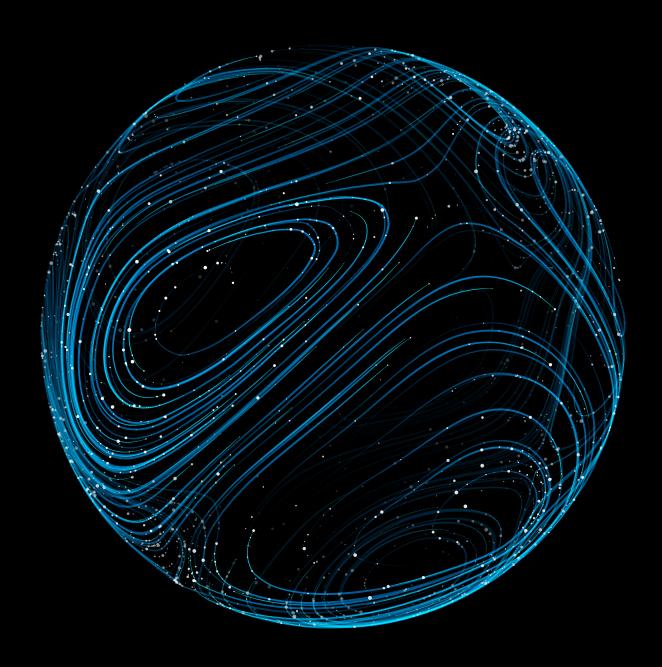
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Five Roadblocks to Overcome to Help Maximize ERP Market Value



Five roadblocks to overcome to help maximize ERP market value

As C-suite leaders navigate technology investments, our analysis found sustained ERP investments can help drive growth, stability, and market impact. However, many organizations may be setting themselves up to be disrupted by taking their foot off the gas on ERP investments. Working to get past these five common roadblocks can help drive value.

Enterprise Resource Planning (ERP) systems can accelerate innovation; data delivery; and business intelligence. They're often the backbone of a modern enterprise, unifying the organization across the business, technology, innovation, and value. And, given their integral function, the ERP market is expected to surpass \$123 billion by 2030.

However, as price increases outpace budgets, many leaders are likely squeezing ERP funding and ready to take their foot off the gas on ERP investments. Sixty-nine percent of business leaders analyzed have a negative to neutral sentiment about ERP investments, according to Deloitte's analysis of 400 companies' mentions of the technology over the last 10 years. Business and financial leaders tend to be focused on the risks, cost, and timelines. And it's costing businesses in market cap returns. (See methodology).

If C-suites allow negative market sentiment and prior poor experiences with large-scale investments to slow down their momentum on ERP implementations, that would likely be a mistake. Not only could that decision put them at risk of disruption, but it may do so at an important inflection point in digital and business transformation where enterprise-scale cloud, data, and automation and Generative AI is expected to dramatically impact the speed-to-value on ERP investments.

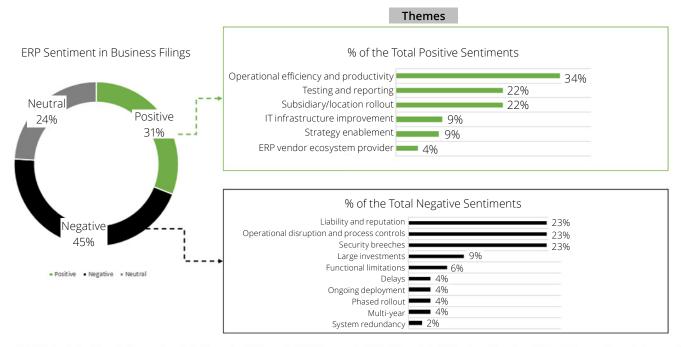
Instead, leaders should be thinking about ERP in relation to growth, stability, and market momentum. When they maintain their ERP investments while staying true to their business case, research^{vii} shows that they experience long-term shareholder returns above market averages. This research will detail five common roadblocks to ERP value and offer considerations for how leaders can get maximize ERP ROI.

Despite negative sentiment, sustained ERP investments can drive market value

Though ERP is critical to businesses, our analysis of 400 companies' business filings found 69% of their ERP statements had a negative or neutral sentiment about the technology. The prevailing themes are what one might expect: the potential for risk, operational disruption, and security breaches. Only about a third of business leaders from the analyzed filings expressed a positive sentiment related to their business strategy, IT modernization plans or expected efficiency and productivity gains. (Figure 1)

There are risks and challenges, but this negative sentiment may be costing businesses in market cap and putting ERP programs at risk in the future as leaders consider reducing ERP funding. C-suites should focus on growth, stability, and disruptive potential calibrated by prior experiences and learnings.

Figure 1: ERP business statements are more negative than positive. Organizations have an opportunity to better connect ERP investment communications to their strategic business intent.

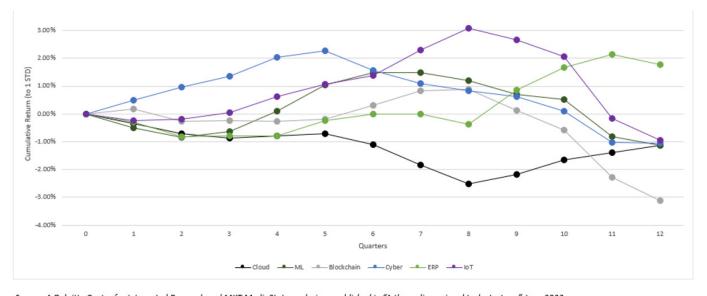


Source: Deloitte Center for Integrated Research analysis of a random 13% sample of 3,000 companies' ERP statements in 10K business filings from 2012 – 2021 years. The analysis covered 400 companies and 658 unique mentions.

Our analysis of organizations investing in ERP over the last seven years found that sustained ERP investments helped drive long-term share price overperformance. (See Figure 2). Therefore, keeping up ERP momentum at the critical two-year juncture may be essential to maximizing that potential.

Those able to persist saw some of the highest long-term ERP share price gains relative to any of the other technologies analyzed. On average, after two years or by the nineth quarter, organizations' share-price tend to over-performed market averages and continued to over-perform for another year.

Figure 2: A strong tech strategy aligned with ERP investments shows a long-term impact on share price returns



Source: A Deloitte Center for Integrated Research and MKT <u>MediaStats</u> analysis as published in "A three-dimensional tech strategy," June 2023.

Analysis based on analysis of largest 500 stocks in the market from 2015-2022, including 719 companies. Frequency analysis reflects percentage of overall media coverage for each technology relative to total articles available overall. Stock return correlation analysis reflects the stock sensitivity to an "attention factor" - ERP – regressing the future returns base stock sensitivity to that factor. Results are reflective of under/over stock return performance over the subsequent three years.

Maintaining that momentum can be helped by leaders getting past these five common roadblocks.

Roadblock #1: Failure to hold ERP implementations true to the business case

One problem is that many organizations deviate from their initial business case. Most start out wanting to join disparate systems and develop a nimbler platform. However, they may take a detour and lose sight of their intended destination.

That could be due to changing market conditions, shifting business priorities and growth levers, innovation and process changes, cost pressures and technical debt, and a multitude of reasons. Often, program fatigue can set in when implementations run longer than expected. Whatever the challenge, slowing down these programs can impact the business case and the ultimate time to value.

Our analysis in Figure 3 reflects in orange a critical inflection point when ERP investments may begin to take that detour. Since they're unable to follow their intended path to enterprise-scale transformation, they reroute and settle for small-scale change. But, when the transformation is small, the gains are often low. After two years (Q8), organizations we analyzed started to underperform in share price.

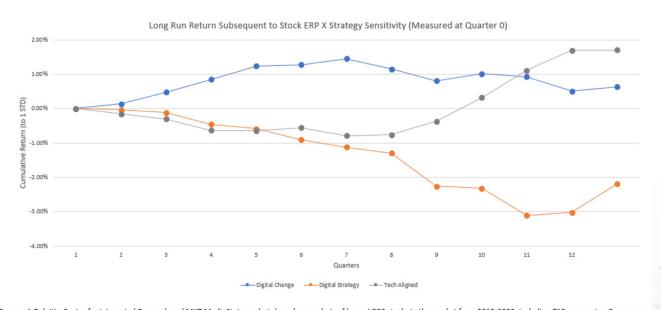
Instead, leaders should signal they are confident in their capital portfolio of investments and that the ERP strategy will be part of a longer time horizon objective to change how the organization delivers services, enabling the ability to impact operating results. When businesses stay the course, most tend to see greater value gains. Our analysis illustrates that when analyzed leaders linked ERP investments to that original business case, they reported above average stock returns. (Figure 3 grey)



What we saw in the filings:XI

Business function integration strategy: Real Good Food Company implemented an Enterprise Resource Planning (ERP) system to align with its long-term strategy to integrate and streamline various functions within the company to support future growth. This example illustrates the potential value to long-term competitive growth and innovation strategy.xiii





Source: A Deloitte Center for Integrated Research and MKT <u>MediaStats</u> analysis based on analysis of largest 500 stocks in the market from 2015-2022, including 719 companies. Frequency analysis reflects percentage of overall media coverage for each technology relative to total articles available overall. Stock return correlation analysis reflects the stock sensitivity to an "attention factor" – in this case, the ERP mentions and the three strategies—regressing the future returns based on stock sensitivity to that factor. Results are reflective of under/over stock

Roadblock #2: Inadequate platform and connectivity strategies

ERP is a massive platform. It typically holds a large portion of any organization's technology footprint and often connects with many others. Therefore, if the ERP is modernized, everything else needs to modernize around it. That includes connecting to downstream systems inside and outside of the organization. Think of the system like a highway: failing to extend the data beyond the highway is like putting a road closed sign at the off-ramp – you're not getting to your destination.

When investing in ERP, some industries see higher returns than others. (Figure 4).

Consumer organizations have embraced these fundamentals and invested in growth. As an early adopter of enterprise resource planning solutions, they now have more mature ERP programs. Moreover, they have a higher focus than other industries on API capability investments and tracking how value cascades across

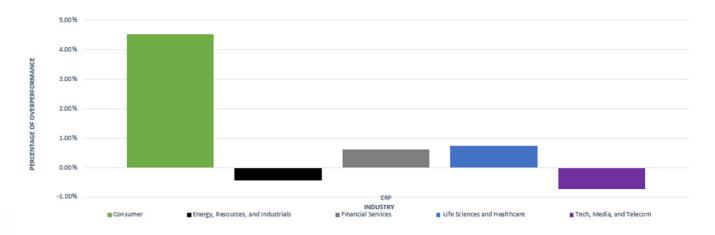
their suppliers. **Both the nature of the industry and the approach to ERP implementations could explain why consumer organizations we analyzed saw a 4.5% over-performance in their three-year-stock returns.



What we saw in the filings:

Operations and Supply chain management: QuantumScape unveiled plans for substantial technological advancements in ERP, manufacturing, and information systems in 2021. These upgrades were designed to support the company's mission to revolutionize energy storage via solid-state lithium-metal batteries. The transformation was part of QuantumScape's larger operational sustainability strategy for a low-carbon energy future.xiii

Figure 4: Consumer, financial services, and life sciences and health care organizations with a high attention to ERP are outerforming in stock returns



Source: Deloitte Center for Integrated Research and MKT <u>MediaStats</u> analysis based on analysis of largest 500 stocks in the market from 2015-2022, including 719 companies. Frequency analysis reflects percentage of overall media coverage for each technology relative to total articles available overall. Stock return correlation analysis reflects the stock sensitivity to an "attention factor" – in this case, the ERP mentions—regressing the future returns based on stock sensitivity to that factor. Results are reflective of under/over stock return performance over the subsequent 3-month period.

Roadblock #3: Insufficient data strategies

Data has value in an enterprise and should be treated as an asset. Lack of enterprise prioritization of data can cause redundancies. That replication and multiplication of data is like a traffic jam. When enterprise data is not prioritized accordingly, ERP data can only be so effective as a single source of truth.

Surveyed **Financial Services and Life Science** and **Health Care** leaders are investing more in data capabilities than those surveyed from other industries. While their current stock-price overperformance related to ERP investments is not to the same level as Consumer respondents (a shift to 1.15% positive performance by year two for FSI), this investment in enterprise data capabilities could move businesses in these industries into the fast lane.



What we saw in the filings:

Real-time data enablement across employee benefits and apps:

As Powerschool Holdings mentioned in 2021, utilizing real-time data can lead to improvements across human resources operations. This includes creating tailor-made learning programs based on student performance data, making investment decisions, and enhancing staffing and professional development strategies through talent solutions. XXI

Roadblock #4: Lack of enterprise cloud capabilities and governance

Cloud migration enables simpler, more innovative, flexible, modern, and nimble enterprise platforms. These solutions often require less customization and come with lower technical debt. It is like moving off of the winding back roads onto a busy highway. You might get where you're going significantly faster, but it can also require a dramatic shift in the organization's culture.

When cloud migration is not happening at the enterprise level with an appropriate level of governance, ERP implementations and customizations can become a monumental task and value can be deferred. Many organizations try to transform the business but fail to transform the culture, so progress suffers. for FSI), this investment in enterprise data capabilities could move businesses in these industries into the fast lane.

An emphasis on cultural transformation can get organizations highway ready. The blue line in Figure 3 indicates when organizations analyzed investing in ERP also place an emphasis on people and culture based on a defined set of keywords. ERP investments combined with a focus on the digital culture of those analyzed, showed almost immediate value. Companies focused on both had stock prices that over-performed market averages by the second quarter and continued to grow in intensity until Q7. Beyond the financial benefits, these organizations could also expect improved operational efficiency, better decision-making, increased productivity, and the ability to scale and adapt more easily.

Energy, Resources & Industrials and Technology, Media and Telecommunications companies in our analysis investing in ERP were more likely to see share price underperformance relative to other industries. One reason might be that ER&I companies are investing in cloud to a lower extent than other industries, running up against that cloud maturity and governance roadblock



What we saw in the filings:

Core infrastructure investments: Polar Power, Inc. has implemented an ERP system to connect different departments and processes within the organization. They have made investments over five years to upgrade their information systems and improve forecasting. The company plans to invest further in integrating aftermarket sales and service with their ERP system to enhance the post-sales customer experience.

Roadblock #5: Unwillingness to automate and disrupt

Business leaders are at an inflection point. Advancements in automation and Al including Generative Al capabilities are expected to change the way we use and implement ERPs across the enterprise. This massive change is a huge opportunity to be more competitive than ever with ERP time-to-value, but it comes with costs across the design, build, validation, and deployment of these systems.

Al and automation create parallelism but can also accelerate and dramatically reduce implementation time. If that happens, you may not need to wait for years to take adv of the business value any longer or need to tie up resources in multi-year programs. Al is expected to have a dramatic impact on how ERPs are perceived in the future, how programs are designed, and on the speed of implantation.



What we saw in the filings:

Automated pricing and billing operations: Spirit AeroSystems highlights an agreement where Boeing's standard pricing and billing model is automatically managed based on standard billing schedules within its ERP system. Common parts have a single price regardless of the model with deficiencies allocated proportionately across the unique parts in Boeing's ERP system.xix

This process is designed to streamline the finance, operations, and vendor management processes across the digital supply chain. Building on that digital operations foundation, over the last decade, Spirit AeroSystems has implemented dynamic scheduling and smart factory solutions that improve labor productivity, reduce work in process, and better overall operational efficiency.



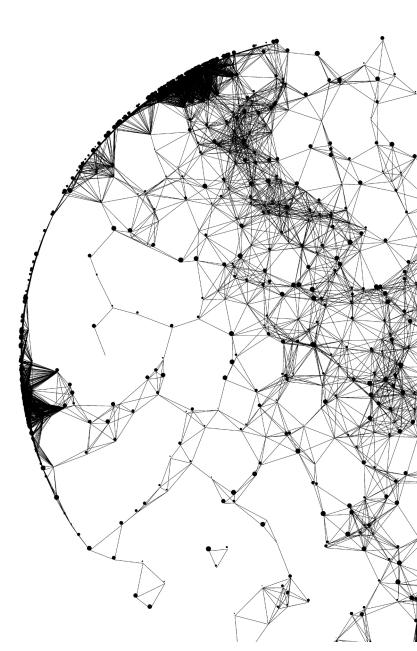
Lifting the blockades to drive ERP value

Given these five roadblocks, C-suites should act accordingly when making and adjusting technology investment strategies. CEOs, CFOs, and CIOs should consider:

- Holding ERP investments to their original strategic vision and intent. Leaders have an opportunity to make strategic, bold, and disruptive business investments. Once a business case is defined, hold to it with a roadmap that focuses on system rationalization and capability enhancement for future success. *** Persist past challenges, especially at the commonly critical 2-year juncture. As much as an organization may be tempted to extend the roadmap or reorder sequencing of priorities, it's important to stay the course. This can help avoid a ill-conceived digital transformation and a complex interim state for operations that may cause more inefficiency and challenges.
- Driving platform integration and next-gen processes.™ The end goal should be having one ERP do as much as possible versus deploying multiple different systems to create a future system that drives value across the organization and ecosystem. Thus, integration as a core tenant of the operating model helps enable next gen processes and innovation. Success here depends on cross-functional leadership and translating business requirements in a way that defines and drives critical functionality and outcomes, costs, and success factors.
- Embracing a common data model. A modern data strategy is often a both a pre-requisite and outcome of successful ERP programs. It's both the "gas" fueling the engine and the "exhaust." The people who get ERP value right typically spend longer on the data. They tend to go slow at the outset to go fast once they create a high-fidelity capability to run business processes with a higher level of data visibility. As a byproduct, some organizations employ dynamic reporting and dashboards. ** Putting customized, intelligence in front of business users is one of the most powerful ways to communicate that value every day.

- Keeping cloud as a cornerstone to your ERP strategy.

 Cloud platforms and services can help accelerate the speed to innovation and integration of your platform strategy. Consider both dependences and economies of scale you can get from these investments.
- Communicating roadblocks and innovation opportunities to shareholders. Some of the most effective companies use business filings to communicate and plan for issues. If there's going to be an over-run-on capital or they plan to deleverage a large capital investment, forewarning the market and analysts that it's an intentional bet or calculated risk backed by a bent to modernize likely sends a different message than "continued headwinds" will extend the program another year. Equally, if you're going to be investing in Al and automation capabilities to accelerate your time to value and drive competitive advantage, communicate that intent. That type of foresight and communication to analysts may contribute to a premium on total shareholder return.



Methodology

Our analysis on Enterprise Resource Planning (ERP) is grounded in two years of research on the topic of technology value, including secondary and academic literature reviews, survey analysis, financial modeling, and executive interviews, to understand the value drivers at play related to digital transformation and technology capability investments. We drew on that insight and conducted additional analysis for this research.

The ERP market cap correlation analysis draws on 10 years of business and financial filings gathered for the research, <u>Unleashing digital transformation value: Paths and Pitfalls</u>. We used Natural Language Processing (NLP) to search for and score these filings based on the presence of defined keywords indicative of ERP investments and then correlate them to market cap returns. The analysis showed a negative correlation to market cap.

The ERP thematic sentiment analysis was conducted by two researchers who randomly selected a 13% sample from over 3,000 10k filings used in the study (approximately 400 documents). ERP was mentioned 658 times in those 400 documents. Therefore, each researcher individually examined these 658 mentioned. The analysts came to a consensus on the positive, negative, and neutral thematic coding at a rate of 85%. The analysis findings reflect only those records where there was 100% agreement between the analysts for maximum accuracy and disregarded the sample where there was the ambiguity.

The ERP news and stock price over/under performance analysis was conducted using data from MKT MediaStats and based on analysis of largest 500 stocks in the market from 2015-2022. As that list changes every year, the total number of companies reflected over the seven-year period includes 719 companies. A frequency analysis reflecting the percentage of overall media coverage related to ERP mentions in total articles available overall was used as a baseline indicator for ERP attention sensitivity as well as for ERP combined with sensitivity to the three factors (Digital Strategy, Tech aligned to Strategy and Change Capability). The stock return correlation analysis reflects the stock sensitivity to an "attention factor" – in this case, ERP mentions and the three strategies (Figure 2)- regressing the future returns based on stock sensitivity to that factor. Results are reflective of under/over stock return performance over the subsequent three years. Similarly, Figure 3 looks at ERP mentions and (adjusted for frequency) regresses the future returns and over/ under stock return performance by industry.

The mixed-method nature of this analysis provided a holistic and multi-dimensional view on where and how value is delivered through technology capability investments, a topic recently covered in Generating Value from Generative AI, which we plan to continue to explore in our future research.

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Endnotes

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- ix. This qualitative analysis used a sample set from the 10 years of historical 10-K statements. We randomly selected a 13% sample across 3K+ filings with ERP mentions, equating to 400 companies' most recent filings with 658 unique ERP mentions.

- x. Tim Smith, et al. Unleashing value from digital transformation: Paths and Pitfalls, Deloitte Insights, February 2023.
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