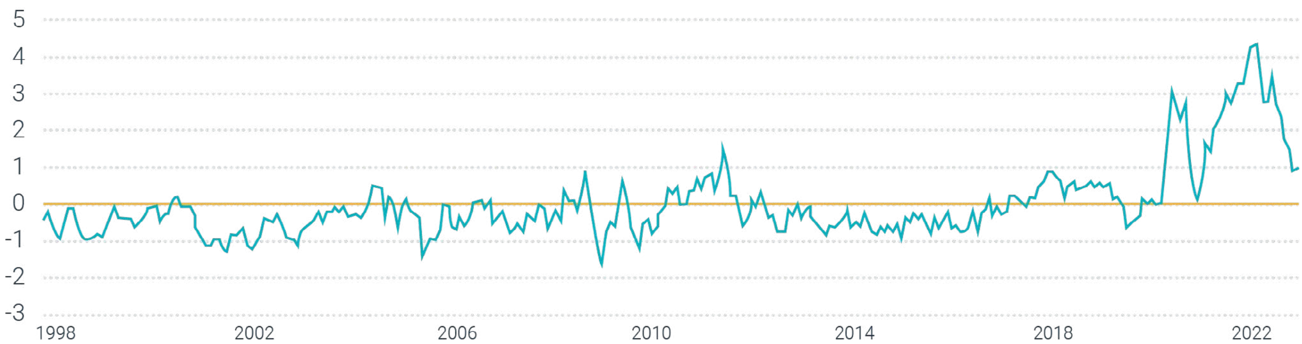
Managing Working Capital:

Returning to a Strategic, End-to-End Approach

It goes without saying that the past few years have provided a roller coaster ride of disruptions of all kinds, manifested by sudden spikes or drops in demand and shortages or surpluses in supply. Executives and planners are still attempting to readjust to "normal" operations, though uncertainty continues to cloud the future. Forecasting and planning remains a challenge. And the implications for future working capital management policy and practice are difficult to discern.

Are we getting back to normal? According to the Global Supply Chain Pressure Index[1] published by the Applied Macroeconomics and Econometrics Center, the level of disruptions in supply chains is moderating (see Exhibit 1 below). The "Pressure Index" is created by combining a host of different production, transportation and economic metrics. While the current trend suggests lowered levels of volatility, most supply chain managers believe that some shortages and serious disruptions will continue throughout 2023.

Exhibit 1
Global Supply Chain Pressure Index



Sources: Bureau of Labor Statistics; Harper Petersen Holding GmbH; Baltic Exchange; IHS Markit; Institute for Supply Management; Haver Analytics; Refinitiv; authors' calculations.
Notes: GSCPI readings for the most recent months can be revised as realized data become available, replacing the imputed values generated through principal component analysis. Further, for some series, mainly the BLS airfreight cost indices, each new release comes with revisions to up to twelve months of previous data. Thus, revisions can have an impact up to a year back in time.

Seizing the opportunity

As global business starts to even out, working capital managers can view this period as an opportunity to revamp their approach in order to maximize the productivity of capital and efficiency of related processes, but also, importantly, to improve the impacts of working capital management on business partnerships and alliances. To investigate the current state and possibilities going forward, Esker partnered with faculty at TCU Neeley Business School's Center for Supply Chain Innovation (CSCI) to conduct research. The following sections of this report provide data and insights from a survey of working capital managers (see sidebar "About the Research") along with prescriptions for a more strategic, end-to-end approach to this set of important business functions.

1. https://www.newyorkfed.org/research/policy/gscpi#/interactive

About the Research

In mid-2022, Esker SMEs worked with faculty at TCU's Center for Supply Chain Innovation (CSCI)[2] to develop and administer a survey of managers responsible for overseeing working capital and supply chain operations. The goals of the research were first to understand how levels of working capital elements, including inventory, cash, accounts receivable and payable, had varied throughout the pandemic period. Second, the research was designed to uncover managers' responses to recent dynamics, as well as their concerns and planned changes to working capital management policies and procedures going forward.

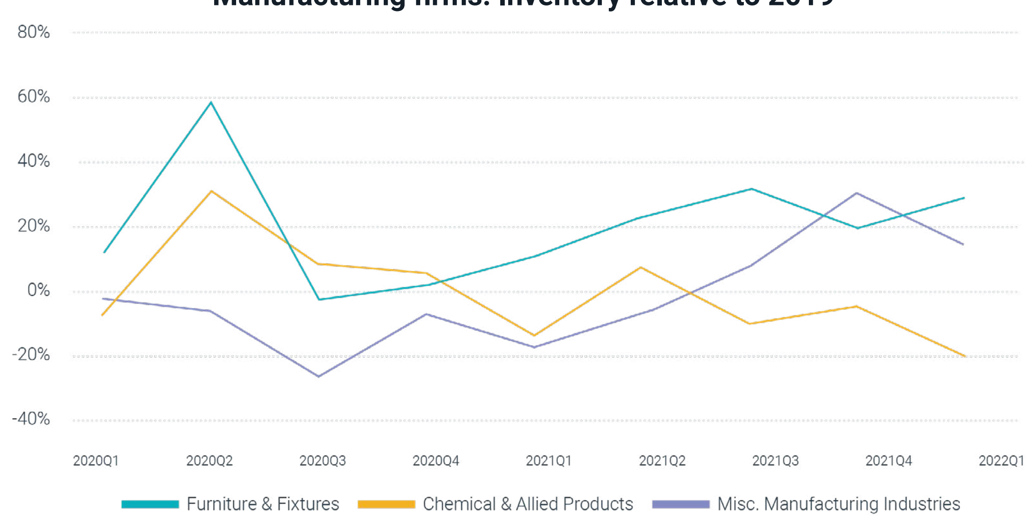
Researchers sent the survey to a selected sample of Esker's clients and the CSCI's network of business partners. In addition, the research survey was announced on the media platform, Supply Chain Now[3]. One hundred and forty managers provided complete responses to the survey. Respondent titles included: Accounting director, Business analyst, CFO, CSCO, COO, Director of operations, Financial controller, and VP finance. The respondents provide a fairly representative sample of small, medium sized, and large firms, spread across manufacturing, distribution, and retail industries.

In addition to the survey data, researchers collected financial data for public firms. These data provide a broader look at trends in working capital.

Industry trends through the pandemic

Working capital levels across manufacturing industries experienced wide swings throughout phases of the pandemic in 2020 and 2021. The trends of inventory levels in three different industries provide an interesting contrast of the ways that the pandemic affected working capital in various sectors of the economy. Exhibit 2 below provides median inventory trends for each industry sector throughout the pandemic period (2020 – 2021). The inventory level (inventory/sales) in each quarter is shown as a percentage above or below the inventory level in the same quarter in 2019, before the start of the pandemic. Furniture manufacturers started with somewhat higher inventories in 2020, then demand dropped in Q2 2020, causing a spike in inventories to over 60% of 2019 levels. As furniture demand rebounded in Q3 inventories fell. In response to the rapid increase in demand, manufacturers over ordered and found themselves sitting on historically high levels of inventory in early 2022. Inventory levels continue to be abnormally high today. This is an example of the classic "bullwhip effect," where shifts in demand cause delayed and sometimes excessive responses in supply. Inventory trends in the miscellaneous products industry (games, toys, sports equipment) saw a similar pattern, though there was no initial drop in demand in Q1 2020. Instead, surging demand throughout latter part of 2020 caused inventories to drop below 2019 levels. Like the furniture industry, a significant overreaction to the rapid spike in demand has led to historically high levels of inventory today. In contrast to these two industry sectors, the chemicals industry experienced a different pattern. Initial slowdowns in demand were followed by increasing demand. However, continued supply shortages in critical elements have more recently dropped inventories to historically low levels.

Exhibit 2
Manufacturing firms: Inventory relative to 2019



2. https://www.neeley.tcu.edu/Page/Center-for-Supply-Chain-Innovation/2a7e8828-6488-4f6c-bf89-e3abd4a6412d

3. https://supplychainnow.com/

These same sorts of demand-supply mismatches have led to volatility in all elements of working capital. For example, levels of cash throughout 2021 averaged more than 200% of 2019 levels in some industries. Exhibit 3 shows the average levels of working capital elements in early 2022, relative to their 2019 values. Overall, average inventories are about 6% higher while cash holdings are 30% higher, but the variance in levels of these accounts across industries is notable. Variances in levels of accounts receivable and payable across industries are not as large. However, the overall averages suggest that manufacturers are collecting payments from customers a little faster, while paying their suppliers somewhat slower. A policy of slower payments to suppliers actually follows upon a multi-decade trend in which manufacturers and retailers have steadily lengthened their payables terms[4]. Interestingly, research indicates that "slow-pay" buyers are less profitable than other firms that offer more favorable terms.

Reassessing working capital

In most firms, global disruptions and associated volatilities have thrown working capital out of kilter with strategic goals. In our research survey, 87% of respondents indicated they were not well prepared to manage the pandemic. About half said that major changes to working capital throughout the period were unintentional (resulting from market forces). While some firms managed working capital more intentionally than others, almost all respondents to our survey (85%) indicated that managing working capital has become at least moderately important. In fact, the majority (60%) said that working capital management has become very important or extremely important, relative to other issues the organization is facing.

Exhibit 3
Q1 2022 Working capital levels - Percent increase/decrease over 2019

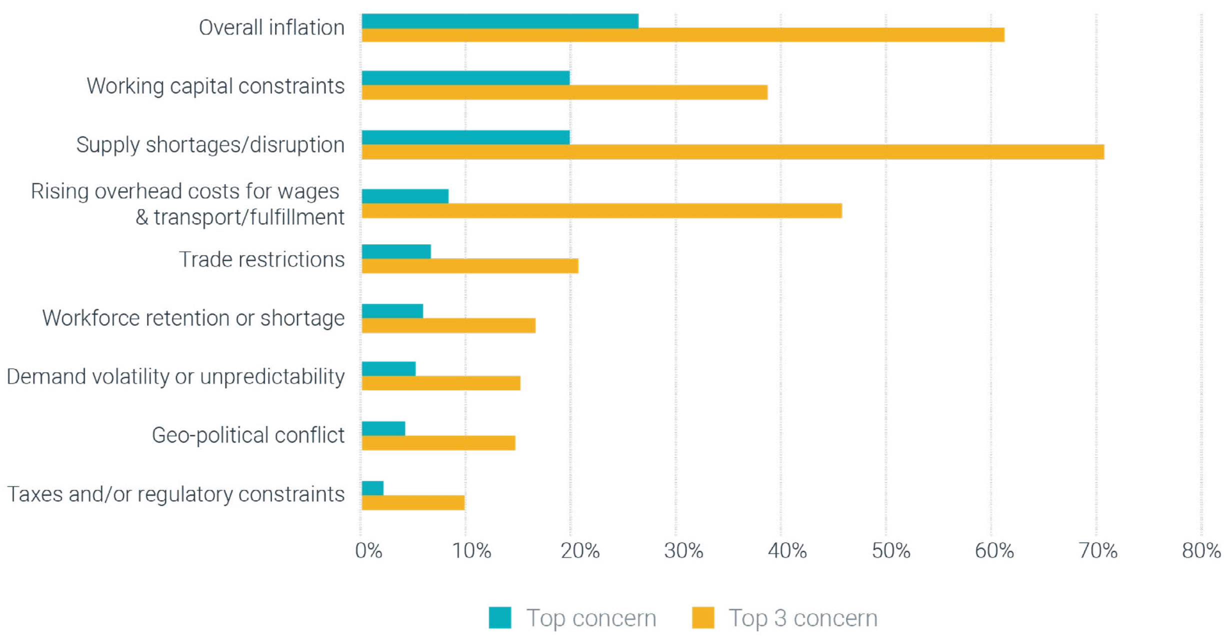
	Inventory	Cash	AR	AP
Furniture & Fixtures	28.9%	21.9%	-7.2%	2.0%
Instruments & Related Products	20.4%	26.7%	-8.2%	18.8%
Leather & Leather Products	16.4%	-17.1%	4.4%	48.7%
Miscellaneous (Games, Toys, Sports Equipment)	14.5%	-63.9%	-7.1%	34.9%
Electronic & Other Electric Equipment	13.2%	7.5%	-7.5%	18.7%
Transportation Equipment	13.2%	40.9%	-10.8%	1.3%
Industrial Machinery & Equipment	10.7%	-6.7%	-2.3%	8.3%
Rubber & Miscellaneous Plastics Products	9.6%	111.2%	-11.9%	13.7%
Primary Metal Industries	8.0%	39.9%	8.5%	12.7%
Printing & Publishing	6.6%	38.0%	-12.8%	-8.1%
Fabricated Metal Products	6.4%	41.5%	-6.4%	14.9%
Lumber & Wood Products	4.1%	103.6%	-10.5%	4.4%
Food & Kindred Products	1.6%	9.7%	-3.5%	5.6%
Paper & Allied Products	-1.1%	5.0%	-2.0%	14.7%
Apparel & Other Textile Products	-1.6%	48.5%	-25.5%	26.3%
Petroleum & Coal Products	-3.1%	24.3%	12.5%	17.5%
Tobacco Products	-6.2%	48.3%	-8.1%	20.0%
Textile Mill Products	-8.4%	100.1%	-2.9%	13.3%
Stone, Clay, & Glass Products	-17.3%	74.2%	-4.9%	50.4%
Chemical & Allied Products	-20.6%	5.9%	-5.8%	-6.9%
Average	**4.8%**	**33.0%**	**-5.6%**	**15.6%**

4. Kovach, J.J., Swink, M., and Rodrigues, M. (2022). Delaying supplier payments to increase buyer profits, Journal of Supply Chain Management, 1-22. https://doi.org/10.1111/jscm.12293

An important driver of the importance of working capital management strategies is the remaining uncertainty in both demand and supply markets. When asked to identify the business challenges causing greatest concerns (Exhibit 4), managers most frequently identified inflation as their top worry. Supply shortages and disruptions occurred most frequently in the top three most important concerns. Rising overhead costs were also reported to be top of mind. Importantly, almost 40% of respondents noted that working capital constraints were among their top three causes for concern. As the previous trend analysis showed, firms are dealing with too much or too little cash and inventory, depending on which side of the demand-supply pandemic pendulum their firms experienced. Exhibit 4 identifies additional issues that continue to make for a highly unpredictable operating environment. Working capital is both a "result of" and "solution to" market dynamism. The demand and supply shocks we've experienced over the past few years have caused wild swings in levels of working capital components. But, when managed holistically and strategically, working capital can be a resource used to buffer operations and maintain or even improve trade partnerships in turbulent times.

Exhibit 4

What future macro level business challenges are causing you the most concern?

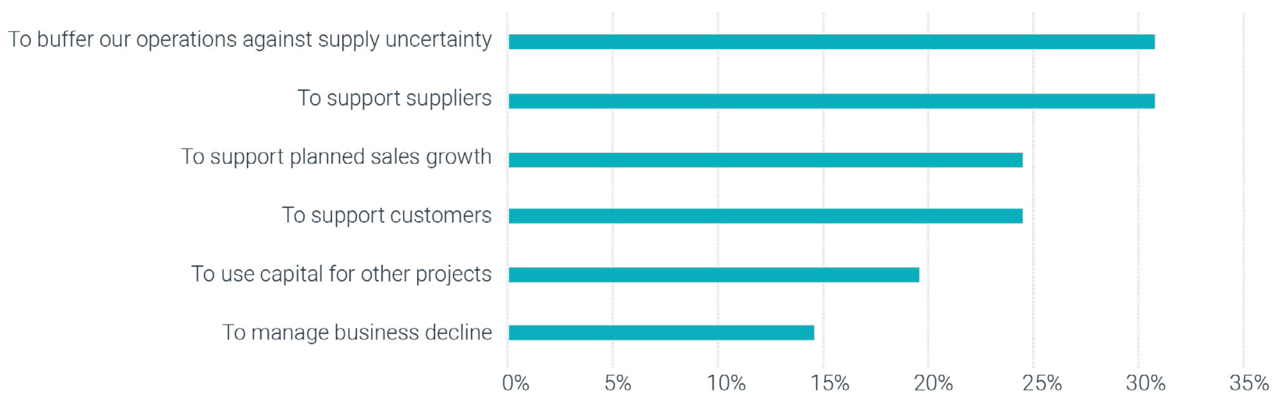


How working capital managers are responding

Our survey results revealed a wide separation between firms that are aggressively managing working capital as a strategic resource and those that continue to operate in a mostly reactive mode. For those firms that are more intentional in adjusting working capital levels, buffering their operations from demand and supply uncertainties appears to be a primary motivation. Exhibit 5 shows the frequencies of respondents who indicated various motivations for making changes to working capital. Beyond raising levels of inventory and cash to guard against uncertainty, managers indicated that they adjusted levels of receivables and payables in order to support their customers and suppliers during challenging times. The results also point to the roles of working capital in managing growth or decline over the period.

Exhibit 5

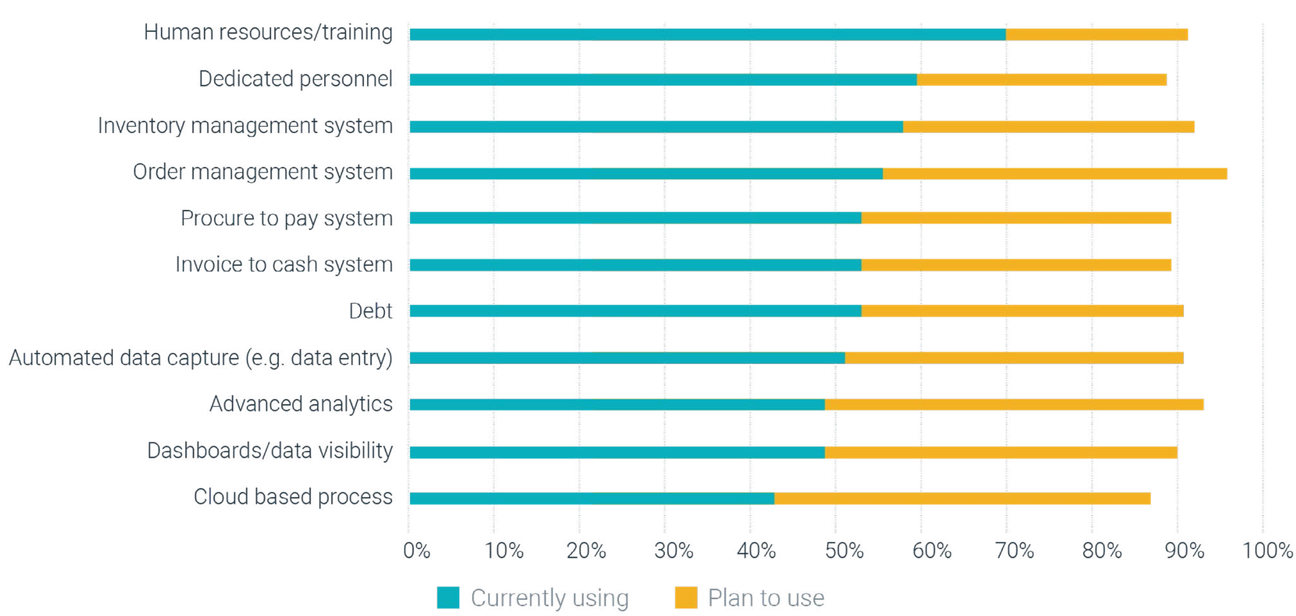
What are your firm's motivations for raising or lowering levels of working capital versus before the pandemic?



Less than 30% of respondents said that they have made more than a moderate amount of progress in improving working capital processes (procure-to-pay; order-to-cash; order management) through the pandemic, while another 30% said that made virtually no progress at all. As shown in Exhibit 6, most tactics for improving working capital processes have been internally, personnel oriented. About two-thirds of respondents indicated that providing better training and assigning more dedicated roles for personnel were the primary tactics they are using to improve working capital. Significantly fewer firms have made substantial investments in advanced analytics, data visibility or cloud-based processes, though almost 90% of respondents say they are doing this or at least plan to do so in the future.

Exhibit 6

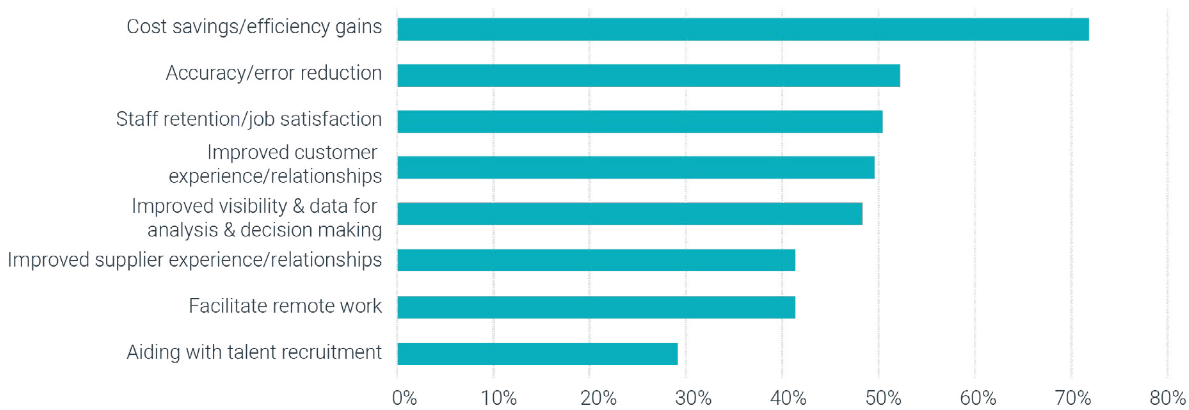
What tactics have you used or plan to use to improve working capital?



Probing at a deeper level, our survey sought to identify the primary objectives of working capital management initiatives. When asked what outcomes managers hoped to achieve through their improvement efforts, they identified cost savings and related efficiency gains as the most frequent goal. Exhibit 7 shows various other outcomes identified by respondents. Around half of the respondents noted that quality/accuracy improvements were an important objective. Interestingly, improved relationships with customers and suppliers were noted as important goals for almost half the respondents. Improvements in employee satisfaction, recruitment and retention, especially in the facilitation of remote work, also made the list. Finally, almost half of respondents noted that improvements in working capital processes can yield improved data and insight for decision makers. The results overall highlight the many ways that working capital management can affect not only internal operating processes, but longer-term relationships with stakeholders and partners as well. These dual effects are highly evident in the following story of Parts Town's automation efforts.

Exhibit 7

What outcomes is your firm seeking from existing or planned improvements in working capital processes?



Parts Town's end-to-end automation success story

Parts Town, a supplier of OEM replacement parts for commercial cooking equipment, was looking to modernize both its P2P and O2C cycles by eliminating low-value work, reducing errors and boosting productivity. In order to combat these inefficiencies, Parts Town chose a cloud automation solution that not only delivered remarkable results, but also delivered cost savings that helped improve working capital performance. Here are the benefits driving enterprise-wide efficiency and bolstering cashflow for Parts Town.

Top O2C benefits

Increased speed

- Accelerated order processing time by minutes thanks to reduced manual tasks and machine learning
- Reduced turnaround time for order acknowledgements

Time & cost savings

- Reduced employee overtime hours
- Improved staff productivity with fewer manual tasks
- No new hires needed in order to manage document volume increases

Top P2P benefits

Increased speed

- 60% increase in productivity; went from 57 to 92 invoices per day/per user
- More time for staff to work on value-added activities (e.g., resolving disputes, contacting suppliers, etc.)

Time & cost savings

- €30k in added savings each month thanks to more early payment discounts captured
- No additional headcount added to handle growing invoice volumes

Not only is Parts Town capitalizing on the far-reaching benefits of end-to-end automation, it was even recognized as "Order-to-Cash Department of the Year" at the IOFM Spotlight Awards for its manual cash conversion process, improving customer service, increasing productivity and reducing Days Sales Outstanding (DSO).

Working capital management: a call to action

The volatile experiences of the last few years have challenged supply chains and whipsawed levels of working capital, making it difficult to maintain control, and even more difficult to manage assets and processes strategically. As we emerge from this (hopefully) unique period, it seems an opportune time for managers to rethink the ways that working capital is managed. Our survey results highlight the broader impacts that working capital has on the success of a business. Of course, it is important to process transactions and track assets accurately and efficiently, however, greater potential gains seem to be evident in a more strategic, end-to-end view and management of working capital related processes. Consider the following recommendations:

1. **Grow resilience.** Given the potential for continued disruption, managers need to develop capabilities that better predict and control drivers of working capital requirements. This means designing supply chains that are more resilient to shifts in demand and supply markets, as well as building in flexibility for internal operating processes. As concerns about inflation, disruptions, and other uncertainties continue to dominate planning, managers should give serious consideration to the resilience benefits afforded by process automation and analytics. Automation delivers more accurate and consistent reporting, which provides the fuel for richer analytics that improve prediction and the ability to manage risk and working capital.

2. **Go for speed.** Velocity makes processes more resilient, drives down overhead, and can improve relationships with partners. When firms reduce working capital process cycle times, they create time and options for themselves, thereby improving the quality and responsiveness of business decisions. Consider order management, for example. Faster order entry increases bandwidth to analyze and assign priority to each order. Similar opportunities exist for processing of receivables and payables. Faster payables processing creates options for early pay discounts, and for using faster payment terms as a part of deal-making with suppliers. As noted earlier, a growing body of research shows that payment terms can provide advantages when competing for high quality suppliers against other potential buyers who are following the "slow-pay" trend.

3. **Manage holistically.** Working capital managers need to push for end-to-end, holistic approaches to working capital management process improvements. Too many firms have siloed departments that independently manage various parts of the overall order management and cash conversion cycle. While functionally specializing areas of order management, payment processing, and inventory management can provide efficiencies. An end-to-end oversight team, under guidance of the CFO or another top executive, is needed to the provide global control needed to make rational trade-offs across functions. Metrics and incentives need to be accordingly aligned across departments as well.

4. **Consider relationship management.** Building upon the previous point, managers should consider the impacts that working capital policies have on relationships with customers, suppliers, and other stakeholders. Elements of the cash conversion cycle are connected and interdependent. For example, sacrificing healthy supplier relationships threatens the longer-term ability to serve healthy customer relationships. Similarly, using supplier capital to finance internal inventories or projects may provide short term gains at the expense of longer-term performance (e.g., due to supplier retaliations, turnover, etc.).

5. **Develop new capabilities.** Managers should continue to investigate the ways that technology can enable greater levels of productivity, effectiveness, data quality and global control in working capital processes. Beyond transaction management systems, emerging intelligent and responsive solutions provide ways to optimize processes, provide insights and respond faster in fantastic new ways. Also consider how technology can change worker roles in ways that improve worker recruiting, retention and satisfaction.

> The pandemic period produced shocks and tests for working capital strategies and processes, but it also created opportunities for learning. Forward-thinking managers will capitalize on lessons learned and opportunities offered by new technologies and partnerships.

About Esker

Esker is a global cloud platform built to unlock strategic value for finance and customer service professionals, and strengthen collaboration between companies by automating the cash conversion cycle. Founded in 1985, Esker operates in North America, Latin America, Europe and Asia Pacific with global headquarters in Lyon, France, and U.S. headquarters in Madison, Wisconsin.

Our customers use our cloud solutions to increase the efficiency, productivity and visibility of their Procure-to-Pay (P2P) and Order-to-Cash (O2C) processes.

info@esker.com • **www.esker.com**