The 5 challenges of legacy ERP systems for high growth digital businesses

Introduction

Look inside a typical business and you'll see something akin to a mechanical Swiss watch: an array of different functions, spanning everything from order management to inventory and fulfillment, product and engineering, sales and marketing, and much more, synchronized in a delicate dance, and finance reconciling and accounting for every step.

Enterprise resource planning (ERP) systems help businesses choreograph this dance. They've traditionally been the cogs that connect the business, coordinating each step and recording it for operations and reporting purposes. But just as mechanical watches have mostly given way to smart watches, so too has the role of ERPs had to change. This white paper explores what that change looks like, why it's happening, the challenges that it presents, and how to overcome them.

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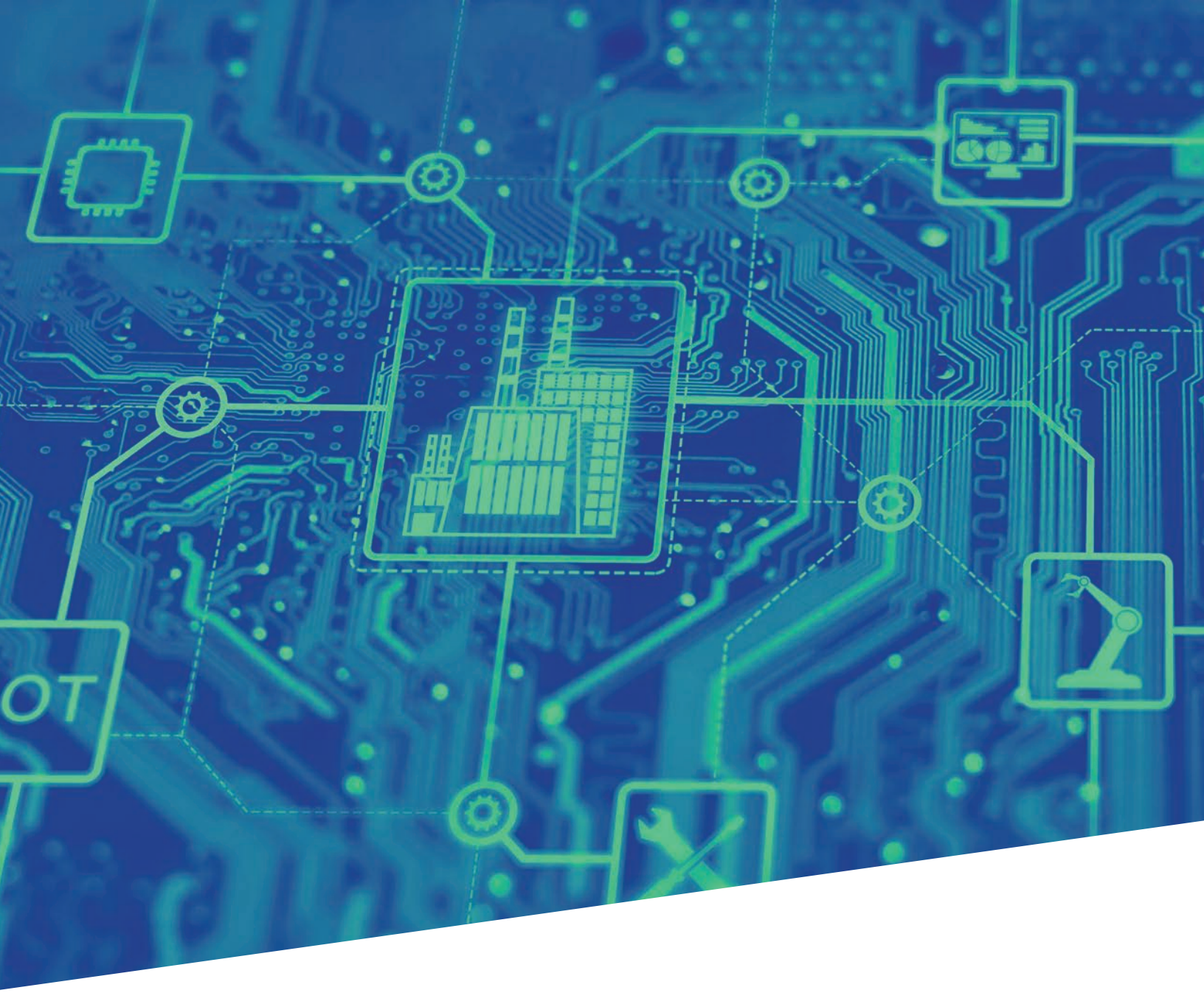

What ERP looked like 20 years ago – A walled garden

ERP originated in the manufacturing industry. Companies started using software solutions to match material requirements to factory capacity. Over time, ERPs expanded to manage inventory and production and the back office, such as accounting and finance. Early ERP were monolithic, containing a variety of back-office functions in one system.

ERP vendors jockeyed to become the one-stop shop for all back-end operations to charge more and better orchestrate complex workflows and exchange data across steps, like connecting supply chain to manufacturing to inventory to accounting. In short, ERP was a walled garden.

What ERP looks like today – breaking up the monolith

Today's ERPs industry looks markedly different, reflecting a changed world.

The business environment today is much more global and competitive than it was when the first generation of ERPs were developed. Companies — especially those with a digital distribution model like ecommerce, subscription software, and marketplaces — change their internal operations frequently to expand internationally, improve margins, or change their product mix.

Monolithic ERPs are not suited for a world of rapid change. Implementations and changes can take years, because designing all the operational rules in many different modules is really complex, and changes in one part of the system affect the operation of other parts. The need to move quickly has made the old, monolithic ERP model less relevant.

Digital companies have also changed the role of the technology function from a cost to be managed to a driver of company capability and strategy. In many cases, key aspects that were once left to vendors have become a core product of the company, like the website, order management, and billing. Moreover, for digital-first business models like ecommerce, marketplaces, and subscription software, much of the traditional ERP functionality built for manufacturing is irrelevant. The combination of building strategic capabilities in-house and not needing many traditional capabilities of ERPs has pushed ERP into a narrower role of serving as the system of record for official financial reporting – the general ledger, income statement, balance sheet, and cash flow statement. And it's increased the need to integrate best of breed and internal systems together to manage the operational and financial flows that run the business.

The importance of integration has been further driven by the rapid globalization of distribution. As countries scale to multiple regions, countries, and currencies, they need to adopt many different payment processors with local presence and expertise. For example, in the UK, card payments dominate, while in Germany open invoicing – where a consumer buys a product and pays for it later – is popular. In Asia, payment systems are often integrated directly into the major e-commerce platforms, like Alibaba or WeChat.

The 5 challenges of unbundled production and financial systems

1 Data silos and integration maintenance

Implementing best of breed cloud solutions creates data silos. A company may use multiple vendors for payment processing, another for fulfillment, and yet another for financial reporting. Each system might excel at its job while failing to be part of a cohesive whole. Each system makes data available to other programs differently, with periodic changes that aren't well documented or communicated, so integrations are a continual headache.

2 A disconnect of trust

With the primary focus of integration on the operational systems needed to make the business run day to day, the proper flow of finance data needed to understand business performance in a standardized, GAAP compliant way, often takes a back seat. The consequence is finance leadership that can't confidently analyze or predict the effects of operational changes or explain the dynamics to investors. That might suffice in their early days, but as companies grow and start to approach public company investors and debt providers, the need to translate operational metrics to standardized financial becomes essential.

3 Data at scale is hard to move and standardize

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4 Lack of end-to-end visibility

It's not just the time factor that hinders companies. Because files are being drawn from a variety of sources and different systems, managers don't have the end-to-end visibility that they would like. What they want is accurate, up-to-date information on financial performance, but what they're all too frequently getting is a snapshot — a small fraction of all the relevant stats. By the time they get month end data, the problem that started to emerge in week two of the previous month has been festering for a month.

5 Lack of control and quality in accounting processes

Without a single view of the entire financial record — from order to invoice (including line items, taxes, discounts) to payment, to potential disputes and refunds — making adjustments in the reconciliation process, or to ensure proper standard subscription prices are factored into the revenue recognition calculations — gets challenging, error-prone, and almost impossible to audit.

Three typical solutions — and their shortcomings

1 Excel

As mentioned above, with high transaction volumes, and compounded by the complexity of integrating multiple payment systems with custom billing or fulfillment software, Excel-based month-end accounting processes start to fundamentally break.

2 ERP

When facing Excel spreadsheets that can no longer open, some finance teams and their technology counterparts look to the ERP they already have. After all, they've often come to view the ERP as the "system of record," so there's a certain easy logic to it. Unfortunately, pushing transaction level data into the ERP can quickly overwhelm systems that were not architected for such volume, leading to huge overage charges and unacceptable software performance problems.

3 Data warehouse

Another option is to push transactions into a data warehouse. If finance teams familiar with their ERP can't be faulted for thinking about using it for transactional data, engineering and IT teams who have already implemented data warehouses for other data streams can't be faulted for wondering if their data warehouse isn't a good solution for their finance transactions as well.

However, teams that attempt this quickly discover two major constraints that are costly to design around.

First, data warehouses don't have business logic, so accounting and finance still have to translate the data into journal entries and factor in all the complex rules that will apply (often using SQL statements or Looker). Second, data in the data warehouse usually isn't immutable. If you have a row of data tracking an invoice, and the status goes from "open" to "paid", the status is overridden. But for accounting, those two states are important to preserve, especially at month end. No accountant wants an invoice paid the second day of the month to change the revenue they recognized last month after the fact. And, they want all changes to be easy to audit. Of course, these challenges can be overcome, but doing so requires a dedicated product and engineering team that understands both finance and engineering, a dedicated data science team that also understands the specific accounting nuances required to write the right SQL queries. Most companies prefer to keep scarce product, engineering, and data teams working on customer-facing products.

Looking to a new approach

The most forward thinking companies have realized a new approach is necessary, and have started investing in business systems teams that understand both finance and data engineering, and can design and operate a finance technology stack to bring them into sync. These teams are also well placed to evaluate the tradeoffs between typical existing solutions like those above, compared to new approaches purpose-built to turn production systems data into finance data that have designed accounting logic and scale into their products and can offer best practices learned by working across many customers and industries to shorten the time to value.

Solution	Integrates data from multiple systems	Integrates data changes in real time	Standardizes operational data to finance data	Able to manage hundreds of thousands of trx	Provides end-to-end visibility	Provides accurate, up-to-date information on financial performance	Provides single view of financial record	Creates controls in accounting process
Excel	✓		✓					
ERP	✓							
Data warehouse	✓	✓	✓	✓				
Data platform	✓	✓	✓	✓	✓	✓	✓	✓

Conclusion

Companies need a way to extract the benefits of a loosely coupled operational and finance stack made up of best-in-breed products without losing sight of their business processes and blinding their finance team and hamstringing their accounting team.

To confidently and rapidly marry production and financial data, they need to put in place a system that can integrate and ingest production and financial data from many different systems, apply finance logic to it, and make it available for analysis, reporting, and the GL.

About Leapfin

Leapfin turns production data into finance data in real time for the world's leading digital brands.

The Leapfin Finance Data Platform unifies billing, ordering, payment, CRM, and other production data with intelligent accounting automation to create a GAAP-compliant, immutable Leapfin Financial Record for every transaction.

The Leapfin Data Platform provides reliable and fast financial reporting to controllers, transaction-level detail for analysis to finance, and visibility to real-time revenue to decision makers.

Canva, Reddit, SeatGeek, Medium, Vimeo, and many other fast-growing, high-volume digital brands trust Leapfin to be their finance data system of record.

Learn how you can design your finance systems to get accurate and real-time reporting to your ERP from Trupanion **here**.

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