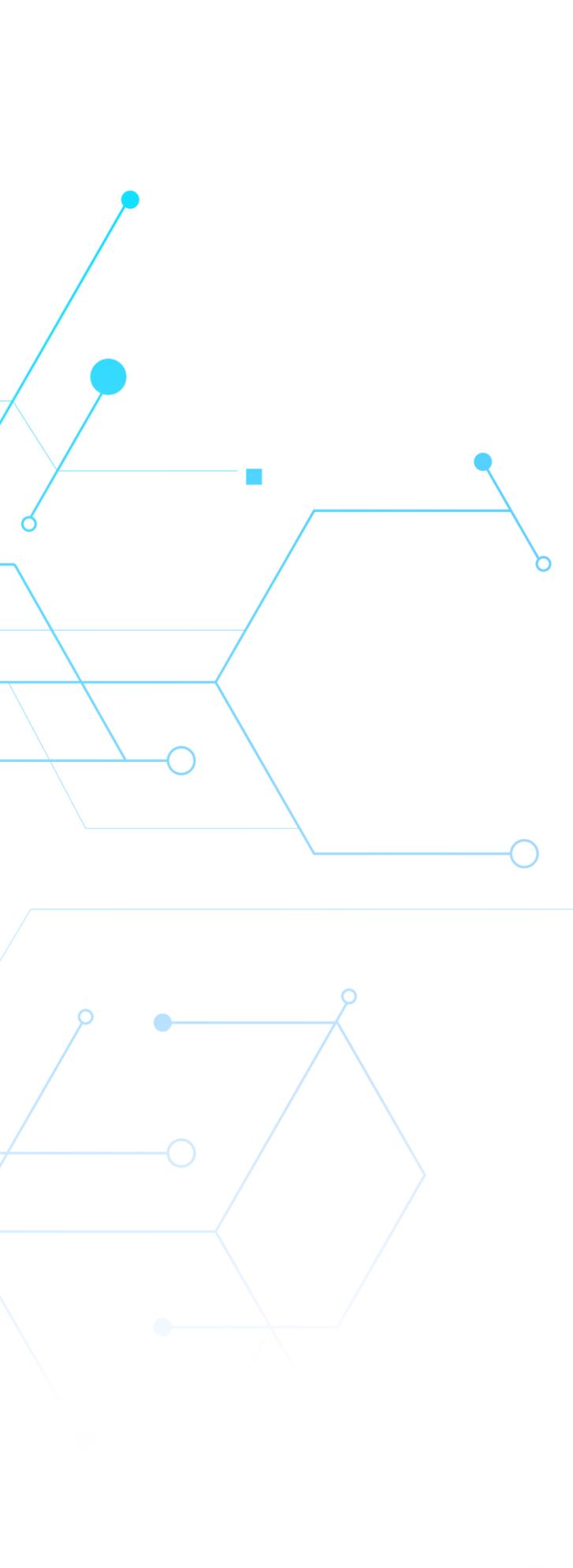


**Working Capital Roundup**

Capital freedom: Exploration of 2023 working capital trends



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## Glossary of terms



|                 |   |
|-----------------|---|
| <b>AP</b>       | Accounts payable  |
| <b>AR</b>       | Accounts receivable   |
| <b>CCC</b>      | Cash conversion cycle   |
| <b>DIO</b>      | Days inventory outstanding                                      |
| <b>DPO</b>      | Days payables outstanding                                       |
| <b>DSO</b>      | Days sales outstanding  |
| <b>EBITDA</b>   | Earnings before interest, taxes, depreciation, and amortization |
| <b>ER&amp;I</b> | Energy, resources, and industrials                              |
| <b>FCF</b>      | Free cash flow  |
| <b>GDP</b>      | Gross domestic product  |
| <b>GenAI</b>    | Generative artificial intelligence                              |
| <b>LSHC</b>     | Life sciences and health care                                   |
| <b>M&amp;A</b>  | Mergers and acquisitions  |
| <b>Q</b>        | Quarter   |
| <b>QoQ</b>      | Quarter over quarter  |
| <b>T</b>        | Trillion  |
| <b>THS</b>      | Transportation, hospitality, and services                       |
| <b>TME</b>      | Telecom, media, and entertainment                               |
| <b>TMT</b>      | Technology, media, and telecommunications                       |
| <b>WC</b>       | Working capital   |
| <b>YoY</b>      | Year over year  |

## Basis of preparation and assumptions

- We analyzed the financial and WC performance of publicly listed companies in the United States<sup>1</sup> with data publicly available as of March 20, 2024.
- Our analysis included 2,507 companies, looking at their WC performance and related key indicators.
- We also analyzed shifts in performance on a quarterly and annual basis.
- Due to the 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 2022 to Q4 2023)<sup>2</sup>

Change in revenue



Change in EBITDA



Free cash flow



Change in DSO



Change in DIO



Change in DPO



# Executive summary (cont.)

## Overview

In this year's edition of the annual Working Capital Roundup, Deloitte conducted an analysis of the working capital (WC) performance of more than 2,500 companies across four primary industries to obtain an understanding of the trends and shifts across AR, inventory, and AP. Additional metrics, such as FCF and cash from operations, among others, were included to provide an in-depth insight into the overall financial health and stability of such companies. The performance was analyzed with the backdrop of an economic environment of record-high interest rates, elevated inflation, and challenging macroeconomic conditions.

Since the pandemic, **corporations have largely maintained their profit margins**, leveraging the recent decrease in some raw materials and energy costs. They have further shown their pricing power by transferring a portion of cost inflation onto consumers.<sup>3</sup>

Such companies, bolstered by improved performance and substantial cash reserves accumulated during the pandemic era's lower interest rates, have enjoyed financial resilience in recent years. However, factors such as **rising interest rates, volatile commodity prices, escalating labor costs, and growing geopolitical tensions have contributed to a noticeable performance slowdown** among the companies analyzed. Consequently, their financial stability has seen a gradual decline.

Data from 2023 indicates that, although **revenue experienced a growth of 1.6% YoY** and a significant increase of 15.1% since 2021, there was a slight decline in net income by 0.7%. Furthermore, the **FCF as a percentage of revenue also decreased, falling from 8.6% to 7.9% over the same period.**

As highlighted in the latest Global Financial Stability Report,<sup>4</sup> there's an **observable upswing in bankruptcy rates** in both Europe and the United States. This trend indicates deteriorating conditions, primarily affecting smaller businesses. In the United States specifically, rating downgrades have begun to outpace upgrades, and default rates have been gradually climbing. This is partially due to the diminishing effects of fiscal support measures introduced post-pandemic.

# Executive summary (cont.)

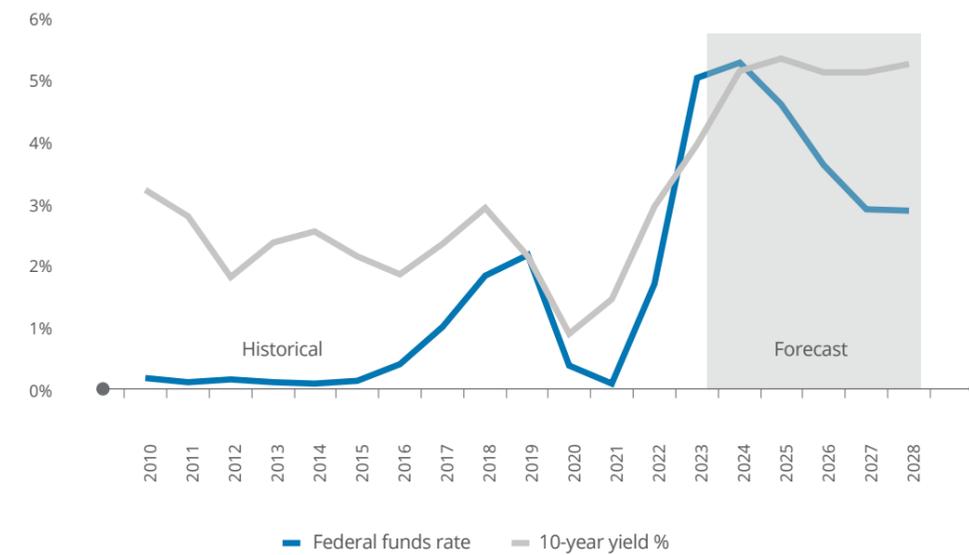
## Overview (cont.)

Despite an overall positive macroeconomic outlook for the United States—evident in an anticipated GDP growth exceeding 2% in 2024, projected inflation decrease to 2% next year, potential interest rate cuts, and low unemployment rates—companies must prepare for ongoing pressure in 2024.<sup>5</sup> Factors such as **dwindling consumer demand, shrinking margins, escalated inflation, increased interest rates, and a shortage of liquidity and credit availability** are likely to challenge their financial health.<sup>6</sup>

Companies with low cash-to-interest ratios are especially vulnerable. Over the past two years, these ratios have seen a rebound, implying that **reduced cash reserves could lead to difficulties in repayments.**

In 2024, **global corporate refinancing needs are expected to exceed \$5 trillion**, with US companies accounting for roughly half of this amount.<sup>7</sup> Although refinancing may not pose an immediate issue for the average corporation in most countries—given that the tenor of outstanding debt spans longer than six years—certain companies may need to refinance as early as next year.

Cash is becoming more expensive due to interest rates at 15-year highs



- **High interest rates are forecasted to persist** for the next couple years (assuming nothing breaks in the economy in the meantime).
- Higher interest rates result in an **elevated cost of capital and a significant impact on cash/debt.**

## Impact of the economic slowdown on key financial metrics

- Following two prosperous years where revenue growth soared to 22.2% in 2021 and 13.3% in 2022, the **companies analyzed saw a significant deceleration in growth, plunging to 1.6% in 2023**. While most industries experienced growth rates between 3.0% and 6.6%, the ER&I industry bucked the trend with a decrease of 5.4%. This decline was particularly pronounced in the energy and chemicals sector, which fell by 11.0%. This downturn largely served as a corrective phase following the sector's extraordinary revenue growth of 50.0% and 30.4% in 2021 and 2022, respectively.
- Both the consumer and TMT industries succeeded in converting enhanced revenue and margins into improved EBITDA margins, witnessing increases of 7.2% and 8.5%, respectively. They also boosted net income, adding 28.8% and 26.2% in 2023, respectively. However, this remarkable net profit surge merely compensated for the previous year's losses. **Compared to 2021, the consumer industry only saw a modest growth of 6.9%, while TMT lagged 10.1% behind 2021.**
- The remaining two industries, **ER&I and LSHC, faced declines across gross margin, EBITDA, and net income YoY**. For LSHC, the EBITDA margin and net income notably decreased by 18.4% and 35.0%, respectively, over the past two years.
- The mixed results have adversely affected the financial health of companies, despite some YoY improvements that primarily served to offset losses from preceding years. **Cash and cash equivalents saw an increase of 6.6%, but remain 3.7% below the 2021 level**. Net debt has surged for the second consecutive year, growing by 6.0% following a 9.5% increase in 2022 across all industries.
- While FCF saw an increase of 14.6% in 2023, the **FCF as a percentage of revenue only saw a modest improvement of 0.9%**. This figure is still trailing behind the levels of 8.7% and 8.6% observed in 2020 and 2021, respectively.
- This trend suggests that **companies might be grappling with managing their debt levels and generating cash from their operations**. The increased borrowing activity, operating losses, and higher interest payments could be indicative of potential financial strain.
- The WC performance, as measured by the **CCC, worsened YoY by 1.3 days**. This decline follows an increase of 3.0 days from the previous year, primarily attributable to a 0.9-day increase in DIO and a 0.7-day decrease in DPO.

## Impact of the economic slowdown on key financial metrics (cont.)

- The consumer and LSHC industries saw improvements in their CCC by 0.5 and 1.7 days, respectively. In contrast, the ER&I and TMT industries experienced a deterioration of 7.8 and 3.8 days, respectively.
- A notable **59.2% of companies observed a worsening in CCC**, with the most significant proportions evident in the TMT (62.9%) and ER&I (64.1%) industries.
- When evaluating CCC performance by revenue size, a consistent decline was apparent across all revenue categories. This ranged from 57.1% in companies boasting a revenue size exceeding \$10 billion, to 62.8% in companies with revenues falling between \$5 billion and \$10 billion.

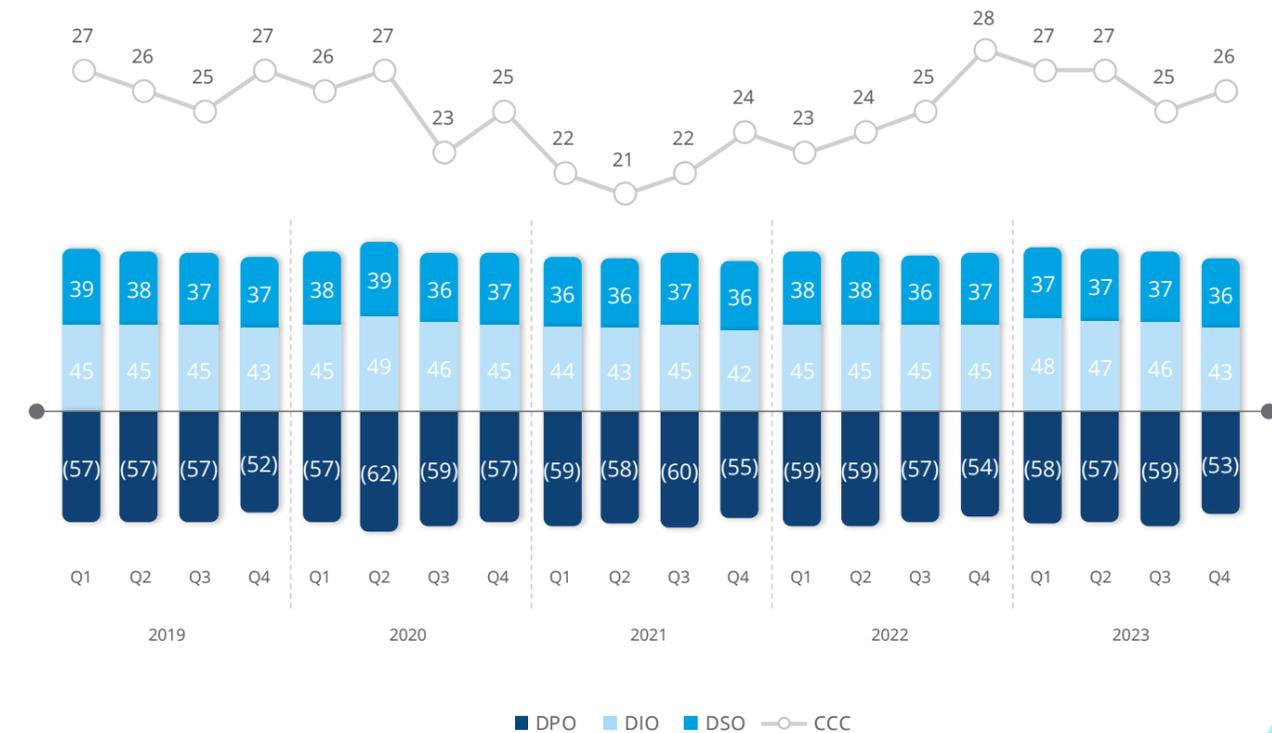
### Impact on key financial metrics – Annual view

| Metric               | 2021      | 2022      | 2023      | Change YoY  |
|----------------------|-----------|-----------|-----------|-------------|
| Revenue              | \$16.5T   | \$18.7T   | \$19.0T   | 1.6% ↑      |
| EBITDA               | \$2.9T    | \$3.2T    | \$3.2T    | 1.1% ↑      |
| Net Income           | \$1.5T    | \$1.4T    | \$1.5T    | 6.9% ↑      |
| Cash from operations | \$2.3T    | \$2.4T    | \$2.7T    | 11.9% ↑     |
| Free cash flow       | \$1.4T    | \$1.3T    | \$1.5T    | 14.6% ↑     |
| FCF as % of revenue  | 8.6%      | 7.0%      | 7.9%      | 0.9pp ↑     |
| CCC                  | 22.5 days | 25.5 days | 26.8 days | 1.3 days ↑  |
| DSO                  | 37.3 days | 38.0 days | 37.7 days | -0.3 days ↓ |
| DIO                  | 44.6 days | 46.3 days | 47.1 days | 0.9 days ↑  |
| DPO                  | 59.3 days | 58.8 days | 58.0 days | -0.7 days ↓ |

# Working capital performance

- The first quarter of 2023 brought an end to six consecutive quarters of increase in the CCC, interrupted only by a one-day decline in Q1 2022. The following two quarters of 2023 saw continued WC improvement, with **CCC reaching its lowest point in Q3 2023** before experiencing a deterioration of 1.6 days in the final quarter. Overall, CCC is down from the five-year high at the end of 2022, though it saw deterioration in Q4 2023.
- **DSO**, generally higher throughout the year with a cyclical dip in Q4, **improved by 0.6 days** YoY and only remained 0.4 days above the leading quarterly performance recorded in the past five years. This suggests companies are keeping a vigilant eye on customer payments—a trend observed across all industries.
- Q1 2023 marked a significant quarterly surge in **DIO**, escalating to 48 days—the highest level since the onset of the pandemic. However, it gradually declined throughout 2023, ending the year at 43.3 days. This **sharp reduction** was primarily driven by a 6.1-day decrease in the consumer industry, particularly the automotive and retail and consumer products sectors, which reduced their DIO by 5.3 days and 8.5 days, respectively. This could indicate inventory reductions in anticipation of an economic slowdown.
- Finally, **DPO saw a drop** in the final quarter of 2023, hitting its lowest level since Q4 2019. This significantly contributed to the deterioration in CCC across many sectors and industries.

CCC trend by quarter (days)



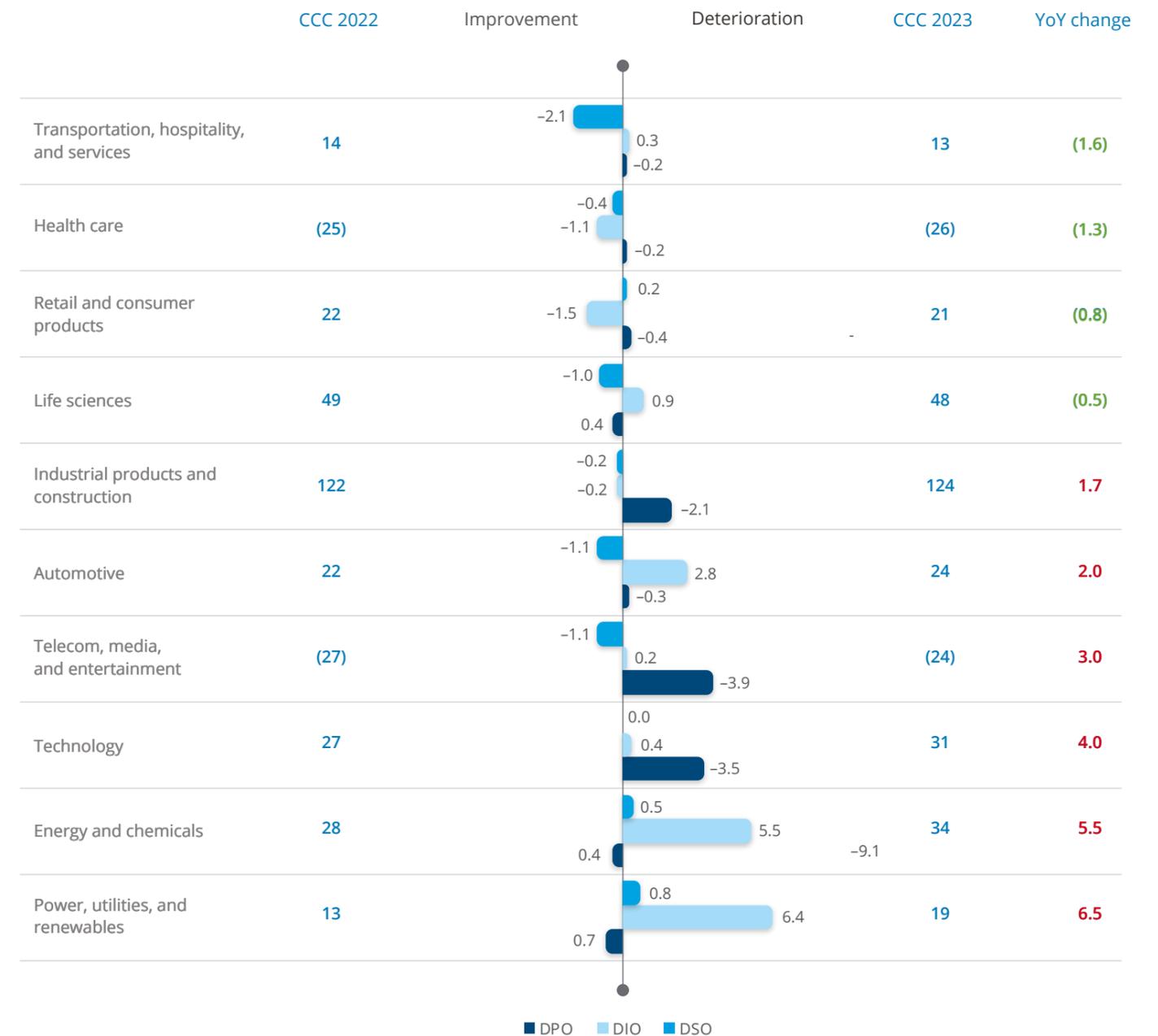
Source data: S&P Global Market Intelligence, public financial data, quarterly earnings report

DXO figures are calculated weighted averages across the sectors.

## Working capital performance (cont.)

- Recent data reveals **enhancements in WC performance across four out of 10 sectors**, experiencing gains ranging from 0.5 to 1.6 days. The remaining sectors, led by power, utilities, and renewables, experienced a decline between 1.7 and 6.5 days, primarily attributed to an increase in DIO and a decrease in DPO.
- In a unique turn of events based on prior year results, technology was the only sector that reported a decline across all cycles, **resulting in a 4.0-day drop** in CCC performance.
- In 2023, **WC performance improvement was only evident in 40.8% of the evaluated companies**. The health care and transportation, hospitality, and services sectors witnessed the most significant improvements in 56.1% and 51.8% of their companies, respectively. In contrast, a mere 28.1% of companies in the power, utilities, and renewables sector reported improvements.
- When categorized by revenue size, **companies in the \$5 billion to \$10 billion range lagged their peers** in most sectors, with 67% reporting a deterioration in CCC. The life sciences and automotive sectors were most impacted, witnessing a decline in 83% and 78% of their companies, respectively.
- **CCC improvements were predominantly observed in the transportation, hospitality, and services, and retail and consumer products sectors within the \$500 million to \$1 billion revenue category**, where 57% and 49% of companies reported improvements, respectively. However, smaller contenders in these sectors significantly trailed behind, with only 47% and 34% of them reporting improvements, respectively.

YoY changes in DSO, DIO and DPO by sector (days)



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

# Industry findings: Consumer

## Industry average 2023



- Amid looming uncertainties related to potential macroeconomic pressures, all three consumer subsectors maintained revenue growth. **Retail and consumer products grew by 2%; transportation, hospitality, and services by 5%; and automotive by 8%.**
- From a profitability standpoint, **retail and consumer products and transportation, hospitality, and services exhibited EBITDA growth at 7% and 10%, respectively.** In contrast, the **automotive sector saw a slight reversal of -4%,** as escalating inventory balances began to erode profitability. **Notably, 67% of automotive companies experienced an increase in their inventory balance** in 2023 compared to 2022, with a median growth rate of 8%.

- The median CCC expanded by 14.3 days overall, with the most significant **increase of 15 days recorded in the automotive sector.** Meanwhile, retail and consumer products and transportation, hospitality, and services sectors reported modest declines.

## CCC in days by sector from 2019 to 2023



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

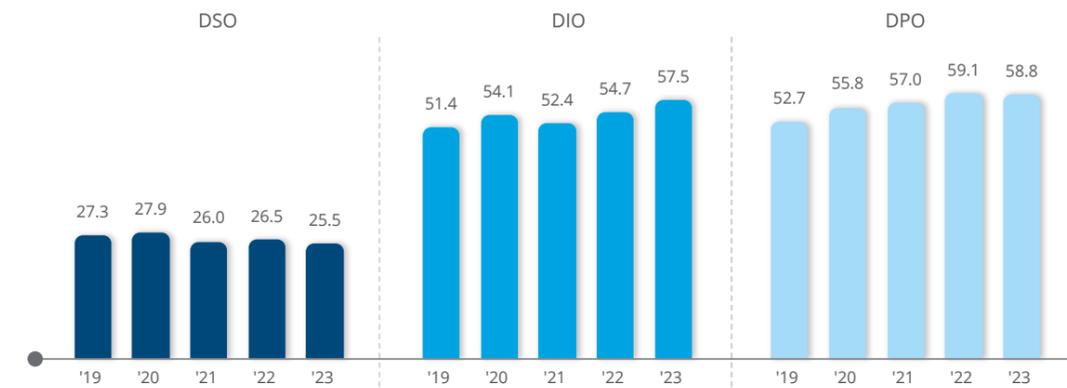
# Industry findings: Consumer (cont.)

## Analysis by consumer sector

### Automotive

- Despite strong sales in 2023, the **CCC for the automotive sector rose by 2 days**. The improvement of 1 day in DSO was overshadowed by a 2.8-day increase in DIO and a 0.3-day reduction in DPO.
- Inventory pressure remains a persistent challenge, with declining demand for electric vehicles contributing to inventory accumulation. This has prompted some manufacturers to shift production toward more profitable gasoline models.<sup>8</sup> Among the top 10 original equipment manufacturers, **nine saw an inventory increase, with a median growth rate of 18%**.

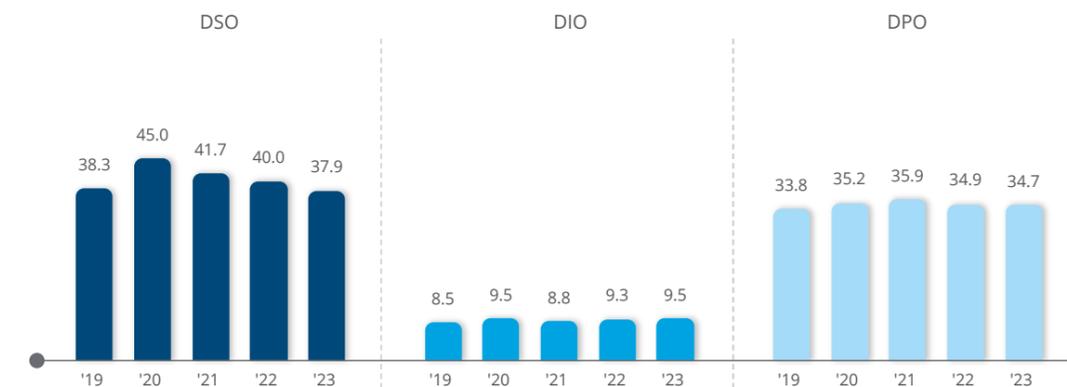
### Automotive



### Transportation, hospitality, and services

- Following two years of YoY double-digit growth post-COVID, the THS sector saw more subdued revenue gains of 5% in 2023. Both the **airlines and restaurants and food service industries showcased strong top-line growth**, with more than 80% of companies reporting an increase in 2023. However, the **transportation and logistics industry lagged**, with only 55% of companies noting revenue growth over the same period.
- With financial well-being sentiment hitting a 12-month low in October 2023,<sup>9</sup> there is lingering uncertainty regarding discretionary demand as we move into 2024.

### Transportation, hospitality, and services



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

DXO figures are calculated weighted averages across the sectors.

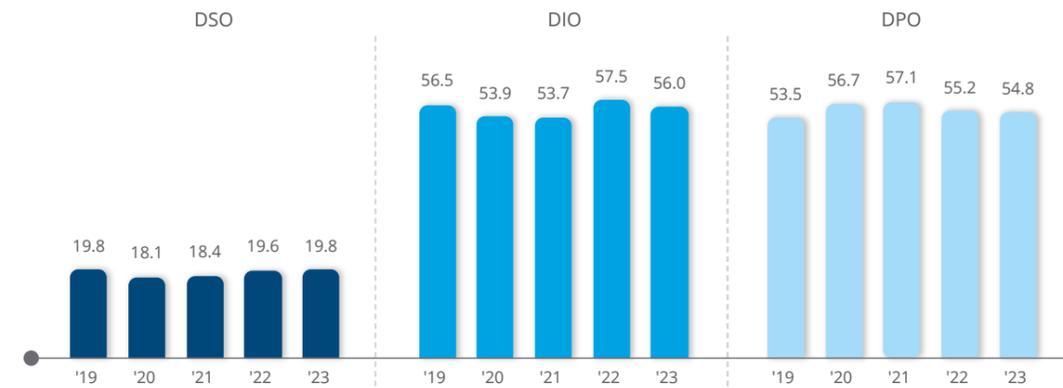
# Industry findings: Consumer (cont.)

## Analysis by consumer sector

### Retail and consumer products

- In the face of interest rates lingering at 22-year highs, the **retail and consumer products sector still managed to witness a revenue growth of 1.6%** in 2023, although at a diminished pace. With three-quarters of consumers expressing concern over escalating prices,<sup>10</sup> there's been a notable shift toward discount retailers, who reported a revenue increase of 26%. In contrast, department stores experienced an 11% decrease during the same period.
- Despite marginal revenue gains, retailers have adeptly maintained DIO at manageable levels, managing to shave off 1.5 days in 2023.

### Retail and consumer products



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

DXO figures are calculated weighted averages across the sectors.

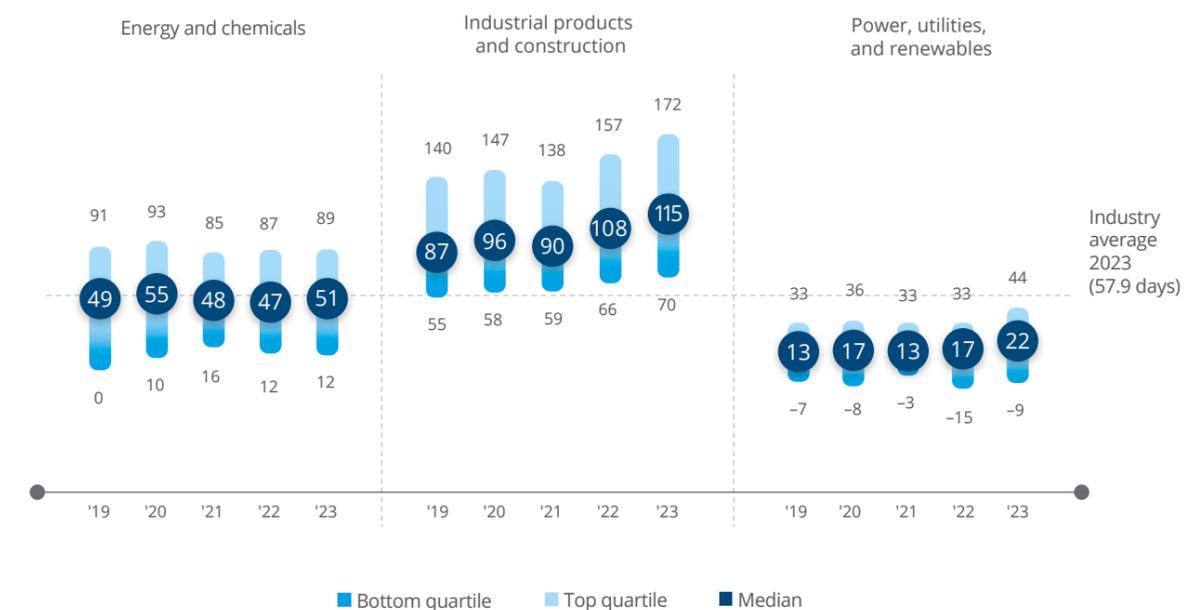
# Industry findings: Energy, resources, and industrials

## Industry average 2023



- In 2023, the ER&I sector reported a 5.4% decrease in revenue compared to the previous year.
- The **energy and chemicals sector** emerged as the primary contributor to this revenue shift, witnessing an **11% year-over-year decline**. A host of key disrupters impeded demand growth in 2023, including geopolitical uncertainties, macroeconomic conditions, the advent of new technologies, and policy and regulatory initiatives.<sup>11</sup>
- The **industrial products and construction sector** stood out as the only ER&I sector to uphold revenue growth in 2023, posting an **annual increase of 7.5%**. This was partly fueled by a surge in construction spending in manufacturing, coupled with a resurgence in product demand within the aerospace and defense industry.<sup>12</sup>
- In 2023, the **power, utilities, and renewables sector saw a 5.2% dip in revenue** compared to the previous year. This was largely attributable to the sector battling with rising input, labor, and capital costs, alongside challenges related to interconnection and permitting delays, and transmission constraints.<sup>13</sup>
- Both the industrial products and construction sector and the power, utilities, and renewables sector managed to boost or maintain their net profitability in 2023. In contrast, the **energy and chemicals sector reported a fall in net profitability YoY**, but net profit margins remain higher than the 2019–2021 time frame.
- The **ER&I sector's CCC increased by 7.8 days YoY** where the energy and chemicals and power, utilities, and renewables sectors primarily drove the CCC deterioration, driven by increases in DIO.

## CCC in days by sector from 2019 to 2023



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

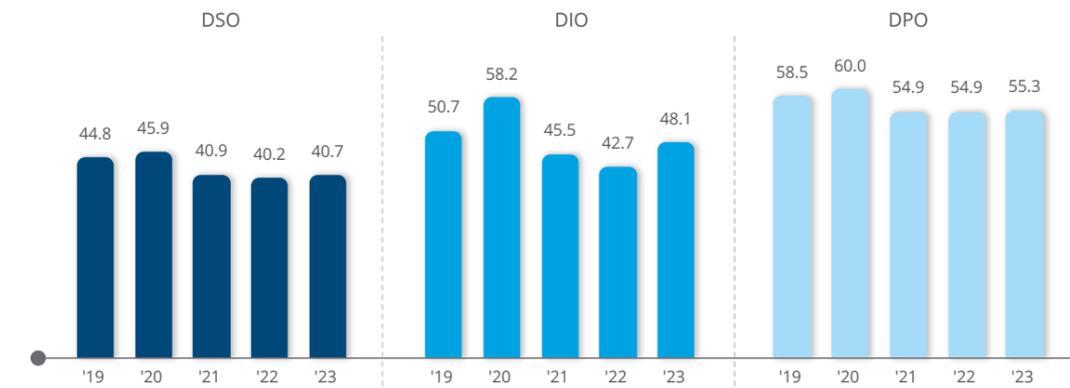
# Industry findings: Energy, resources, and industrials (cont.)

## Analysis by energy, resources, and industrials sector

### Energy and chemicals

- In 2023, the **energy and chemicals sector experienced a challenging year** in terms of both revenue and working capital metrics. The sector's CCC expanded by 5.5 days compared to the previous year, largely due to a 5.4-day increase in DIO. While the sector demonstrated significant improvements in working capital metrics in 2021 and 2022, these CCC enhancements began to reverse in 2023. More than half (56%) of the companies in the sector **experienced a DIO deterioration**, with an average increase of 13.5 days. In terms of DSO, there was a 0.5-day, or 1.2%, YoY deterioration, while DPO declined by 0.4 days, or 0.8%.
- Companies with revenues ranging from \$500 million to \$1 billion witnessed the most significant downturn (CCC increased by 11.6 days YoY), and their DIO grew by 8.5 days. This indicates that cash is being tied up for longer periods and cannot be utilized for other purposes.

### Energy and chemicals



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

DXO figures are calculated weighted averages across the sectors.

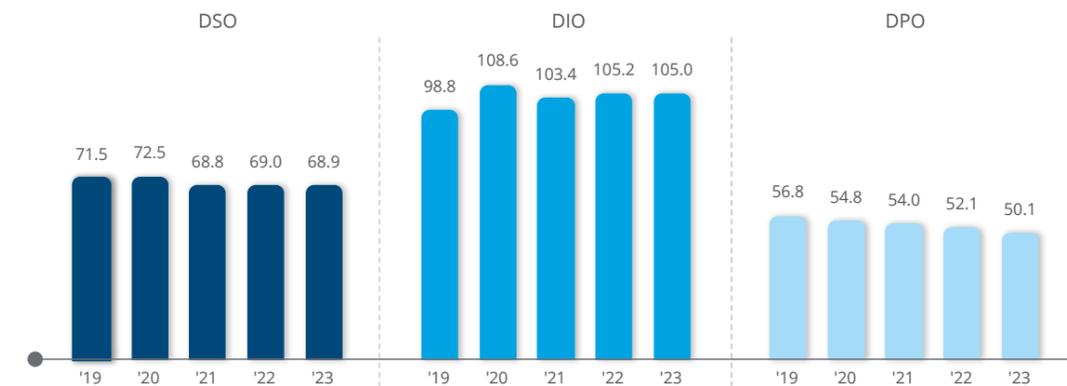
# Industry findings: Energy, resources, and industrials (cont.)

## Analysis by energy, resources, and industrials sector

### Industrial products and construction

- The industrial products and construction sector witnessed a 1.7-day surge in the CCC, primarily due to a **2.1-day decline** in DPO. Among the 61% of companies in which DPO decreased, the average deterioration was 15.8 days. This indicates an acceleration in payments made to vendors YoY. Both DSO and DIO improved marginally by 0.2 days for companies in the sector.
- Companies with revenues below \$500 million faced the most significant increase in CCC (17.3 days YoY). On the other hand, firms with revenues above \$10 billion reported slight improvements in CCC (0.3 days, or 0.2%, YoY), suggesting that larger entities in this sector might be leveraging their scale to enhance their working capital position.

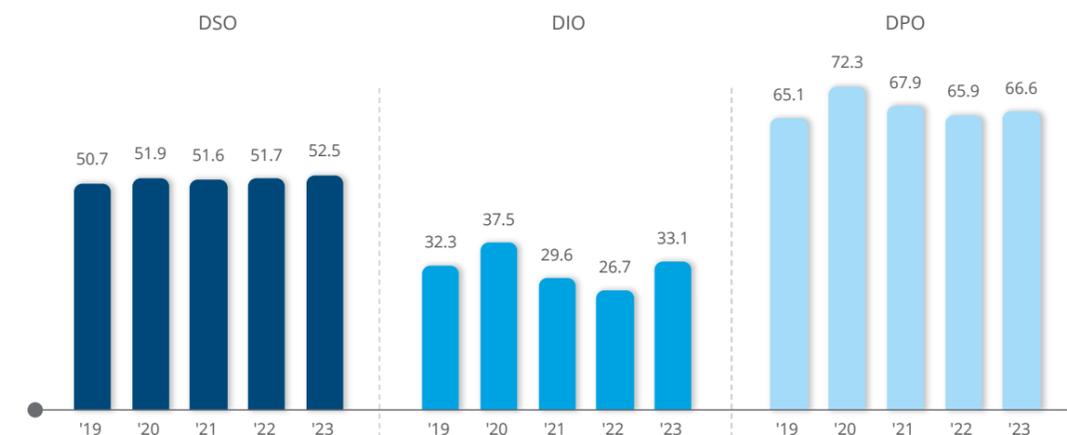
### Industrial products and construction



### Power, utilities, and renewables

- The **power, utilities, and renewables sector** faced significant setbacks in working capital performance in 2023. The **CCC saw an increase of 6.5 days**, moving from 12.5 days in 2022 to 19.0 days in 2023. This increase was primarily driven by a **6.4-day surge in DIO**. Among the companies where DIO rose (66% of the sector), the average increase was 15.6 days.
- DSO also deteriorated, with an increase of 0.8 days, or 1.6%, YoY, while DPO improved by 0.7 days, or 1.1%.
- Companies with revenues between \$1 billion and \$5 billion experienced the most significant deterioration in CCC, with an increase of 8.3 days, or 24.3%, YoY. Meanwhile, companies in the \$500 million to \$1 billion revenue range reported a 2.5-day YoY improvement in their CCC.

### Power, utilities, and renewables



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

DXO figures are calculated weighted averages across the sectors.

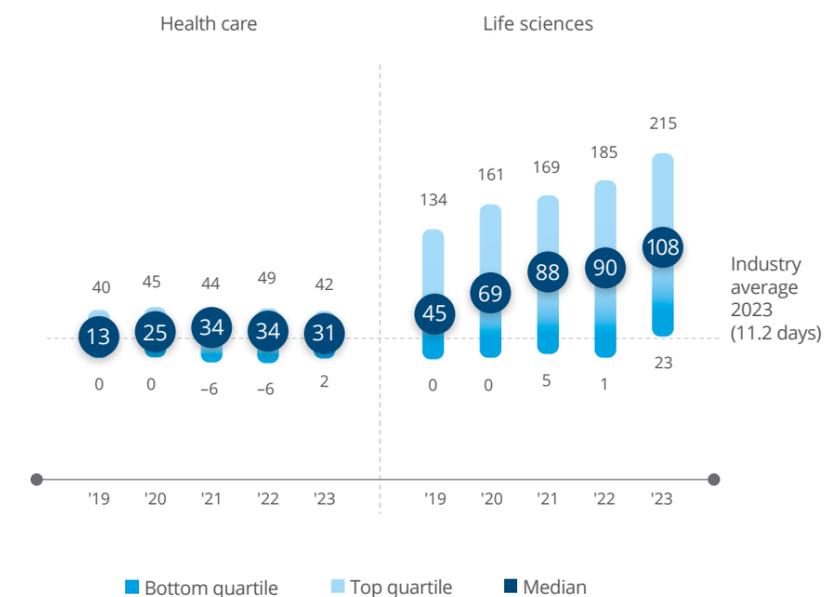
# Industry findings: Life sciences and health care

## Industry average 2023



- The **LSHC** industry saw an enhancement in working capital performance in 2023, with the **CCC decreasing by 13.2%, or 1.7 days**, YoY, thereby sustaining its momentum above pre-pandemic levels. This improvement was primarily driven by a reduction of 1.2 days in DSO and a 0.5-day decrease in DIO. Meanwhile, DPO remained relatively stable YoY.
- The **LSHC industry reported 6.6% revenue growth** in 2023, closely mirroring the 6.4% increase observed in 2022.
- Despite the drastic dip in **M&A activity** in 2022, the LSHC sector experienced a resurgence of **interest in 2023, a trend projected to persist into 2024**.<sup>14</sup>
- While the **operating cash flow declined by 13.2%** in 2023 compared to 2022, cash balances remained sufficiently strong to support additional deal activity.<sup>15</sup>
- **EBITDA experienced a significant drop in 2023, with a YoY reduction of 15.4%** from 2022. This marked a considerable downturn compared to the modest 3.5% decrease between 2021 and 2022. The decline can be attributed to a sharp reduction in demand for COVID-related vaccines and treatments in 2023, which led to reduced revenues across the sector. Additionally, profit pressures intensified within the biopharma sector, as the US government seeks to curtail drug pricing.
- Looking ahead, executives within the LSHC industry anticipate that digital transformation initiatives, including **GenAI, will begin to demonstrate positive revenue impacts in 2024**. This is expected as organizations harness the transformative capabilities of these technologies to generate value.<sup>16</sup>

## CCC in days by sector from 2019 to 2023



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

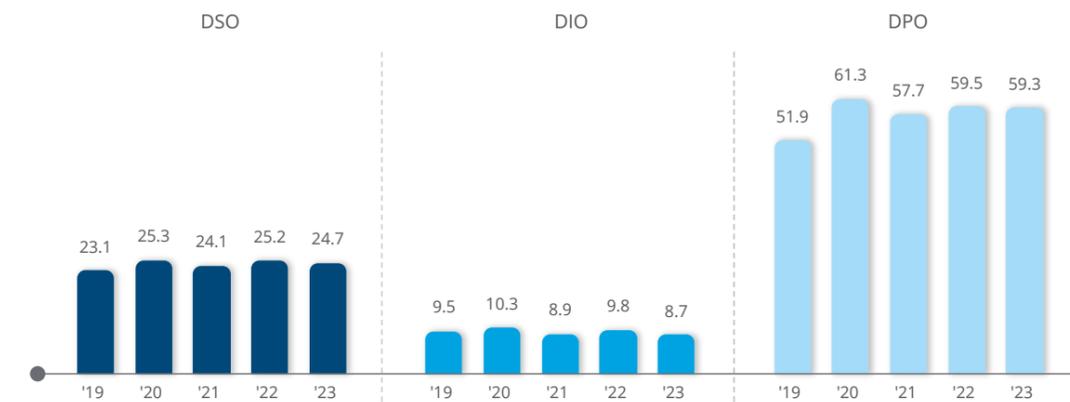
# Industry findings: Life sciences and health care (cont.)

## Analysis by LSHC sector

### Health care

- In the **health care sector**, the CCC showed a YoY improvement of 1.3 days. This improvement can be attributed to enhanced DIO and DSO performance, implying that the sector has been successful in managing its medical supply inventory and enhancing its revenue collection processes. The YoY improvement in DIO was primarily driven by the largest companies in the sector—those generating more than \$5 billion in revenue.
- However, on a quarter-over-quarter basis, the CCC performance deteriorated by 2.4 days, as both DIO and DPO presented signs of weakening. The main contributor to this decline was DPO.

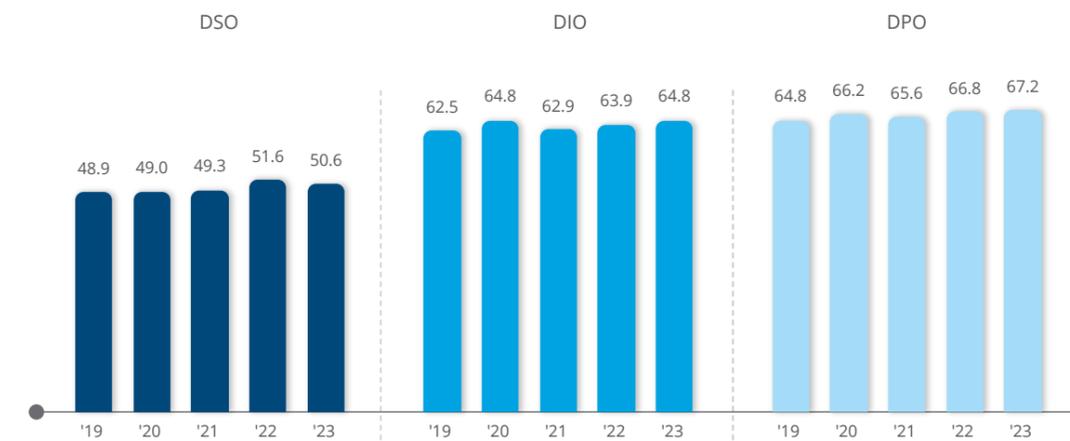
### Health care



### Life sciences

- In the **life sciences sector**, the CCC performance improved year over year by 0.5 days. This improvement was observed in both DSO and DPO, signifying more efficient collections and longer payment periods. Particularly, small- to medium-sized companies (those with less than \$5 billion in revenue) saw improvements in both DSO and DPO. However, larger companies (those with \$5 billion or more in revenue) saw only a modest improvement in DSO and a similar improvement in DPO.
- On the other hand, when considering QoQ performance, the CCC showed signs of weakening, with an increase of 5.9 days, largely attributed to the performance of DPO.

### Life sciences



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

DXO figures are calculated weighted averages across the sectors.

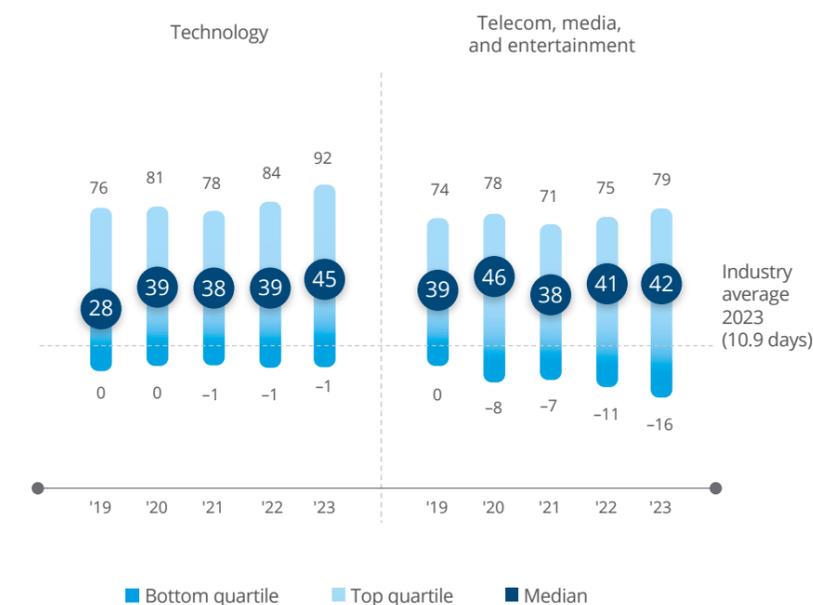
# Industry findings: Technology, media, and telecom

## Industry average 2023



- Throughout 2023, the **TMT industry witnessed a slower pace of revenue growth**, with a modest increase of 3.0%. This growth was predominantly fueled by the technology sector, which saw an expansion of 4.3%. This relatively mild performance came in the wake of two strong years, with revenue spikes of 18.9% and 6.7% in 2021 and 2022, respectively.
- Despite surpassing their record-high revenues from 2021, companies' net income still lagged 10.1% behind the 2021 level. The TME sector fell by 32.1%, while the technology sector remained 4% above the 2021 level.
- Net debt continued its upward trend in both sectors, with the technology sector witnessing an increase of more than 52%, and TME recording a 0.7% rise.
- A two-year decline in EBITDA margins and net income adversely affected the cash generation abilities of companies in the TME sector. Although there were some improvements, **cash and cash equivalents were still 29.2% lower** than in 2021, and FCF as a percentage of revenue dropped from 15.9% to 14.9% in the same period.
- The **CCC worsened by 3.8 days YoY** and by 10.6 days since 2021, largely due to the technology sector. While an increase in DIO was the main driver of CCC deterioration in 2022, the primary cause in 2023 was a 3.7-day decline in DPO.
- Looking forward to 2024, GenAI continues to be a focus in technology, with potentially far-reaching impacts across sectors and industries. The chip market for GenAI is expected to be valued at more than \$50 billion in 2024 (up from close to zero in 2022), with potential of up to \$400 billion by 2027.<sup>17</sup>

## CCC in days by sector from 2019 to 2023



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

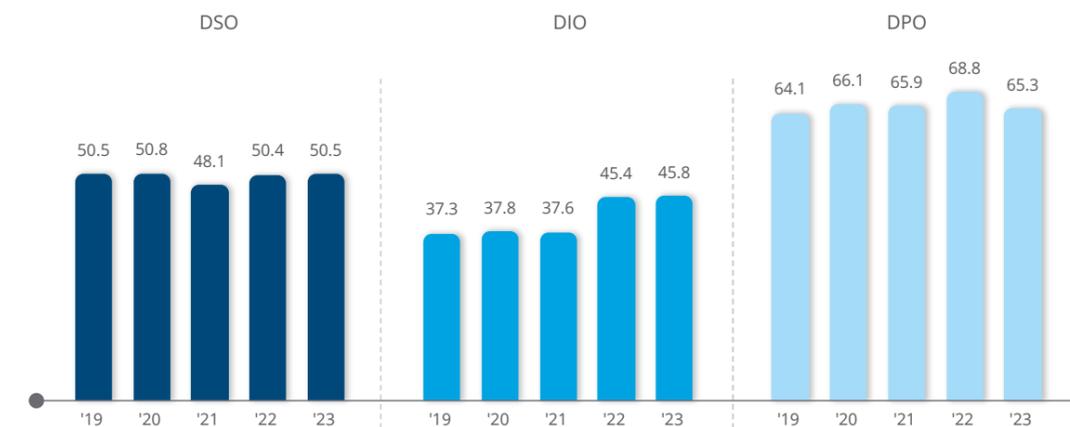
# Industry findings: Technology, media, and telecom (cont.)

## Analysis by TMT sector

### Technology

- While the **technology sector** overall saw a slight increase of 0.1 days in DSO, companies with revenues below \$5 billion experienced a much larger deterioration. These companies reported a DSO increase ranging between 2.0 and 5.6 days, with 62% of such companies indicating an increase in 2023. Conversely, the largest companies—those boasting revenues exceeding \$10 billion—managed to reduce their DSO by 0.6 days.
- DIO registered a minor YoY increase of 0.4 days, but a considerably larger uptick of 8.2 days compared to 2021. This rise was primarily driven by smaller companies with revenues below \$1 billion, with their DIO increasing by 5.8 days YoY and 14.7 days since 2021.
- DPO, however, displayed a contrasting trend. Larger companies witnessed a **decline in their DPO ranging between 1.8 and 4.1 days**, while smaller companies managed to extend their DPO by 0.1 to 2.2 days. Notwithstanding recent improvements, the DPO of these smaller companies remains 5.6 days and 11.9 days below pre-pandemic levels for companies with revenue between \$500 million to \$1 billion and less than \$500 million, respectively.
- The technology sector faced headwinds in 2023, with global spending continuing the weakening trend started in 2022, resulting in more than 260,000 layoffs to address pandemic-era hiring. Pressures to improve efficiency, reduce costs, and increase automation continue, but there is some optimism that this trend will swing in 2024.<sup>18</sup>

### Technology



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

DXO figures are calculated weighted averages across the sectors.

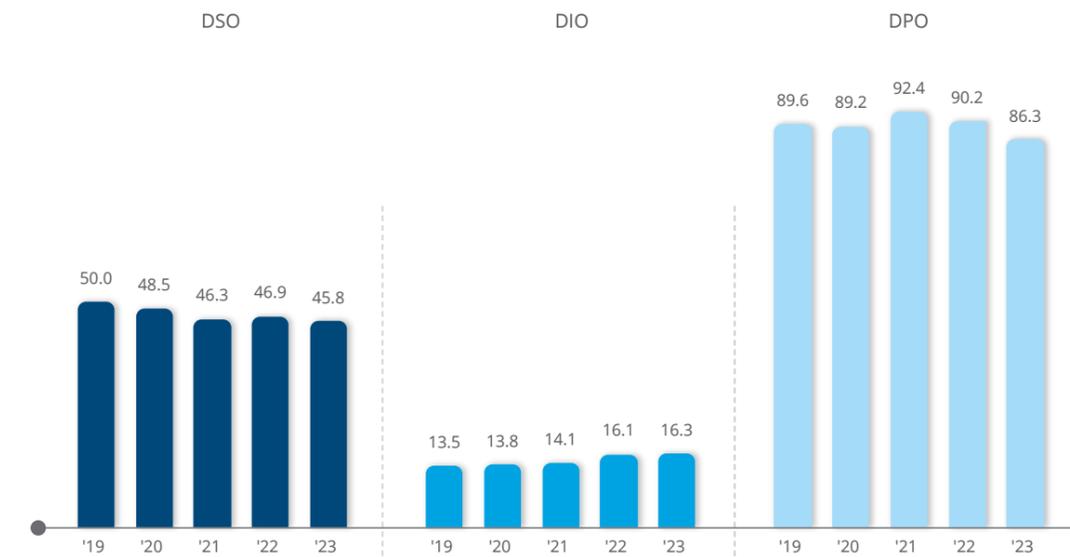
# Industry findings: Technology, media, and telecom (cont.)

## Analysis by TMT sector

### Telecom, media, and entertainment

- In 2023, the **technology, media, and entertainment sector witnessed an expansion of 3 days in its CCC**. This deterioration was evident across all revenue categories, with the exception of companies within the \$500 million to \$1 billion revenue bracket, which saw an improvement of 2.3 days.
- Year over year, the DSO showed an improvement of 1.0 day, largely attributed to larger companies that marked an improvement of 1.5 days. In contrast, companies with revenues below \$10 billion experienced a decrease ranging from 0.4 to 7.8 days.
- Particularly, companies with revenues under \$1 billion—where the DSO deterioration was most significant—aimed to counterbalance this unfavorable trend by extending their DPO. This increment ranged from 7.6 to 10.0 days, which resulted in these companies having DPO levels 21–64 days higher than pre-pandemic years, pointing toward potential cash flow and liquidity challenges. Over the past five years, these companies also saw a 40% increase in net debt, and they are presently operating with FCF below 1% of their revenue.
- Media and entertainment continue to experience a shifting landscape as consumers become more price-sensitive and selective with their streaming subscriptions. With high inflation throughout 2023 potentially continuing into 2024, companies will look to add service tier offerings to capture incremental revenue.<sup>19</sup>

### Telecom, media, and entertainment



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

DXO figures are calculated weighted averages across the sectors.

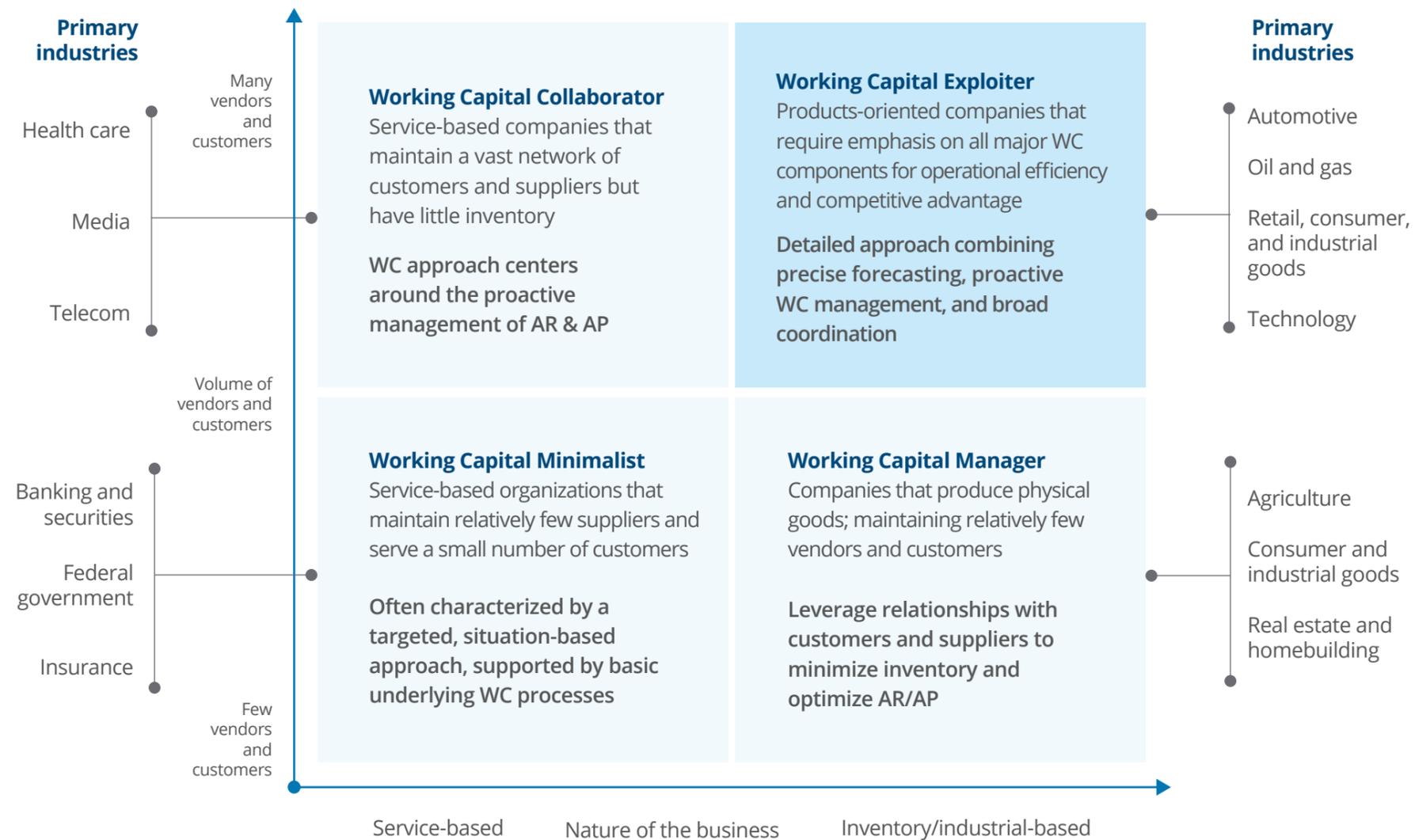
## Looking ahead: Working capital archetypes

- Overall, working capital metrics have demonstrated strong performance in 2023, with **DSO and DIO matching or beating pre-pandemic levels**, despite interest rate pressures and rising prices for raw materials and labor. **However, DPO performance has lagged and is near 5-year lows**, erasing the significant improvements seen early in the pandemic.
- The overall positive trend was buoyed by companies in the more than \$10 billion revenue range, specifically in consumer and LSHC, which saw 0.9- and 1.8-day CCC improvements, respectively. Smaller companies (less than \$10 billion revenue) saw eroding CCC across all industries in 2023.
- **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.**

# Looking ahead: Working capital archetypes (cont.)

## Working capital archetypes

Four distinct archetypes exist as companies execute the WC optimization process. Increasing capability levels are required as companies move toward the top. Different levels of WC investment and trade-offs are required depending on the target archetype aspiration chosen (e.g., inventory, staffing, and technology).



Companies may fall into more than one archetype across their business. Most companies will be working capital collaborators in at least part of their business.

# Looking ahead: Impact of Generative AI



Generative AI has the potential to **reduce the marginal cost of generating knowledge-intensive<sup>20</sup> content significantly**. It has the potential to facilitate the creation of new ideas and information at a faster rate.



Generative AI could **augment existing roles and create new jobs**. In addition to **software engineering skills**, the following roles will likely become essential:  
**Prompt engineers · Full-stack cloud-native software engineers · AI engineers · Fine-tuning specialists · LLM ops managers · UI/UX designers · Hardware/GPU specialists**

## Industry-specific use cases

There are transformative Generative AI use cases specific to each industry that could **enable revenue growth and/or expense reduction**

### Consumer

- Ad and marketing creation
- Personalized recommendations
- Product design
- Product attribution
- Store layout optimization
- Virtual try-on
- Website content creation
- Trade promotion optimization
- Artificial mod

### Life sciences and health care

- Drug discovery
- Medical imaging
- Personalized medicine
- Precision diagnostics
- Synthetic control data generation
- Medical coding
- Automated regulatory compliance

### Energy, resources, and industrial

- Design optimization
- Development of site plans
- Predictive maintenance
- Supply chain and process optimization
- Quality control
- Resource allocation
- Virtual field assistant
- Personalized OHS training

### Technology, media, and telecom

- 3D assets for video games
- Ad and marketing creation
- Audio translations
- Content creation and localization (e.g., scripts, videos, music)
- Telecoms network optimization
- Semiconductor chip design

### Financial services

- Customer segmentation
- Financial forecasting
- Fraud detection
- Loan underwriting
- Portfolio optimization
- Automated claims reporting
- Real-time risk management

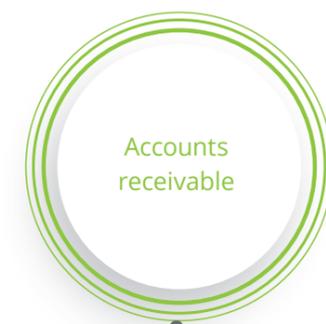
### Government and public services

- Fraud, waste, and abuse prevention
- Regulation and oversight
- Open-source intelligence and sensemaking
- City planning
- Report generation
- Knowledge management
- Policy development copilot
- Hyper-personalization

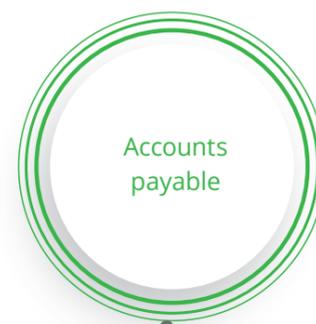
## Looking ahead: Impact of Generative AI (cont.)

### Several use cases exist to leverage Generative AI within working capital and cash flow management

Generative AI can be a powerful tool in working capital management, with an ever-increasing number of use cases, including:



- Invoice generation and distribution
- Automatic payment tracking
- Predictive behavior analysis
- Automated reminders and collections
- Reconciliation automation



- Invoice processing
- Automated approvals
- Payment timing reminders
- Payments for early discounts
- Reconciliation automation



- Inventory management and demand forecasting
- Replenishment planning
- Inventory classification
- Safety stock optimization
- Supply chain disruption management



- Cash flow forecasting
- Scenario modeling
- Anomaly detection
- Revenue forecasting
- Expense forecasting

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## Endnotes

1. Companies could be headquartered in countries other than the United States.
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