

# Guide to data-driven private equity value creation

Using data analytics to discover hidden opportunities for portfolio company growth



## **Introduction: A new era for private equity value creation**

- 4** Use cases for data analytics across the deal life cycle
- 5** Untapped potential for data in value creation

## **The evolution to data-driven value creation**

- 6** Value creation approaches, yesterday and today
- 7** What data-driven value creation looks like
- 8** 5 examples of value creation opportunities

## **How to approach data-driven value creation**

- 10** 5 questions to guide data strategy development
- 12** Technology approaches to analytics and business intelligence (BI)
- 13** Pushing PEG teams to investigate the data
- 14** Guiding questions to evaluate operational improvements

## **Why PEGs might need additional resources**

- 15** How Crowe powers data-driven value creation

# Introduction: A new era for private equity value creation

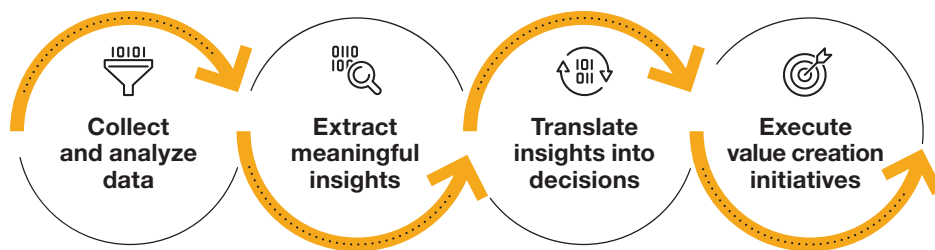
Private equity is undergoing a major transformation. At every stage of the deal life cycle, private equity groups (PEGs) can now apply data analytics tools to gain deeper insights into portfolio company performance, risks, and opportunities.

Value creation stands out as one of the most exciting data-driven opportunities – and perhaps one of the most underused. By analyzing granular data sets – drilling down far beyond general ledger information – PEG teams can uncover hidden risks and opportunities to improve earnings before interest, taxes, depreciation, and amortization (EBITDA). By tapping into real-time data, they can make better decisions in a fraction of the time.

“The most successful private equity firms recognize that analytics can unlock the value that is hiding in plain sight, within the data they already own,” says Paul Jordan, a principal in the advisory group at Crowe.

This guide explores how data-driven insights have transformed private equity value creation. It offers a structured approach to help PEGs – no matter their level of data maturity – extract valuable data to guide decision-making and enhance their value creation strategies.

## Data-driven value creation overview



## Use cases for data analytics across the deal life cycle

Data analytics now plays a role at every stage of the deal life cycle, not just value creation during the hold period. Private equity groups can extract and analyze granular data sets and gain deeper insights through advanced data models, automated dashboards and data visualizations, and even predictive artificial intelligence. The following are examples of how data analytics tools can add value at each stage.

Deal sourcing →	Due diligence →	Value creation →	Exit strategy →
Analyze data sets from third parties to track a large pool of target companies	Speed up overall process to evaluate target companies	Analyze operational data to identify new process improvements and cost savings	Increase speed to exit by giving potential buyers <u>easier access to relevant data</u>
Identify new targets by analyzing unstructured data, such as customer reviews and social media posts	Identify hidden financial, operational, or IT risks that affect a go/no-go decision	Analyze customer data, sales trends, inventory costs, and other data sources to refine pricing strategies	Organize data via detailed financial reporting dashboards, tailored to the needs of potential buyers
Monitor industrywide performance metrics and trends to identify emerging opportunities and risks	Deliver more accurate EBITDA and revenue projections that can influence deal pricing	Automate real-time reporting and performance analyses to improve and accelerate decision-making	Share analyses of future revenue growth and other trends that affect company valuation



## Untapped potential for data in value creation

Today, PEGs report that data analytics delivers the greatest benefits at the due diligence and buyer negotiation stages of the deal life cycle, according to a 2022 survey of 30 senior executives at U.S. private equity firms.<sup>1</sup> Only 10% of these leaders stated that data analytics provides the most noticeable benefits for long-term value creation and performance analysis. Yet when they look to the future, 30% of these leaders said that data analytics can have the most positive impact on long-term value creation, as opposed to other stages of the deal life cycle.

### The takeaway

Data analytics is still underused in value creation, which means that PEGs might be missing significant opportunities to increase revenue and EBITDA margins. Yet data analytics holds tremendous potential for private equity firms. To remain competitive in a crowded and volatile private equity landscape, PEGs should consider accelerating their shift to data-driven value creation.



Data analytics is still underused in value creation, which means that PEGs might be missing significant opportunities to increase revenue and EBITDA margins.

<sup>1</sup> "The Race for Data," S&P Global Market Intelligence and Mergermarket, June 2022, <https://www.spglobal.com/marketintelligence/en/mi/Info/0522/private-equity-race-for-data.html>

# The evolution to data-driven value creation

Over the past decade, the private equity approach to value creation has changed significantly. Today, data analytics and digital transformation continue to drive that evolution. Speed is a game-changer. Data collection and analysis that once required hundreds of hours and significant cost (making it less likely to be attempted) now can be accomplished in hours or days.

## Value creation approaches, yesterday and today

Traditional value creation	Modern value creation
Value creation planning begins <i>later</i> in the deal life cycle, after acquisition	Value creation planning begins <i>earlier</i> in the deal life cycle, often pre-deal
<i>Narrower</i> set of operational improvement strategies pursued, often focused on cost-cutting and consolidation	<i>Broader</i> set of operational improvement strategies pursued, identified through data analysis
Technology/IT viewed as a <i>due diligence risk</i> to manage	Technology/digital transformation viewed as a significant <i>value creation lever</i>
<i>Slow, laborious</i> data collection via multiple spreadsheets, limiting the scope of value creation planning	<i>Rapid, real-time</i> data collection and analysis of integrated, in-depth sources to enhance value creation planning
Value creation decision-making guided primarily by PEG team <i>experience and instincts</i>	Value creation decision-making guided primarily by <i>data-driven insights</i>
Value creation teams composed of <i>generalists with industry experience</i>	More <i>diverse value creation teams</i> , including data, IT, and cybersecurity specialists

## What data-driven value creation looks like

To understand how data-driven value creation works in practice, consider the hypothetical example of a \$500 million, private equity-owned manufacturing company. This platform company continues to grow through regular acquisitions of smaller add-on companies.

Its latest acquisition is typical: a smaller manufacturer that is profitable yet still relatively immature in its use of technology and adoption of digital transformation initiatives. Financial reporting is rudimentary and slow because data is fragmented and siloed across the organization, proving difficult to extract. Value creation opportunities remain hidden.

That situation changes dramatically within the first 100 days after acquisition:

- The PEG team and a third-party consultant identify the company's key business drivers for each department or business unit and the transactional data sources that support those drivers.
- Financial and operational reporting data is extracted and loaded to the platform company's cloud-based data platform. This should happen within the first 30 to 60 days.
- Moving forward, data is automatically pulled into the platform for analysis, data modeling, and real-time reporting via dashboards and visualizations.



## 5 examples of value creation opportunities

With this shift, the PEG team and the manufacturing company's management can readily access a wealth of new key performance indicators (KPIs) and other data: EBITDA add-backs, gross margin by product, accuracy of forecast demand, and many other metrics. Teams can run data models and analyses to gain insights into revenue and margin trends, customer behavior, or sales performance. They can spot outliers or unusual deviations in data patterns.

By examining this in-depth data, they can identify problem areas and pursue the root causes and solutions. This effort sets the stage for operational improvements and value creation initiatives across business functions, such as these:

### 1 Sales pipeline

Data analysis shows that the company has a slower pipeline velocity compared with similar companies within the portfolio, as well as uneven sales representative performance. Identifying these problem areas can inform a sales effectiveness strategy to improve win rates. In addition, real-time sales data allows senior managers to identify sales trends immediately (such as increased demand for a specific product) and pivot sales and marketing resources to take advantage of those trends and increase revenue.

### 2 Supply chain optimization

PEG teams identify a high manufacturing cycle time as well as a high inventory of products. Data analysis reveals supply chain inefficiencies that can be corrected to improve quality and lower costs. In addition, analysis of customer data allows management to predict demand more accurately, which reduces inventory and increases profits.

### 3 Inventory management

An analysis of inventory costs and procurement processes reveals that the manufacturer is purchasing the same raw materials as other platform companies, but it is paying a higher price. Consolidated purchasing can save money and improve margins.

### 4 Human resources (HR) and staffing

Employee turnover is a known issue at the company. Data analysis provides insights into the departments and staff demographics most affected, as well as trends and takeaways from employee surveys and reviews. With this detailed information, management can develop a focused retention strategy for skilled workers.

### 5 Cybersecurity

A closer inspection of KPIs reveals a concerning number of attempted and successful breaches, along with a high dwell time within the system. The company uses a patchwork of technologies and requires a more rigorous mitigation strategy to safeguard customer data. Through this analysis, the PEG team also identifies cost-saving synergies, such as shared IT services with other portfolio companies.

With a list of proposed operational improvements in hand, the PEG team and company management can select and prioritize initiatives with the greatest impact on EBITDA margins.



# How to approach data-driven value creation

In this manufacturing example, the PEG team focuses heavily on data analysis, and rightly so. But even before collecting data sources or figuring out the right technologies to extract and analyze data, PEG teams should focus on the fundamental business challenges, needs, and value drivers at hand, according to Jordan.

Then they should determine the role of data and technology to address the challenges. That's the mindset for success. With this approach, PEG teams can avoid chasing data that doesn't provide business value or collecting more data than they can use.

"If you approach data-driven value creation as a technology problem to solve, then your initiatives will be less likely to deliver value," explains Jordan.



## 5 questions to guide data strategy development

This business-led approach to data analytics and value creation can be distilled into five fundamental questions. In the first 100 days after an acquisition, PEG teams can use these questions to shape their overall data strategy – to determine where to focus data analytics efforts for near-term value creation and how to develop dashboards for effective, ongoing analysis and decision-making.

### 1 What are the key value drivers for each relevant business function (HR, finance, sales) and the business overall?

A short list of value drivers – defined as capabilities or activities that improve profitability or promote growth – can bring value creation efforts into focus. Depending on the business function, value drivers could include the following:

- Skilled employees
- Access to capital
- Systems and processes
- Customer base
- Market share
- Recurring revenue

### 2 Within each function, who are the key decision-makers and what are the roles that should be supported through analytics?

PEG teams should identify the key decision-makers across business functions and then conduct detailed interviews with each of them. These interviews can reveal the major challenges and opportunities for their teams, their future-state vision for their department and the company overall, and a list of the metrics they use to track performance.

### 3 What are the key questions that each role needs to ask? What are the key decisions they need to make?

Interviews with decision-makers also should capture a list of the key questions and decisions that these stakeholders make on a regular basis. Each question or decision should be nested under one of the key value drivers. For example, a sales leader might list the following:

- **Value driver:** revenue and gross profit
- **Key questions:** What is my daily run rate of invoiced sales against targeted budget? What are my revenue and gross profit trends by product for purchased and manufactured goods?

**4 What data will empower that decision-making? Which analyses, insights, and KPIs?**

Together, PEG teams and decision-makers can create a list of existing and proposed metrics that address key questions and drive better decision-making. Metrics should relate to business-relevant outcomes. For example, a sales leader could answer questions about revenue and gross profit trends by tracking metrics such as these:

- Gross profit margin
- Total sales
- Year-to-date sales
- Target budget
- Budget variance

**5 What are the sources of this data? How should data be captured and presented?**

Listing data sources is a critical step. These sources could range from large enterprise resource planning (ERP) systems to simple spreadsheets.

As teams investigate data sources, they also should ask two other questions:

- What data is already sufficiently captured and aggregated, and what is still difficult to find and extract?
- Where can merging data sets provide greater insight?

Once data sources are conceptually diagrammed at a high level, IT specialists can continue the work of creating a detailed, physical design for how various data sources will be connected to cloud infrastructure for data preparation, transformation, modeling, and presentation.



## Technology approaches to analytics and business intelligence (BI)

This five-question discovery process sets the stage for technology choices. Approaches to IT infrastructure can vary tremendously depending on the size of a platform company, the number of add-ons, and the industry in which it operates. A skilled third-party consultant with experience assisting PEGs and platform companies can recommend the optimal architecture and vendor solutions after a detailed discovery phase.

In a commonly used BI architecture, data flows through the system in the following manner:

- Data from disparate sources (across multiple add-on companies) is ingested into a cloud-based platform.
- Before being loaded into a cloud-based central repository, the data is prepared, enriched, and cleaned.
- Data is then stored in a central repository such as a structured query language (SQL) database, data warehouse, or data lake.
- Data modeling and advanced analytics tools extract insights.
- Data is automatically curated and presented for reporting through a BI dashboard.

### 7 habits of highly effective, data-driven PEGs

1. Begin value creation and data analytics setup early.
2. Establish cooperation and trust with company management.
3. Connect data sources to gain a strategic view of the business.
4. Investigate the data to extract meaningful insights.
5. Quickly translate data insights into value creation strategies.
6. Track ongoing performance of value creation initiatives.
7. Document value creation initiatives in detail for the next buyer.





## Pushing PEG teams to investigate the data

Once PEG teams, company management, and third-party consultants have worked through the five discovery questions, the next step is for these stakeholders to begin an intensive analysis of data to uncover operational improvements. This process requires diligence:

- Asking follow-up questions with decision-makers and management, and pursuing the “whys” behind the data
- Disaggregating revenue and profitability attributes to reveal opportunities with pricing, cost reductions, and more
- Analyzing operational processes and technologies that affect major costs

This effort can provide a list of potential operational improvements, which can be ranked, prioritized, and selected with the following factors in mind: timing, impact, risk, and resources.

## Guiding questions to evaluate operational improvements

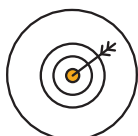
### Timing



#### How well does this operational improvement align with our point in the holding period (year zero, year one, year two)?

- Is there enough time to execute this activity and achieve returns?
- How is the business expected to change during the holding period?
- Are we close enough to exit that an analysis of the opportunity (and road map to execute) would be part of our sell-side materials?

### Impact



#### What is the impact of this proposed improvement compared to other opportunities?

- What is the anticipated EBITDA impact?
- Does this activity affect our ability to hit our growth and revenue goals during the hold?

### Risk



#### What are the risks of implementing this initiative?

- What is our appetite for risk based on our goals and expected returns?
- Do we have enough information to adequately assess risks and refine tactics, or do data gaps remain?
- At exit, are we limiting the pool of potential buyers if we haven't addressed this issue?

### Resources



#### What is the anticipated time commitment and level of effort required?

- What is the capacity of management to dedicate attention to this initiative?
- Do we have the expertise to complete this initiative successfully, either in-house or through third-party consultants?
- Is this initiative sustainable? Can the portfolio company staff manage it on an ongoing basis once implemented?

# Why PEGs might need additional resources

Setting up custom data analytics at a newly acquired portfolio company requires expertise and resources that many PEGs do not have in-house. Most PEGs, even digitally mature ones, turn to third-party consultants for assistance. But these consultants should have ample experience working with private equity firms and customizing technology solutions for them. They should also bring deep industry experience to understand the challenges of portfolio companies.

## How Crowe powers data-driven value creation

Crowe brings a lengthy and proven record of success in supporting PEGs and their portfolio companies – tailoring data analytics solutions to their needs. Crowe uses a business-led approach, focusing first on identifying business needs and value drivers and then developing data solutions to support these factors. With this approach, Crowe helps companies to:

- Gather data easily from disconnected systems
- Extract meaningful insights from mass data
- Gain a strategic view of the business

Crowe combines a strategic, business-led approach with cutting-edge data analytics competencies:

- Enterprise reporting strategy and automation
- Automated data integration and archiving
- Rapid data integration for acquisitions
- Full-scale implementations and training
- BI dashboard tools
- Close relationships with top vendors





## Contact us

Learn more about Crowe private equity services – from tax consulting and valuation to IT advisory – as well as our business data and advanced analytics capabilities. Or, to discuss your private equity firm’s specific needs and goals, contact a Crowe specialist today.



**Paul Jordan**

Principal, Advisory

+1 574 239 7836

[Profile](#)

**crowe.com**

“Crowe” is the brand name under which the member firms of Crowe Global operate and provide professional services, and those firms together form the Crowe Global network of independent audit, tax, and consulting firms. “Crowe” may be used to refer to individual firms, to several such firms, or to all firms within the Crowe Global network. The Crowe Horwath Global Risk Consulting entities, Crowe Healthcare Risk Consulting LLC, and our affiliate in Grand Cayman are subsidiaries of Crowe LLP. Crowe LLP is an Indiana limited liability partnership and the U.S. member firm of Crowe Global. Services to clients are provided by the individual member firms of Crowe Global, but Crowe Global itself is a Swiss entity that does not provide services to clients. Each member firm is a separate legal entity responsible only for its own acts and omissions and not those of any other Crowe Global network firm or other party. Visit [www.crowe.com/disclosure](http://www.crowe.com/disclosure) for more information about Crowe LLP, its subsidiaries, and Crowe Global.

The information in this document is not – and is not intended to be – audit, tax, accounting, advisory, risk, performance, consulting, business, financial, investment, legal, or other professional advice. Some firm services may not be available to attest clients. The information is general in nature, based on existing authorities, and is subject to change. The information is not a substitute for professional advice or services, and you should consult a qualified professional adviser before taking any action based on the information. Crowe is not responsible for any loss incurred by any person who relies on the information discussed in this document. © 2023 Crowe LLP.

AUDIT2305-003E