

Application Portfolio Management for Mergers & Acquisitions

Effective business and technology
integration with data modeling and
enterprise architecture

erwin[®]

Learn More at
erwin.com

► Robust M&A Market Demands Businesses Adopt New Technology Integration Strategy

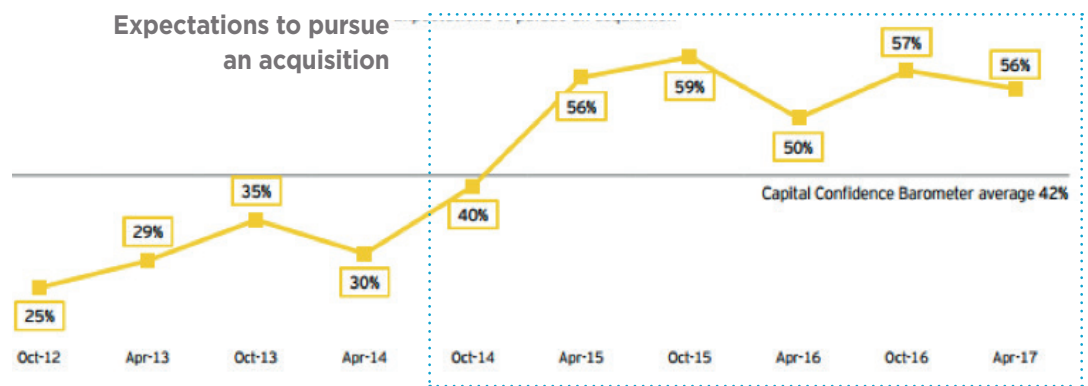
The year was off to a steady start for mergers and acquisitions (M&A) around the globe, with more than [8,000 deals worth close to \\$1.5 trillion](#) recorded in the first half.

Signs are that deal-making will continue on a strong path, too, which naturally has repercussions for merging businesses' IT systems and data.

Thirty-nine percent of executives surveyed by [EY](#) in April see the M&A market improving, representing a 10% increase from October of 2016. [Deloitte](#) finds that 75% of 1,000 corporate executives and private equity investors expect deal activity to increase, with 64% saying they expect an uptick in deal size, as well. And [J.P. Morgan](#) anticipates that 2017 M&A volumes will be solid, citing its belief that companies will continue to seek out innovative and transformative transactions to complement their own organic growth.

The M&A spotlight, not surprisingly, often focuses on eye-catching mega-deals, like the \$60 billion acquisition by British American Tobacco Plc of Reynolds American Inc. But the fact is that small- to mid-sized companies, which often are privately held, also pursue M&As as perhaps the most efficient way to stay competitive, grow talent and expand business into new markets.

DO YOU EXPECT YOUR COMPANY TO ACTIVELY PURSUE M&A IN THE NEXT 12 MONTHS?



Source: EY Global Capital Confidence Barometer, April 2017



M&A TRENDS DRIVE NEW PERSPECTIVES ON HARMONIZING IT ESTATES

As companies come together to complete a transaction, their success relies on multiple factors - economic certainties, accurate valuations, proper identifications of targets, and sound due diligence processes, Deloitte notes. But chief among these, cited by 22% of its M&A Trends survey respondents, is effective integration.

MEGADEAL COUNT

Announced number of deals worth **\$10 billion** or more:
2016, first half: **14** | **2017**, first half: **17**

Source: Mergermarket Global and Regional M&A: H1 2017

► Robust M&A Market Demands Businesses Adopt New Technology Integration Strategy

(continued)

Integration must be accomplished across multiple fronts, of course. Clearly technology is one of them. Very likely, executives will want to conduct application portfolio management (APM) initiatives in support of technology integration efforts. With M&A transactions seemingly poised to continue at a good pace, it's important for executives to understand that successfully integrating entities at the technology level isn't simply a matter of rationalizing applications with an eye to their surface costs.

That approach has been typical of many large companies that tend to have miles of acquisitions under their belt, each one generally bringing with it a slew of overlapping applications and a focus by executives on cutting down the numbers. But now there's an opportunity for these companies to harmonize their IT estates from a more holistic perspective that ultimately will serve the business better. That opportunity exists for smaller businesses, too, which generally have less M&A experience and a greater need for immediate agility in the wake of closing a deal.

Indeed, a more thoughtful approach to APM could play a role in lowering the [oft-reported statistic](#) that 70 to 90% of M&A deals fail.

Intelligent APM depends primarily upon understanding application compatibility with business priorities, strategies and processes, as well as knowing what data types exist across the organization and where. This will enable the merged organization to maximize, optimize and govern its data assets and respond to management, customer, regulatory and other issues - regardless of which applications remain in place and which are phased out.

TOP TRANSACTIONS, H1 2017

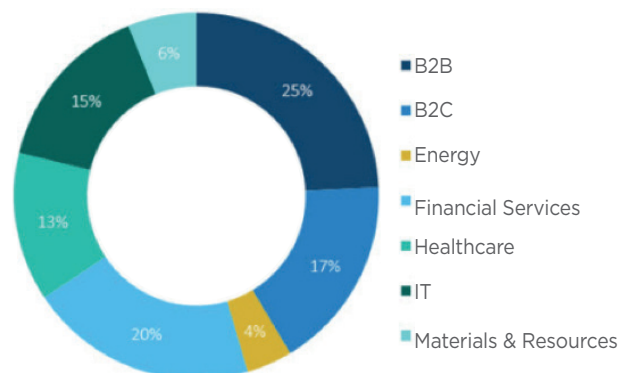
Deal Valute (US\$bn)	Bidder company	Target company
60.6	British American Tobacco Plc	Reynolds American Inc (57.83% Stake)
45.5	Praixar Inc	Linde AG
33.2	Atlanta SpA	Abertis Infraestructuras SA
29.6	Johnson & Johnson	Actelion Pharmaceuticals Ltd
25.4	Essilor International SA	Luxottica Group SpA

Source: Mergermarket Global and Regional M&A: H1 2017

M&A BY INDUSTRY

B2B and financial services were the top sectors in deal counts among announced M&As in Europe and North America during the first half of the year.

Source: Pitchbook



► The Data Foundation: a Key Component of Effective APM

It's been common practice for merging businesses to tap into APM solutions to see how many invoicing, CRM or other applications exist across their companies, and based upon factors such as licensing and maintenance costs determine which ones will stay and which will go.

ENTERPRISES TAKE THE DATA LEAD

Nearly 60%: The amount of data enterprises will create in **2025**, up from less than **30%** in **2015**.

97%+: Regardless of where the data is created, enterprises will manage this amount of the datasphere.

Source: IDC Data Age 2025 study

But it's been less common for them to have a way to visualize consistency in systems and data infrastructure and determine the relationship between application data to various processes that are (or that may become) critical to the business – even if a particular application itself may not be.

Without that perspective, executives risk making portfolio decisions that may negatively impact the combined entities' ability to quick-step merging of operations and processes, as well as make steady, ongoing progress towards overall business goals. They may allocate time and dollars to eliminating what they consider to be redundant applications in favor of moving everyone onto the same system, for instance, when in fact it might be faster and cheaper to keep multiple applications that perform similar functions in place – as long as they all can leverage the same data structures and work from the same synched data.

Another risk is that systems may wind up being eliminated, aiming to remove redundancy and drive efficiencies, without taking the appropriate steps to archive the data associated with them. Such data may have provided useful input to other business processes, offered value for future projects or, along with preserving transactional flows, proved crucial for auditing purposes.

DATA EVERYWHERE

163 zettabytes (ZB): Forecasted global datasphere by **2025**, up from **16.1ZB** of data generated in **2016**

[Source: IDC Data Age 2025 study](#)



OBSTACLES TO OVERCOME

While it's traditionally been difficult to recognize and orient application data foundations, things have grown even more complex with the growth of Shadow IT. And that complexity magnifies when trying to build a landscape that takes into account multiple business' system infrastructures coming together as part of an M&A venture. When disparate applications live across each organization in unaccounted ways, islands of unknown data grow. If not investigated as part of the APM process, this potentially will impact the merged business' ability to comply with upcoming mandates such as the EU's General Data Protection Regulation (GDPR) for citizen data privacy.

And, whether part of the official or unofficial infrastructure, there's no doubt that data growth continues to accelerate, with new sources contributing to the mix and a shift from consumer-driven to enterprise-driven data creation, according to [IDC](#). Unless all enterprise data is harnessed and tied back to specific applications, any APM decisions will be made without complete asset views, putting hoped-for outcomes at risk.

Knowing the data and establishing its lineage and interconnections via modeling practices and architectural blueprints is foundational to moving successful M&A efforts forward.

► Undertake APM with Business Context in Mind

To set the groundwork, merging organizations need to enter the APM process by diagramming goals and intent in a high-level capability model framework that defines the business, in order to output a project portfolio that can deliver to those ends.

In M&A situations, which often involve buying direct competitors or businesses of a similar nature or that operate in a similar market, there surely will be opportunities to streamline operations. The framework can inform further collaborative discussions of application applicability to the merged organization's portfolio, but with consideration of important factors, such as the relationship of data to systems and processes, that weren't always considered in the past. It can provide a starting point for highlighting options to consider for realizing strategies as part of the APM solution architecture phase – the point at which the implications of those options are considered to inform decision-making and blueprints for ongoing design.

It may turn out, for example, that killing an acquired company's field service management application in favor of the buyer's solution would require a complete reworking of data at massive cost – a task that might be better left to a later date, and so an argument for initially keeping both systems online despite their dramatic differences.

Building capability models, cataloging and assessing assets and publishing analysis and recommendations for applications that support the business' current operational and aspirational needs all play into the APM process. Needless to say, the behind-the-door complexities to this are many. They can include sussing out which systems residing under different names in different parts of the merging enterprises are actually the same solution, for example. There also may be a need to determine whether particular functions that are expected to become business-critical – say, consumer online claims processing in the insurance sector – have a solid, scalable base to build on before making a previously planned investment in an existing application that won't be able to handle the increased processing and data load.

WHAT THE BUSINESS NEEDS AND WHAT IT HAS

Effective APM provides an objective way to manage the business systems of organizations. **As entities merge, it provides a way to determine:**

- **What each one has**
- **How they support the business**
- **How good they are**
- **What plans are in store for them**
- **What policies and standards apply to them**
- **What are the dependencies between them**
- **What technologies they are dependent upon**

► Undertake APM with Business Context in Mind

(continued)

Business context tasks for merging companies' APM efforts will encompass, among others, requirements such as:

- **Listing Tier 1 applications that support the most critical capability model requirements, and data about these solutions.** That includes factors such as business ownership; if a system is cloud-based or has a road map leading to that end; whether it has been the subject of a disaster recovery assessment; and whether it was built in-house or is an off-the-shelf solution that perhaps was heavily customized.

Creating this listing can require a significant time investment without the right tools at hand to help speed the process. But it's necessary to do if the merging organizations hope to make best efforts to avoid issues like technical debt or making choices that contradict stated ends, such as moving the entire organization to web-based solutions and storing no data locally.

- **Assessing application financials beyond upfront licensing and maintenance costs.** Organizations need to understand how an application's costs across the board add up in relationship to the system's true functional, technical and process support for critical business capabilities, as they are defined now and in the future in the capability model

What expenses would be associated in integrating an acquiring company's application, which may present as a cheaper CRM system, with another critical technology, like an accounting solution – especially if the CRM app lacks an application programming interface (API)? The costs may surpass taking the opposite tack of moving everyone onto the acquired company's data-compatible CRM solution, where such integration already has been completed, for instance.

Also, are there availability issues and excessive support call costs associated with an application that otherwise seems to have everything going for it? Does a solution suffer from low satisfaction scores by business users that could impact usage, and so ROI? Is a system that was previously outsourced falling down on the Technology Maturity Model front because it now lacks inclusive documentation that could affect IT's ability to fully leverage it? When costs are rolled up across multiple areas (department, business function, user base and so on), do they exceed the priority level the application actually has to the organization?

► Undertake APM with Business Context in Mind

(continued)

- **Gaining business-wide visibility of data and enterprise architecture.** Data modeling technology that enables a holistic visual roadmap of the data infrastructure, and its alignment with architecture assets, all within a central repository enables relevant parties across merging companies to work from a single source of information.

This provides insight to help determine whether, for example, two equally adept applications of the same nature can continue to be used as the companies merge, because they share common underlying data infrastructures that make it possible for them to interoperate across a single source of synched information. Or, in another scenario, it may make it obvious that it is better to keep only one of the applications because it alone serves as the system of record for what the organization has determined are valuable conceptual data entities in its data model.

At the same time, it can reveal the location of data that might otherwise have been unwittingly discharged with the elimination of an application, enabling it to be moved to a lower-cost storage tier for potential future use.

HOW TO MEASURE APPLICATIONS

Major attributes on M&A application assessment lists should include:

- Application Lifetime Cost
- Number of Users
- Active Users
- License Cost
- Maintenance Cost
- Business Criticality
- Functional Quality
- Technical Quality
- Risk
- Business Processes Supported

► Make APM Work

With both data and business context being integral to successful APM, it's not surprising that merging companies should pay close attention to whom is invited to be a part of technology integration efforts and how they are accomplished.

Despite the fact that IT professionals have the inside track about the connections that already exist across applications and data – and that they'll be the ones tasked with carrying out whatever technical requirements are in order post-acquisition – they're rarely given a seat at the table during M&A tech strategy discussions. That should change.

Bring IT leaders into the picture from the start, so that they can work with CFO and COO teams on assessing systems and providing advice on costs that might not otherwise be fully accounted for, such as systems and data integration.

Of course, IT leaders don't bring with them knowledge about the business criticality of various systems. It's the business/application owner who knows if the CRM system his or her company is using is extremely important to the sales team or just the place people log what they've already recorded in Excel. These associates can bring other information to the discussion too, to inform costs in real dollar terms – that, for example, one of their applications is used only by a handful of individuals rather than the entire team.

Such issues should make a big difference to M&A APM decisions, and to ensure they do, it's important that business owners from all companies involved in the merger or purchase be able to weigh in on application/data criticality, costs and performance.

Finally, the right technology has to be in place to provide a collaborative platform for business and technical stakeholders to get a complete view of their data and enterprise architecture assets.

To that end, companies in the midst of M&A efforts must leverage an agile enterprise architecture platform for reducing the time-intensive task of building a portfolio of applications, quickly visualizing and assessing what is in place across the companies, as well as what integrations, overlaps or other complexities exist among them. The right tool helps makes it possible to experiment with and understand whether moving or eliminating an application has an impact on other processes across an organization beyond the workflows that are tied to its core functions, for example – and if so, to what extent. Working hand-in-hand with data modeling solutions for discovering data, assessing its quality and revealing its ties to the architecture, all in a centralized manner, makes it possible for all stakeholders to understand how different environments connect, diverge or may be better leveraged.

PARTIES TO EFFECTIVE APM IN M&A SCENARIOS



The people: CFO teams, COO teams, IT leaders, business unit leaders.

The technology: data modeling and agile EA.

The process: A single platform so that all users can work from the same source of data to discover, explore and re-imagine application portfolios, affiliated data and business process/governance interconnections.

► How erwin Drives APM for M&A Activities (and Beyond)

Fortunately, solutions are at hand to perform the technology due diligence required to see M&A activities to a happy conclusion – as well as continue the merged business' ongoing journey to assure that its application and data houses remain in order.

erwin brings its Data Modeler and EA Agile tools together in an integrated, cloud-based solution, CloudCore, which enables merging businesses to consider APM from holistic cost impacts as well as from the data structure, and business capability and process perspectives. Its approach makes it possible for internal executives at even smaller businesses to take the reins of the M&A tech integration job without having to bring in expensive consultants. A solution such as erwin EA provides an on-premise approach to delivering APM as part of ongoing business capabilities, as well.

Among its key features are:

- **A seamless method of building a definitive list of applications and their purpose.** Streamlining and speeding their discovery via bulk .CSV imports helps organizations match systems to business priorities and sets the foundation for judging systems by current and future business and technical suitability.
- **The capability to discover application dependencies, including underpinning technologies, as well as connectivity to data sources.** Being able to identify these assets' locations, quality, database schema and architecture support provides invaluable contributions to application rationalization decisions and the business' ability to meet regulatory requirements, manage governance or support future projects.
- **Application value assessments.** Leveraging business and technical suitability scoring capabilities helps make clear where applications may excel or suffer, potentially creating opportunities or problems for businesses.
- **Cost calculation roll-ups to understand holistic nature of expenses.** Using multiple factors such as related objects (policy and customer data management, for instance), as well as yearly OPS cost, businesses can measure aggregated expenses against solutions' particular capabilities as part of their rationalization decisions.
- **Collaborative functionality among parties.** Information and assessments to maintain, develop or phase out particular proposed applications can be shared online with the broader community for suggestions and reactions before final decisions are made.
- **Delivery capability roadmaps.** By providing insight into application gaps, lifecycle plans, and other factors, organizations can better determine when and how to roll out, close down or extend applications to avoid causing business disruptions.

► How erwin Drives APM for M&A Activities (and Beyond)

(continued)

With all information held in a robust, centralized, online environment, authorized users to the erwin SaaS solution have one go-to place to query current application and data states and visualize them from a number of perspectives, as well as experiment with the potential impacts of changes on processes across the organization without disruption.



M&A WITH LESS STRESS

Organizational mergers can be fraught with difficulties on many fronts. There's no reason that that should be the case for bringing together the companies' respective IT estates. With a web-based SaaS solution that goes to work right away for all participants in the process, erwin takes a big step toward easing M&A efforts.

At the same time, it prepares the way for the company in its new state to continue moving its portfolio forward in an intelligent manner after the merger has concluded. The fact is that the minute an organization takes its eye off its application portfolio, the sooner it will once again confront a world of unchecked and unmonitored systems and data, subject neither to policies, rules nor governance processes – just waiting to take their toll on future M&A activities as well as impact current business performance and costs.



It only makes sense to stop the madness before it starts, and **erwin is here to help.**

▶ erwin Puts APM Technology to the M&A Test

The acquisition in 2016 by erwin of Corso and its SaaS enterprise architecture platform benefitted from the fact that Corso had always used its own technology to inventory its applications and processes, bringing order to what in many companies is a disorderly environment.

Having access to details about its acquisition's application infrastructure – system costs, users, capabilities and even ISO 27001 certification status for securely managing customer data – helped accelerate erwin's due diligence process. Normally, it would take two to three months to accomplish the work that makes up the technology integration phase of an M&A effort. But with everything so well-documented and easily visualized, it took only two to three weeks to complete.

Speeding up these efforts is a boon to any company, but it can be of particular help for mid-sized organizations (erwin included) that don't have the extra cash cushions to absorb prolonged M&A projects the way behemoths do. Small to mid-sized companies dealing with mergers have to be ready to functionally operate and drive revenue from their deals in a much more timely fashion.

Today, erwin is going through the process again as it integrates business process modeling provider Casewise into its fold. Part of the technology integration effort, for example, has involved moving Casewise staff and CRM processes from Salesforce to NetSuite. This required modeling and visualizing the Salesforce-related systems and data to suit erwin's own enterprise architecture as the companies coalesced.

In fact, erwin now is using its data modeling and agile EA tools to document and review all its customer-facing systems and processes with the aim of improving the customer experience across the entire company.

Help for Your APM Efforts

With erwin's technology, executives at businesses of any size can easily accomplish APM on their own. But they may need some help in defining what terms matter most to them as they consider attributes to add to their application measurement lists.

In addition to the basic metrics like licensing costs and technology quality, for instance, they may have to include measurements related to specific business objectives, financial requirements or even security clearances. Some of these factors may even carry a higher weight than costs when it comes to judging an application's place in a newly combined business' portfolio.

erwin's ready to help on that end, providing professional services consultants to help define key measures for an APM strategy and put the appropriate metrics in place to view and analyze solutions to fulfill organizational needs.

The logo for erwin, featuring the word "erwin" in a dark blue, lowercase sans-serif font. A small registered trademark symbol (®) is located to the upper right of the letter "n". The background of the entire page is a complex, abstract graphic composed of overlapping, semi-transparent geometric shapes in various shades of blue and cyan. These shapes include circles, triangles, and lines, some of which contain binary code (0s and 1s) and other technical symbols, creating a sense of digital connectivity and data flow.

erwin[®]

erwin, Inc. makes the world's No. 1 data modeling software, trusted by more than 50,000 data professionals in 60+ countries. Combined with business process modeling, enterprise architecture, data governance and collaboration solutions, erwin provides the industry's only unified data management platform that uses any data from anywhere to drive operational improvements and growth. The erwin Data Management Platform is the foundation of mission-critical data programs in government agencies and leading financial institutions, retailers and healthcare companies around the world. The company is headquartered in Melville, New York.

Connect with
erwin at erwin.com

