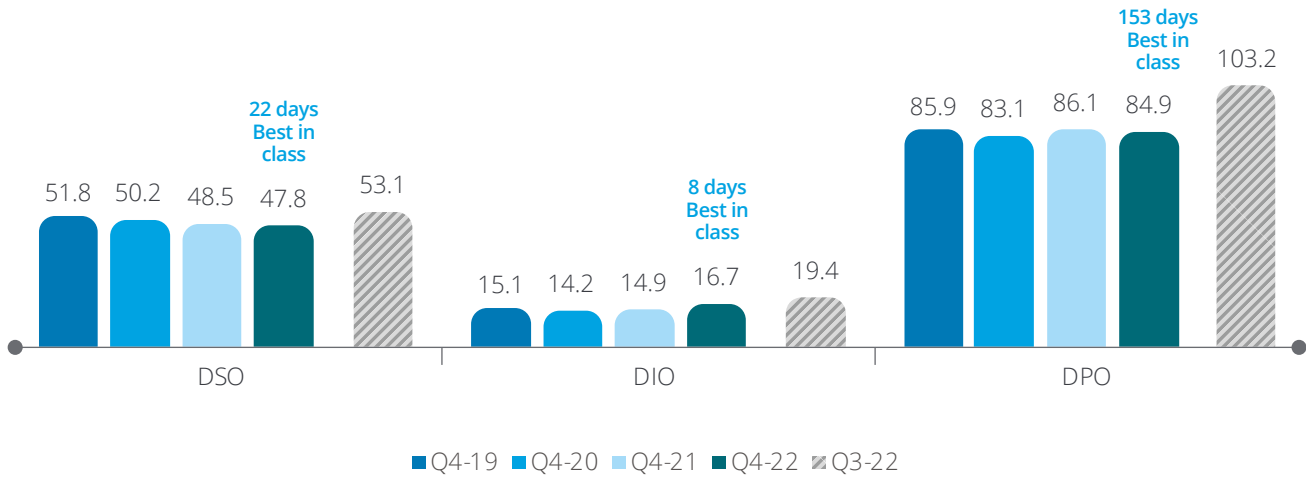
• **Technology** indicates a decrease in CCC performance both QoQ (4.6 days) and YoY (8.9 days). DIO increased by 6.8 days YoY and was driven by companies with revenue greater than \$10 billion; DPO YoY decreased by 0.4 days, driven by companies with revenue between \$500 million and \$1 billion; DSO decreased by 2.2 days YoY and was driven by companies with revenue below \$500 million.

Technology



• **Telecom, media, and entertainment** has a slight improvement in DSO YoY, whereas DPO and DIO YoY underperformed in 2022 versus 2021 with an overall decrease of 2.4 days in CCC. DSO decline was mainly driven by companies with revenue less than \$500 million with a 0.7-day decrease YoY; DIO increased by 1.8 days YoY, driven by companies with revenue between \$1 billion and \$5 billion; DPO decreased by 1.2 days YoY, driven by companies with revenue less than \$500 million.

Telecom, media, & entertainment



“Best in class” represents top 10% performers.

Source data: S&P Global Market Intelligence, public financial data, quarterly earnings report

Looking ahead

- Overall, working capital metrics have demonstrated strong performance in 2022, with DSO and DIO beating the pre-pandemic levels across many sectors, despite supply chain challenges and rising prices for raw materials and labor. DPO pursued the same trend of moving closer to its pre-pandemic levels and has deteriorated gradually during the year, staying only 0.6 days above Q4 2019, which recorded the shortest DPO in four years.
- Despite the overall positive trend, we noted that companies in the \$1 billion (or greater) revenue range suffered the biggest decline in working capital performance last year, mainly due to significant decline in DPO that ranged between five and eight days.
- With both inflationary challenges and interest rates at their highest levels over the past 15 years, companies and executive teams need to be prepared to respond to these challenges by managing actively their working capital cycles, beyond just focusing on select areas to improve.
- It is essential that decision-makers understand the importance of protecting liquidity. Building a cash culture means more than highlighting cash as a metric; a cash-conscious culture needs to permeate through the entire organization, so everyone assesses every decision through the lens of liquidity.
- Companies have an opportunity to create long-term value as well as a competitive advantage compared to their peers, through a focused effort to improve working capital processes.

What helps make working capital projects and programs successful?

Leading working capital organizations embark on transformative journeys to engrain the concept of working capital efficiency within the fabric of daily operations. They tend to have a supported ecosystem built to proactively manage and continuously improve working capital execution.



- Need executive committee support from CXOs
- Select functional leaders and communicate goals



- Accounts receivable/payable
- Sales/operations/supply chain
- Information technology



- Use industry-standard measures of performance
- Perform deep-cycle analytics
- Review process, policies, controls, and technology



- Execute quick wins to build momentum
- Complete customer, item, and vendor segmentations to identify opportunities
- Seek buy-in on how vendors, items, and customer decisions need to be made



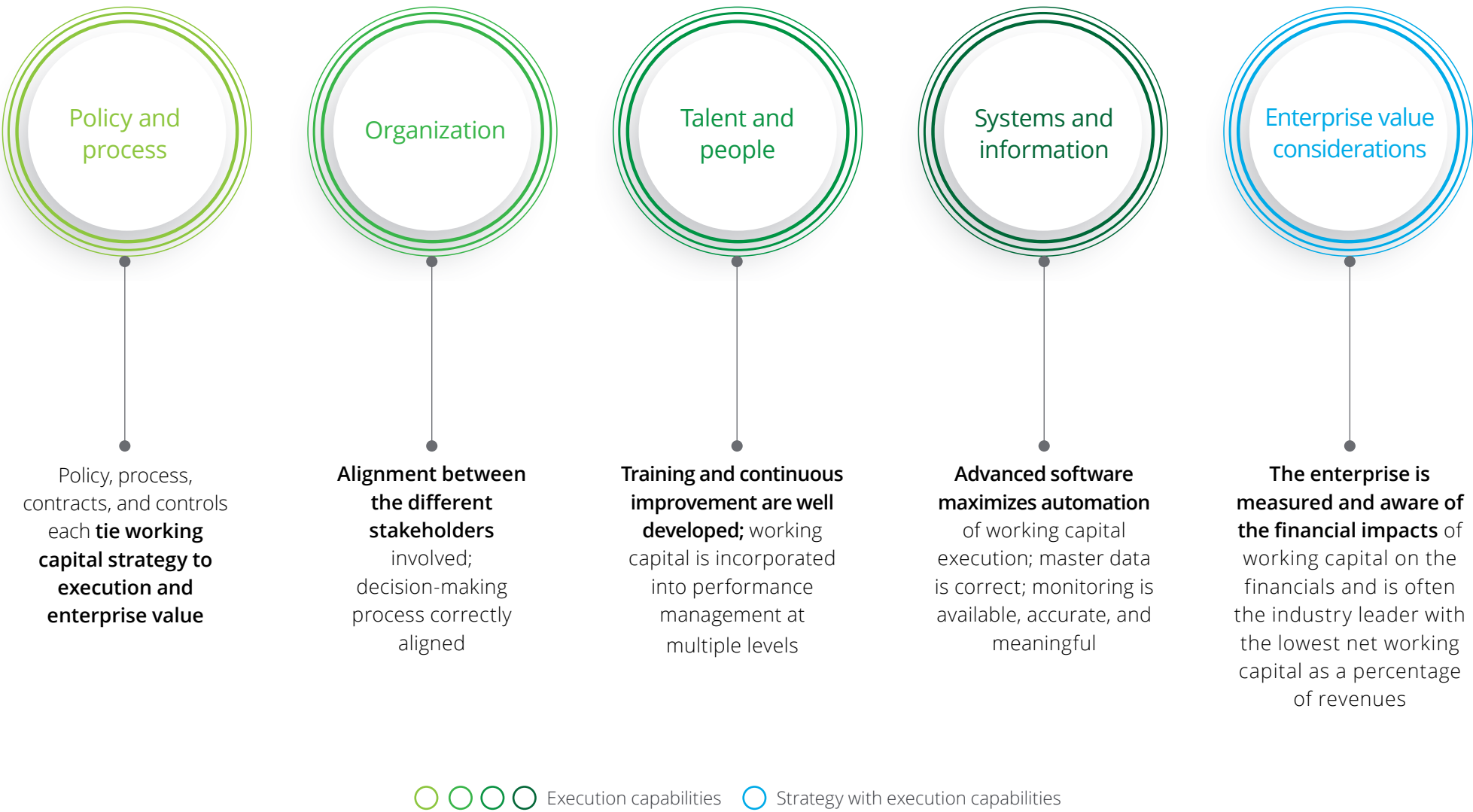
- Resource the solutions
- Hold executives accountable for timelines and target
- Identify functional interdependencies
- Focus on change management and instill a continuous improvement mindset



- Build in process instrumentation and analytics to establish KPIs and increase visibility
- Measure performance regularly and establish a performance culture
- Establish governance with a monthly operating cadence and quarterly executive updates

Looking ahead (cont.)

Leading organizations have a supported ecosystem built to proactively manage and continuously improve working capital execution



Authors



Anthony Jackson
Principal
Cash & Working Capital
Services Leader
antjackson@deloitte.com



Wanya du Preez
Senior Vice President
wanyadupreez@deloitte.com



Tomas Szabo
Vice President
toszabo@deloitte.com



Justin Hughes
Senior Vice President
juhughes@deloitte.com

Industry and sector contributions from:



John Little
Principal
Cash & Working Capital –
ER&I Industry Leader
jolittle@deloitte.com



Michael Epstein
Principal
Cash & Working Capital –
TMT Industry Leader
mjepestein@deloitte.com



Matt Lew
Managing Director
Cash & Working Capital –
Healthcare Sector Leader
mattlew@deloitte.com



Rich Infantino
Managing Director
Cash & Working Capital –
Automotive Sector Leader
rinfantino@deloitte.com



Victor Aguilar
Senior Vice President
viaguilar@deloitte.com

Additional contacts:



Michael Quails
Managing Director
Cash & Working Capital -
Consumer Products
Sector Leader
mquails@deloitte.com



Ryan Maupin
Managing Director
Turnaround &
Restructuring Leader
rmaupin@deloitte.com



Veronika Joy
Senior Consultant



Yuan Jie
Senior Consultant



Kincade Gilbert
Senior Consultant



Ayesha Khan
Consultant

Special contributions from:

Endnotes

1. Companies could be headquartered in countries other than the United States.
2. S&P Global Market Intelligence, public financial data, quarterly earnings report; change calculated in percentage and days: Quarter values measured YoY 2021 against 2022.
3. Organisation for Economic Co-operation and Development, [“Russia’s war of aggression against Ukraine continues to create serious headwinds for global economy,”](#) November 22, 2022.
4. Ibid.
5. Jackson et al., [Working Capital Roundup: A look back at 2021.](#)
6. Board of Governors of the Federal Reserve System, [“Fed’s interest rate hike March 2023,”](#) last updated March 22, 2023.
7. Change calculated in percentage and days: Quarter values measured YoY 2021 and 2022 and QoQ.
8. Leverage—net debt/EBITDA.
9. Revenue growth, EBITDA, net income, net debt, cash and cash equivalents, operating cash flow, and cash conversion cycle.
10. Asif Dhar et al., [“Inflation signals unrest ahead for health care,”](#) Deloitte Insights, November 1, 2022.
11. Deloitte, [“Deloitte: The ills of inflation may make consumers and the health care system sicker,”](#) press release, November 14, 2022.
12. Stephen Bradley and Bill Murray, [“How is the semiconductor shortage affecting medtech?,”](#) Deloitte, June 28, 2022.



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