

Data Analytics in M&A

Clarity on Mergers & Acquisitions

Moving from data to insights to value

Data analytics in M&A

Data analytics has become a revolutionary force in M&A. Changing the way M&A advisors work, it is impacting how they deliver the results of their work, and how they interact more broadly with clients and others. This fundamental transformation is being enabled by significantly greater processing power and data storage capabilities, which has led to an exponential increase in data availability and processing.

In short, data analytics is key to a more effective methodology, better information, and smarter decision making. Embedding data analytics tools and capabilities into M&A teams is therefore key to helping clients achieve more insights, quicker.

The business world is no stranger to data analytics and data science. Marketing professionals have been using statistical models for years to evaluate the success of their campaigns with any given target group. And insurance companies continue to build increasingly sophisticated models to evaluate their client risks. The use of data analytics and data science in M&A has been slow by contrast, however, largely because:



Data was not accessible







Data analytics was not integrated into the deal process



Analyses could not be delivered quickly enough for the deal environment.

M&A advisors have begun adapting to these challenges. The key to success is to build analytics units within the M&A team, and to train representatives in the business in analytics capabilities. Only then will the digital transformation of M&A take hold. 1

Dealing with complexity

M&A-relevant analytics can be clustered according to the matrix below, by analytics and data complexity. Data complexity is driven by the volume of data sources, a common degree of granularity, and the extent to which these sources are structured. Analytics complexity scales from descriptive analytics to prescriptive analytics.

Even with advanced tools and more integrated analytics experts, most M&A analytics solutions happen within basic and advanced analytics. The deployment of stateof-the-art analytics is very limited. This is mainly driven by deal speed and the limitations of standardization for most highly complex analytics solutions. With a higher degree of data and analytics complexity, data models not only become more individualized (i.e. problem specific), they also have longer planning, execution and deployment times. Short deal lifecycles in an M&A context mean a lack of duration and repeatability - as projects are short and rarely identical. This is the very reason why data models that are less complex are so valuable, as they are reproducible and easily adaptable. They enable fast data processing and analysis, facilitating new insights and faster decision making.

Prescriptive analytics Make recommendation for optimization actions based on given parameters and limitations	Data driven decision making (e.g. transfer price optimization cockpit)	Portfolio optimization (e.g. automated and integrated risk-return optimization)	Behavioral finance optimization
Predictive analytics Forecasting KPIs of the target company in order to calculate the most accurate valuation	Time series forecasts (e.g. revenue and networking forecast)	Multi-variable prediction (e.g. business plan validation based on economic factors)	Integrated scenario analysis (e.g. data driven strategic business modelling)
			business modelling)
Diagnostic analytics Advanced analytics is used to illustrate and understand the data, isolate and relate	n-dimensional interactive reporting	Data discovery analysis	Network analysis
information and drill down to the root-cause(s)	(e.g. dashboards to diagnose root- cause relationships)	(e.g. correlation and regression analysis)	(e.g. retail profitability model)
Descriptive analytics	Explorative reporting	Multiple source combination	
Basic analytics is used to summarize and visualize data on a high abstraction level	(e.g. Excel summary statistics)	(e.g. geographic visualization)	

High

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High

Low

Basic analytics

Advanced analytics tools are used to structure and visualize data in a more robust and more efficient way.

Connecting multiple data sources and achieving deep granularity allow for better analytics and an enhanced understanding of rootcause relationships.

Advanced analytics

The integration of data scientists means more complex statistical models are being used to derive data-driven forecasts and decisionsupport models.

Data complexity

The use of low-code tools in particular pushes data analytics solutions further into the M&A space.

State-of-the-art analytics

These types of analytics are based on very complex models and data sets. They are rarely used in M&A. largely as the models are complex and therefore difficult for business people to evaluate; there is limited data available to sufficiently train the models; and most importantly. the rapid pace of the deal environment makes it difficult to utilize the models in a timely manner.

Creating value for M&A

Data analytics enhances data processing quality by installing automated checks on data integrity. It also significantly increases the speed of processing data, especially current trading updates or scenario analyses. In addition, deploying data analytics give the due diligence team an unprecedented ability to quickly identify hidden market signals and drill down into the topics that matter.

How data analytics helps to create value in a deal



Speed / Efficiency

Reported numbers/ As-Is factbook within a day

- Fast deal execution
- Faster data processing and automated updates
- Automated reporting
- Framework for standardized data models.



Quality

Automated rule-based workflows with clear audit trail

- Robust data models
- Deploying common data models
- Audit trial of data processing
- Automated data quality checks.



Insights

Synergy tracking

Unprecedented depth and breadth of analysis

- Higher granularity of analysis
- Combination of multiple data sources
- Technology-supported detection of patterns and root-cause relationships

Continuous dynamic reporting

• Quick adaption to changes in analysis level or scope.

Possibilities to use analytics to create value in the deal lifecycle

With the benefits of using data analytics in mind, here is a look at where it can be deployed in M&A.



Case study 1 deal sourcing

Initial situation and challenge

- A random number generation tech start-up approached KPMG for support in the creation of a business plan and options for commercialization, in addition to helping with their efforts to raise capital
- The start-up developed a novel True Random Number Generator (TRNG), which is the first software solution in a new and fast-growing market
- The cryptography market is expected to grow at a CAGR of 39.2 percent, with the market opportunity exceeding USD 2 billion in 2027
- Due to the market being new, data on market size, competitors and investors was scarce and hard to come by.

Approach and benefits

- Desk research was carried out to identify existing competitors and relevant market segments
- Together with the analytics experts, data from PitchBook was used to build a dashboard of competitors, investments, investment stages, and investors
- The dashboard consisted of a keyword analysis, network analysis and investor overview
- The customized Tableau dashboard was used to show the existing market dynamic to the client
- Investor information was utilized to build a long-list of potential VC firms that could be approached by the client.

Value created

Data from PitchBook enabled an understanding of the market potential and dynamics



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Tableau is a powerful tool to dynamically walk through the data with the customer and to do a deep-dive into specific topics

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There were significant **time and cost savings** in consolidating, validating, analyzing and visualizing large volumes of data

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A **pre-defined dashboard template** developed by KPMG could be tailored to the client's specific needs within hours.

Case study 2 complexity management in strategy

Initial situation and challenge

- KPMG's Separation team was asked to build a bottom-up financial model which required granular data that was not centrally available
- A global data request process was begun, in which more than 30 countries were asked to provide three different datasets. This resulted in feedback of more than 100 Excel sheets
- These Excel files needed to be mapped to two additional databases (central P&L and central HR database) based on a customized mapping approach
- Collection and consolidation of the feedback was necessary in a very short timeframe.

Approach and benefits

- Alteryx workflow was built to deal with the large volume of data feedback (i.e. clean, transform, check and consolidate the ~100 Excel sheets) and to build an integrated database across all data sources
- Maximum level of granularity was kept, with clear references to sources for traceability
- After the initial Alteryx workflow had been built, adding additional feedback data to the model was extremely quick
- Tableau enabled real-time browsing and review of data to identify errors or inconsistencies that required follow ups
- Tableau delivered higher performance (higher processing speed, no system break-downs) when working with large volumes of data.

Value created

- A significant time saving in data crunching allowed more time to be spent on data review and analysis
- Alteryx forces the application of consistent logic and leaves a clear audit trail of all the transformations performed, from data input to output
- Working with an experienced DealTech expert gave confidence in achieveing the required deliverables.

Implementation in M&A: key drivers and challenges

Large volumes of data and various ERP input files are particular features of M&A that favor the use of analytics. At the same time, certain aspects such as unstructured data and data access limitations complicate the deployment of an ETL, or Extract-Transform-Load, tool. Sell-side projects generally allow a substantially greater use of data analytics than buy-side projects, as access to data is significantly better. Further, large corporates generally have better, more structured data availability than small and medium-sized enterprises.

Data/ Infrastructure	Sell-Side Data Availability High Multiple Inputs External Data	Buy–Side Data Availability Low Single Input Only Internal Data
Target Company Specs	Large O Global Operating Multiple Products	Small Single Location Single Product
Project Type	Repetitive Updates Continuous Tracking	No Updates One time analysis
Deliverable	Dynamic Reporting O Various stakeholders	Static compliance report One stakeholder

The move to using more advanced technology and more data-driven models also requires relevant stakeholders to change their established ways of working. The following steps are key to making data analytics initiatives and solutions successful:



AND -

Managing leadership's expectations

Even though analytics aims to increase efficiency, non-analytics stakeholders often underestimate the time and effort involved in setting up these solutions.



Stronger co-operation between M&A and data controllers

Getting access to the right raw data is key. Strong collaboration and clear communication of what is required and what is available will help to minimize fault lines.

Educating business users in M&A advisory

Complex analytics solutions are considered a black-box to normal business users. Getting business people comfortable with new tools and methods is vital.

Educating the client

Local SMEs in particular have very limited touch points with advanced analytics tools. It is necessary to demonstrate the advantages in as simple and user-friendly a way as possible.

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Degree of Automation

Our view of what the future holds

Bl and

workflow tools

visual interface

Present

Advanced analytics tools to

process and connect large

volumes of data and provide

n-dimensional analyses with



+5 years

Proprietary tools leveraging Al

Deal-based proprietary analytics platforms for communication and data platforms. Al-supported data processing to have a consistent model of financial, operative and exogenous data within one deal

Platformization and full connectivity

An overarching platform for a deal and stakeholders for financial and operational data – supported by standardized data extracts and processing and advanced AI technologies. Seamlessly connected micro and macroeconomic data to instantly investigate business performance, value drivers and root-cause relationships.

Future

Data analytics already enhances M&A and will do so even more going forward



reports

Past

Basic software

Standardized office software

for table calculations and static

Data analytics within the M&A deal lifecycle often relates to transforming ERP raw data sets into a more user-friendly and more interactive interface. Deploying analytics software makes it possible to transform and combine datasets more efficiently, and illustrate the results interactively by utilizing BI solutions.



By providing more granular data from ERP systems, M&A advisors are able to analyze the business based on more factual insights, thereby delivering a higher standard of due diligence. Data availability has improved tremendously over the past couple of years and will continue in the future at an accelerated pace.



Until the full potential of artificial intelligence is utilized in the M&A deal lifecycle, some hurdles still need to be overcome. Within the next couple of years, however, automated recognition and transformation of data with various file types will become an established practice.

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About DealTech

Our expertise lies in the advanced Big Data analytics tools, Alteryx, Tableau and PowerBi. We leverage these tools to optimize the data flow (e.g. building robust data cubes) and to enhance the data analysis possibilities (providing dashboards with numerous dimensions).

Our DealTech solution portfolio supports our Deal Advisory clients along the entire deal lifecycle, starting from market entry & positioning strategy, deal sourcing, portfolio management, due diligence, synergies and value capture, dynamic reporting, all the way to a PMO Cockpit.

Visit our website to find out more: **kpmg.ch/dealtech**

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