REPORT

THE ANALYTICS AND AI GAP IN M&A

westMONROE

CONTENTS

5-MINUTE READ

The need to evaluate the analytics maturity of target acquisition companies is ever-increasing.

There's a heightened importance of data and analytics in many companies' core products and services.

Gaps in an acquisition target's analytics capabilities and products can be substantial.

This is due to the use of analytics buzz terms, the hype around machine learning and AI, and inconsistent understanding of analytics in the market.

A retrospective analysis of 40 target companies in real-life acquisitions shows crucial differences in real vs. stated capabilities by type of analytics, providing warning signs to acquiring firms.

Non-Digital Native companies tend to overstate their analytics capabilities.

Older and less data-driven industries such as healthcare do so on average more than Digital Native companies, especially for more sophisticated analytics.

We recommend these key actions.

Perform an analytics diligence aligned to the investment thesis, determining current vs. planned capabilities, and evaluate the readiness of analytics capabilities to create value and support business strategy.

INTRODUCTION

The increased importance of data and analytics in many companies' core products and services, coupled with increased activity in mergers and acquisitions, makes evaluating an acquisition target's analytics capabilities a crucial step of the process.

But there's evidence—as found in our review of 40 recent acquisition targets—that companies overstate their analytics maturity, causing an "analytics gap" between real and stated capabilities.

Evaluating a target's analytics capabilities offers a way forward that identifies and maps the analytics gap in detail, allowing private equity and other acquiring firms to make more informed decisions and look ahead to planned capabilities. Managing the analytics gap is a difficult yet crucial step for both private equity firms and acquisitive companies.

CHAPTER 1

M&A investments may be at risk without proper analytics diligence

The emergence of big data, analytics, and artificial intelligence (AI) across industries in the last decade has led to an explosion of companies seeking to build analytics maturity and more fully leverage the value of data. This trend has disrupted many industries and often challenged legacy enterprises to compete due to new "Digital Native" business models originally being founded on data.

The rise of analytics has generated significant buzz and marketing, particularly around AI. Gartner recently characterized the "hype" around analytics and AI, as evidenced by the millions of marketing dollars spent on the topic by the big consultancies.

"Artificial intelligence (AI) is 'hot' and hyped. CIOs, AI, data and analytics leaders across many industries are seeking breakthroughs, which will come in the long run. For now, though, they should focus on finding practical uses for AI that will have immediate impact."

In step with the rapid growth of analytics, both public and private companies are acquiring firms with analytics and AI capabilities, seeking to capitalize on the emerging market. In particular, private equity funds have grown significantly and with similar growth as the analytics services market, far outpacing U.S. GDP growth. Private equity-backed technology is one of the fastest-growing business sectors, with some indications that the sector has dry powder.

WEST MONROE'S ANALYTICS DILIGENCE METHODOLOGY

We assess analytics capabilities across many types of acquisition targets to support the diligence process, with the flexibility to focus more strongly on key areas of concern and opportunity.

Analytics foundation

Data: How data is managed and stored, key data sources and assets, current effort to integrate data, key challenges

Skills: How and where analytics are resources organized, who leads, team size, how experienced, external analytics partners, key challenges

Tech/Tools: Which tools are in use across BI & analytics, how they support analytics processes and product enhancements, key gaps

Analytics execution

BI/Reporting: How BI and reporting are managed, level of self-service, functions and divisions primarily served

Advanced Analytics: Use of predictive analytics, machine learning and AI, how models are developed and maintained, model quality, key partners

Analytics Culture: Usage of analytics across the target, strategic commitment to value from data

Analytics value creation

Strategic Alignment: How/if analytics activities are aligned to top-level strategic priorities

Products: How BI/analytics are in use directly in target's products and services, which capabilities are customer-facing

Road map: How analytics are being used/planned to support target's strategic roadmap, how analytics initiatives are scoped and prioritized

CHAPTER 2

Approach analytics diligence with flexibility

We perform more than 400 technology diligences each year across industries, the vast majority of which support private equity firms evaluating an acquisition target. In such diligences, our technology and industry experts serve as "house inspectors" to determine the validity of a target's claims across their technology infrastructure. Primary focus areas include application security, software development processes, platform performance, and technical integration of prior acquisitions.

An increasing number of private equity firms have expressed interest in assessing a target's analytics capabilities, reflecting their view of the increased importance of analytics in acquiring firms' investment theses and target business models. To meet this need, a typical analytics diligence includes a review of target-provided documents and target interviews to assess a target's current capabilities, record of execution, and value creation. We recommend that the analytics diligence process cover a broad range of capabilities that include data management, reporting, business intelligence (BI), advanced analytics such as machine learning, and analytics organizational effectiveness.

One of the key features of the methodology is the flexibility to evaluate companies of different analytics maturity: A target focused on operational reporting can be analyzed for reporting tools and processes, while another target with AI-centric products can be evaluated for predictive model effectiveness and differentiation.

Some targets require more depth of assessment due to the often-sprawling nature of their technology solutions.

DESPITE BEST INTENTIONS, THE ANALYTICS GAP IS ROOTED IN OVERSTATEMENTS AND MISREPRESENTATIONS

Prior to engaging the target directly, the diligence process begins with reviewing the confidential information memorandum (CIM) developed by the target and often their M&A broker-advisors. This marketing document, usually 50 to 100 pages, summarizes a target's market opportunity, products, finances, technical capabilities, and strategic direction.

The CIM often includes strong statements of the target's use of analytics, particularly when analytics are core to the target's products and services. Comparing the CIM to the assessed analytics capabilities is a primary outcome of the analytics diligence process, which includes reviewing additional documents and interviewing the target company's leadership team.

It often becomes apparent during the diligence process that analytics capabilities advertised in the CIM are not aligned to the diligence's findings. We refer to this difference between the target's marketing and our assessment of analytics capabilities as the "analytics gap." We see three primary patterns in the overstatement of analytics and AI capabilities in targets' CIMs that lead to these analytics gaps:

- **Overstated analytics capabilities.** Simply put, proud companies seeking to attract buyers are inclined to overstate capabilities, true to the marketing nature of the target's objective.
- **Misrepresentation of non-analytics capabilities.** Some functionality in business processes tends to be cast as analytics; a common example is when a static, rules-based decision engine for targeting customers or recommending products is referred to as "machine learning" in the CIM.
- **Future plans portrayed as current capabilities.** Companies with stronger analytics on their product or strategic road maps tend to portray the analytics as already in place. In fact, for many targets, such "selling ahead" of capabilities is a necessary component of their business growth.

Three patterns in the analytics gap

	TARGET MARKETING Management Presentation	WEST MONROE ASSESSMENT Analytics Diligence Analysis
Overstated analytics capabilities	"Our AI Database provides unique insights to customers"	The database contains standard data processes; no analytics or AI in use
Misrepresentation of non-analytics capabilities	"Machine learning is embedded in the customer-facing platform"	The customer platform uses hard-coded business rules; no evidence of machine learning
Future plans portrayed as current capabilities	"An enterprise data science team drives product enhancements"	One data scientist on staff; more positions discussed but not on road map

Figure 1 *Types of analytics gaps observed in acquisition targets, relative to their stated capabilities prior to diligence.*

In our experience, the gap sometimes arises due to misunderstandings around analytics at leadership levels that are driving the M&A process. For example, a small target company in a nascent industry for analytics might believe its capabilities to be more mature than they are, such as portraying standard reports as more sophisticated.

Such companies also often struggle more with translating analytics into business value, such as incorporating key customer insights into real business processes.

Analytics gaps also sometimes arise because owing to their "hype" nature, analytics and AI can be more easily overstated or exaggerated without being uncovered until the diligence process begins (and analytics scope is included). While outright misrepresentation likely isn't the intent, and target companies aren't incented to exaggerate too much, the marketing inherent in the process can lead to strong analytics gaps.

CHAPTER 3

A review of 40 recent acquisitions reveals a gap in every category

To quantify the analytics gap between the CIM and our findings during the diligence, we compiled 40 recent acquisition targets from 2018-19 in which the acquiring company elected to include analytics in our diligence scope. We gauged both stated analytics capabilities and our analytics diligence findings for the following categories.

We assessed five categories of analytics capability and maturity in our analysis:

1. **Reporting Capabilities.** Internal and external reporting processes, quality of management reporting, level of data integration to support reporting, and impact of reporting on business decisions
2. **Business Intelligence.** Use of advanced tools, platforms, and interactive visualizations to support business insights, enable self-service access to insights across business functions, and empower quicker business decisions
3. **Analytics in Products and Production.** Extent to which analytics capabilities are implemented in production processes and/or embedded in the acquisition target's products
4. **Predictive Analytics and ML/AI.** Advanced analytics and data science capabilities to inform operations and generate business value
5. **Analytics Organization.** Existence and maturity of analytics leadership and teams, and level of analytics maturity of the acquisition target as a whole (operating model, strategy in place, etc.)

For the five categories, we evaluated the analytics capabilities stated in each target company's CIM and assessed during the diligence and assigned a simple two-point analytics maturity score for each: 0 = none, 1 = weak capabilities, 2 = strong capabilities. We also calculated a composite maturity score for each target by adding the scores across the five analytics categories, with a maximum value of 10 points.

For one example, a target's CIM claimed strong use of machine learning in its products, but the diligence process uncovered little actual use implemented in current products. In this case, the Predictive Analytics and ML/AI analytics maturity scores were determined to be 2 for the CIM and 1 for our assessment.

The graphic below compares the composite maturity score based on the CIM ("Target Marketing") with the score based on the analytics diligence ("West Monroe Assessment"). The analytics gap is reflected in the difference between these two scores. On an individual-target basis (left side of the graphic) the analytics gap varies but is consistently below the equal line. Averaging all 40 targets in the analysis leads to an overall gap of 2.2 points: Roughly 30% of their marketed analytics and AI capabilities overstate actual capabilities in our analysis.

Overall analytics maturity

In our assessment of 40 acquisition targets, perceived capabilities exceeded actual capabilities in most cases. The assessment is on a scale of 0 to 10.

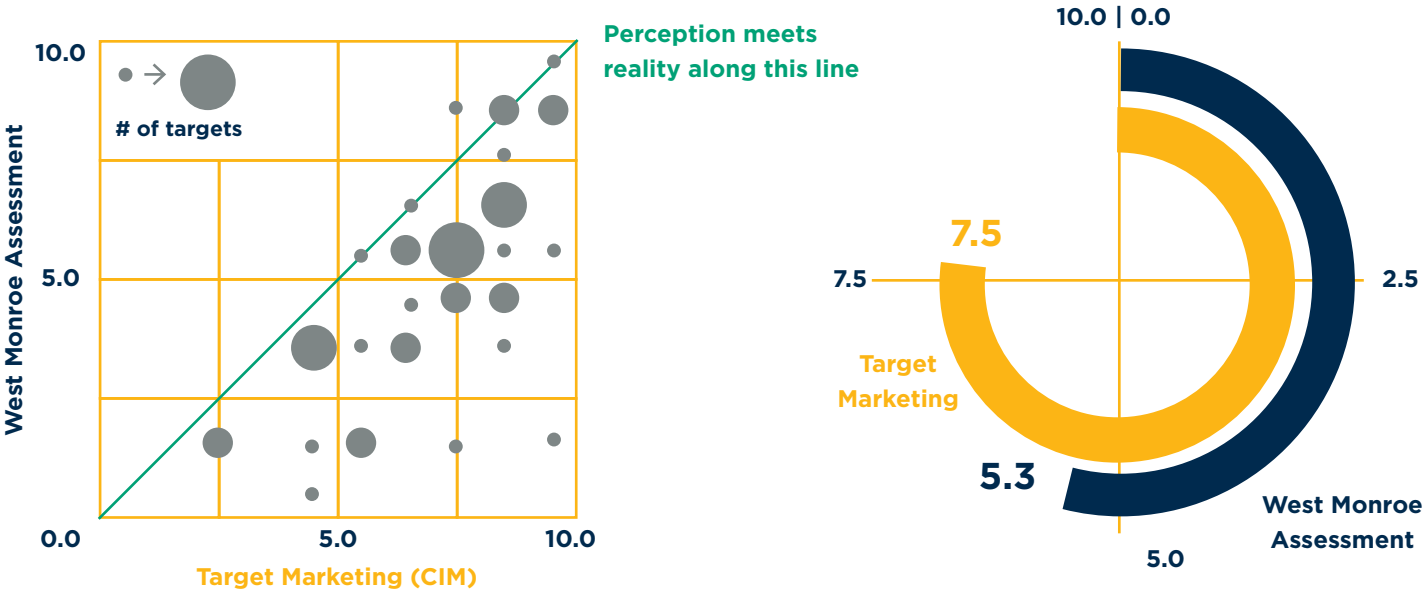

Figure 2 *Left: Comparison of Composite Maturity Scores for a target's stated capabilities and WMP's assessment.*
Figure 3 *Right: Average Composite Maturity Scores for all 40 targets in the analysis.*

Marketing vs. Assesment

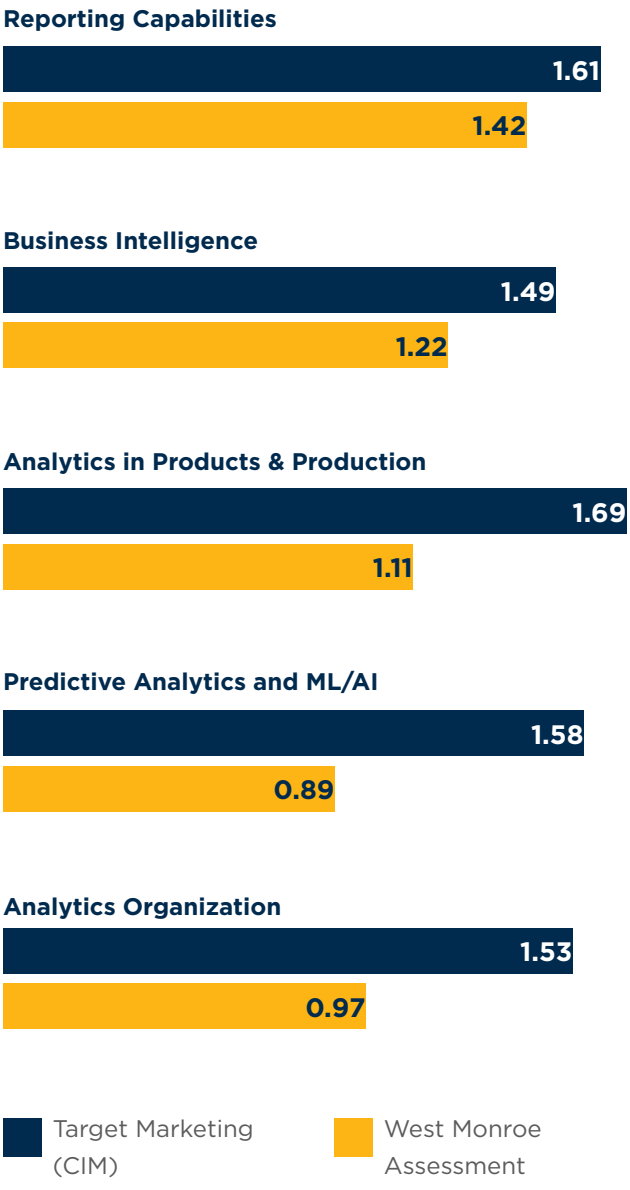

Figure 4 *Comparison of Analytics Maturity scores for each of the five analytics capabilities in the analysis*

Stepping into the individual analytics capabilities, the chart below shows an interesting trend when going from less advanced (reporting, BI) to more advanced (analytics products, use of predictive) analytics: The size of the gap increases for more advanced analytics capabilities. We believe this partly reflects an "AI bubble" in the analytics market, where some targets elected to include advanced analytics terms such as machine learning to garner investment attention.

In a few recent target companies that emphasized machine learning in their CIMs and marketing documents, we found no machine-learning capabilities during the analytics diligence. Instead, rules-based decision engines or manually-coded process automation were in place, with machine learning on their product road maps. In some cases, such analytics capabilities might be years away from being firmly established, potentially impacting a target's value over the investment horizon.

Organizational effectiveness is another key component of the analytics gap. This likely has two additional causes beyond the target's tendency to overstate analytics capabilities: First, a shortage of data scientists, paired with a common lack of commitment to hire them, leads target companies to have fewer analytics resources than their CIM implies. Second, analytics maturity across a company's functions (marketing, sales, operations, etc.) can vary widely, and lack of analytics leaders and strategic commitment will create barriers for a data-driven culture.

CHAPTER 4

Connecting the analytics gap to analytics maturity

To investigate the analytics gap for different types of targets, the 40 companies in our analysis were separated into two groups: "Digital Natives" and "Non-Digital Natives."

A Digital Native firm is typically a few years old, often uses modern technologies (e.g. cloud), and sometimes is founded for the purpose of monetizing data. Non-Digital Natives are often older or in less analytically mature industries such as healthcare, and they sometimes struggle with data and digital. More than half of the Non-Digital Natives in our analysis are in healthcare.

Figure 5 compares the average maturity gaps between Digital Natives and Non-Digital Natives for four analytics capability categories, with more advanced analytics from left to right. Non-Digital Natives exhibit larger analytics gaps for more advanced capabilities, such as Analytics in Products & Production and Predictive Analytics and ML/ AI. Given the increasing gaps for Non-Digital Natives for more sophisticated analytics, it's evident that companies are more likely to overstate or misrepresent capabilities when they're less likely to have those capabilities.

We believe the differences in the graphic below arise for two reasons: First, Non-Digital Natives likely struggle to understand analytics, increasing the possibility of misstating their capabilities. Second, Non-Digital Natives are more likely to follow a traditional, linear path along the analytics maturity curve. For example, a machine-learning application in a traditional hospital system might not make sense if there are no historical reports telling hospital administrators what happened the previous day.

Analytics gap by category

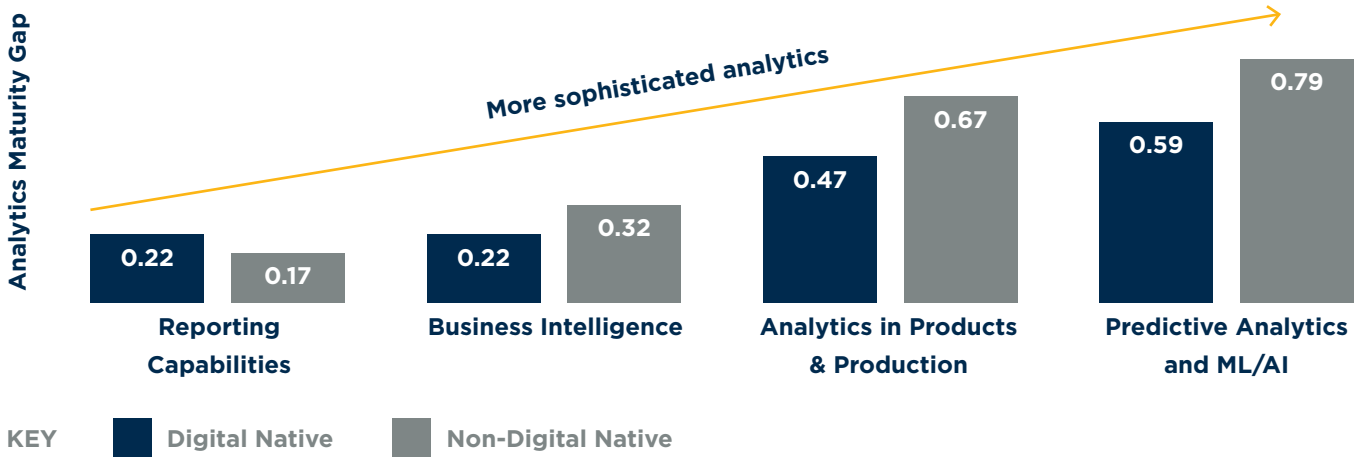

Figure 5

The gap for Reporting Capabilities is slightly larger for Digital Natives, possibly indicating that Digital Native firms prioritize traditional reporting less than value-creating opportunities with advanced analytics. For example, a platform may be built to analyze contracts using natural-language processing and assign risk scores to contracts. BI and reporting are then built to understand the risk scores in the context of a contract management workflow.

Closing the analytics gap: 5 recommendations for acquiring firms

For acquiring firms seeking to better understand a target's analytics capabilities and wanting to improve their evaluation of the target, here are five recommended actions to take throughout the diligence and acquisition process to navigate the analytics gap:

1. **Incorporate analytics into the diligence process.** Given the risks inherent in the analytics gap, a thorough review of evidence and focused analytics discussions with target leaders are essential to determine true capabilities.

2. **Determine the scope to evaluate in advance.** Depending on the target, industry and maturity can matter in how deep you want to dig into investigating capabilities. We will conduct a quick analytics scoping call with the acquisition target to guide the diligence plan. In addition, the acquiring firm's investment thesis or business integration plans should factor into the analytics scope when relevant.

3. **Determine what's current and what's planned.** Given that a company's stated capabilities might be more forward-looking than established, it's important to probe what currently exists. Determining which version of a platform is current state is a common challenge when assessing digital companies with frequently changing products.

4. **Don't make it all about technology.** Make sure the capabilities assessment is evaluating the people and processes involved in growing and supporting analytics, in addition to the technical platforms and deployed solutions in place.

5. **Develop an action plan for analytics after the transaction.** When analytics is central to growing or scaling a target company, bridging the analytics gap might be only part of the necessary investment. Developing a robust plan for analytics-specific investments built on a strategic foundation will be crucial to achieving growth and capabilities goals over the investment horizon.

The analytics gap and private equity

Given the strong growth of the private equity market and the increasingly competitive, fast-paced nature of target selection and evaluation, the analytics gap described above has three potential consequences for acquisitive private equity firms.

INFLATED VALUATIONS

Overstated analytics capabilities might result in elevated valuations due to challenges in achieving plans related to analytics, particularly for analytics-driven product companies

REQUIRED INVESTMENTS

Private equity firms facing an analytics gap likely will need to make additional investments to establish the target's stated capabilities

EXTENDED TIMELINES TO EXPECTED ROI

The time needed to remediate issues and make investments might extend the initially expected timeline to value creation

Figure 6

CONCLUSION

Given the crucial importance of the technical diligence of companies involved in a potential transaction, the ease with which analytics capabilities can be overstated or exaggerated leads to the analytics gap we presented in this paper. In particular, the "gold rush" nature of advanced analytics such as machine learning and AI, and the desire for acquisition targets to portray themselves as AI-enabled, drive the need for careful evaluation during the diligence process.

In many cases, we have observed that a lack of understanding of analytics among target leaders and stakeholders, particularly for Non-Digital Native companies and industries, can contribute strongly to the analytics gap. An opportunity exists for advisors of target companies to play a larger role in ensuring a company's stated capabilities better match true capabilities, which would improve the diligence process overall.

As one bright spot, Digital Native companies show smaller analytics gaps, likely due to business models based on data and less technical debt. We've also seen recent examples of confidential information memoranda with reduced boasting of analytics and more precise language on capabilities, likely as a result of increased scrutiny and the increased analytics maturity of all firms in the transaction.

The growth of analytics is not slowing down anytime soon, and the excitement around this growth is clouding expectations for many executives. To navigate the process, acquisitive companies and private equity firms need heightened awareness and a smart game plan for analytics. Over time, the increased prevalence of analytics across all industries should reduce the analytics gap. In the meantime, we recommend deeper evaluation and vigilance.

ABOUT WEST MONROE

West Monroe is a national consulting firm that was born in technology but built for business—partnering with companies in transformative industries to deliver real, measurable results. Technology is who we are, it is not something we bolted on overnight, and we believe it is one of the greatest enablers of business value. That's why we work in diverse, multidisciplinary teams that blend industry expertise with deep operational and technology capabilities to create quantifiable, financial value for our clients. Our 1,500 employees based in seven offices across the United States also own 100% of our business, so when you partner with us you know we are committed—because your success is our success. Our undeniably different approach breeds undeniable results. **Visit westmonroe.com to learn more.**

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