

# The Top 10 Ecommerce Re-platforming Mistakes

A Project Planning Guide for  
the Era of Elastic Commerce

elasticpath™

Digital Commerce Everywhere.

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## Introduction

In recent years, evolving market demands have forced online sellers to grow their ecommerce systems into complex, heavily-integrated networks that encompass a vast range of business applications. The added cost and effort associated with this movement have led many businesses to initiate re-platforming projects in an attempt to reduce expenditures and improve market agility. As a result, the number of large enterprises with their own in-house ecommerce applications declined by 24% from 2005 to 2009, while those buying licensed platforms more than doubled<sup>1</sup>. Major online sellers including Wal-Mart made the switch to licensed software during this period, while not one of the top 200 Internet retailers in North America moved from buy to build.

This long-term trend will only accelerate in response to the rapidly growing demand for an even better, more seamless multichannel experience. We call this “the rise of elastic commerce,” where consumers will expect all of their interactions with your business to be frictionless, social, and everywhere. Online enterprises will be called on to provide a far more consistent and relevant shopping experience across a greatly expanded list of touchpoints—from social networks to mobile devices. The functional richness and complexity of the software needed to deliver such an experience is impractical for any individual seller to replicate in-house, which means that every serious ecommerce upgrade moving forward will involve a licensed platform at its core.

These developments also put tremendous pressure on those responsible for planning and managing ecommerce re-platforming initiatives in the era of elastic commerce. The sheer number of the necessary integrations, the business agility being demanded, and the overall complexity of the multichannel landscape mean that every project now carries an immense amount of risk that must be mitigated at every stage. Coupled with the increased significance of online revenue to many businesses, the importance of careful planning and software selection during a re-platforming project has never been greater.

The goal of this white paper is to demonstrate why the only successful way to approach a major ecommerce project today is to pursue a rigorous “integration first” strategy, rather than relying on traditional procurement methods. Based on our experience helping hundreds of companies achieve their online commerce goals, we’ll also provide you with practical, hands-on advice for managing your project and evaluating software using this approach.

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<sup>1</sup> Source: Internet Retailer, 2010

## Your Commerce Ecosystem Now

Whether your existing commerce ecosystem revolves around hosted, licensed, open source, or homegrown software, it's likely that the core platform is already integrated with numerous third-party and legacy applications. As both business and market demands have risen over the years, some combination of these scenarios has likely affected your enterprise:

- **Increased feature weight and specialization:** As ecommerce matured and its features grew richer and more complex, the pace of new requirements outstripped the ability of internal IT teams or platform vendors to deliver them. Specialized applications from vendors as diverse as Adobe, Google, and SAP, all the way to the US Postal Service, rushed to fill the gap. Integrations to these applications, subsequently, were often built hastily, without any consideration for the overall architecture of the ecosystem.
- **Maturity and acceptance of SaaS vendors:** Reinforcing the above scenario, the arrival of trusted and reliable hosted solutions with compelling features greatly increased the number and complexity of integrations to third parties outside the corporate firewall.
- **A rush to leverage existing data assets:** Many of these new features required access to customer, product, order, or analytics data, either through the ecommerce platform or directly from a legacy system, leading to yet more integration requirements.
- **An extension of ecommerce beyond the website:** For many businesses, the online sales channel expanded far beyond a single website to encompass affiliates, partners, app stores, marketplaces, auctions, and aggregators. Each one of these poses unique and continuing integration challenges.

As a result of these factors, most commerce ecosystems today have evolved into arbitrary, organic combinations of products and services, with each application acquired at a different time using wildly different selection criteria. The most common implementations involve software from vendors such as those outlined in diagram 1.0, integrated using a wide range of ad hoc methods without much regard for a stable, consistent, future-proof enterprise architecture.

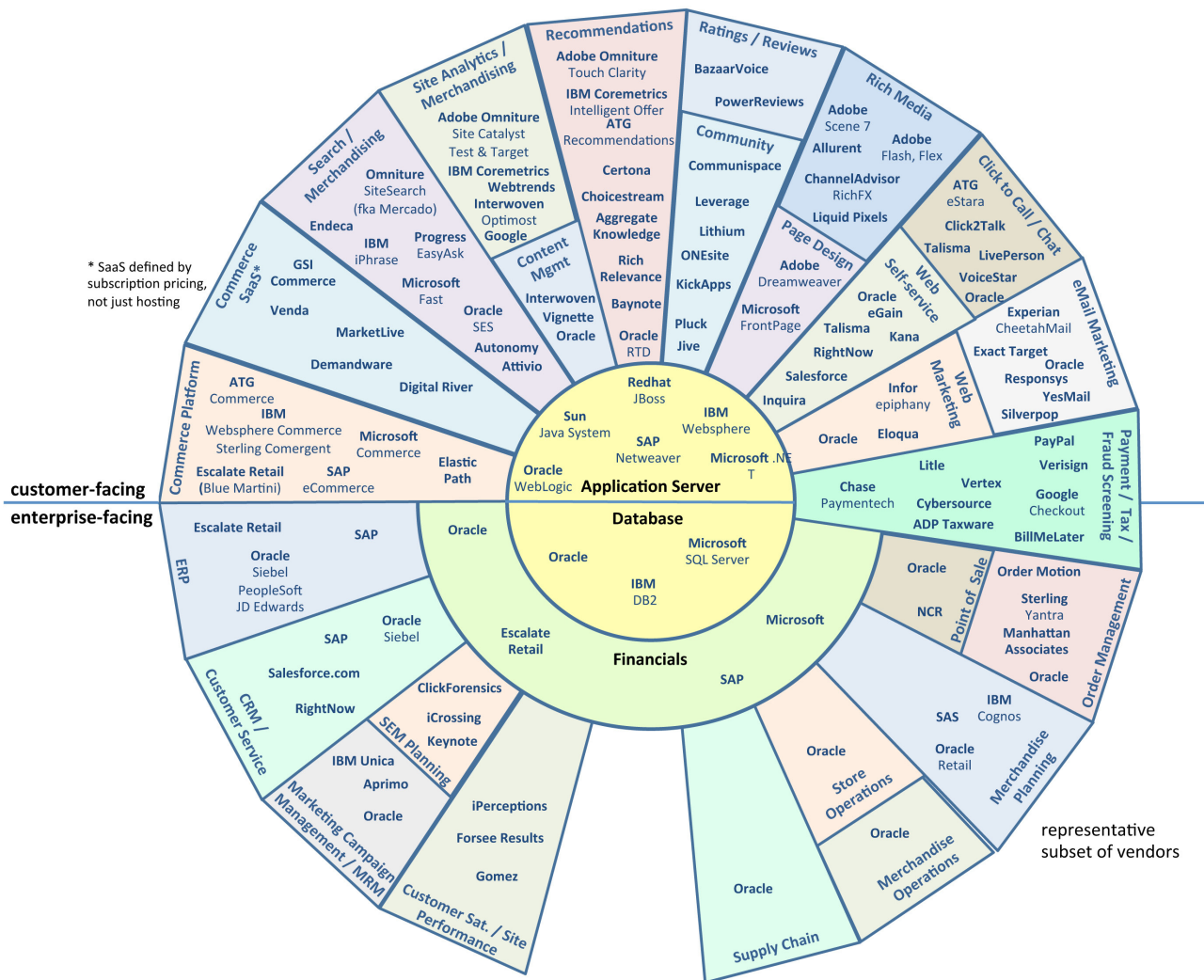


Diagram 1.0: Typical vendors within an ecommerce ecosystem.

The ecommerce platform usually requires the greatest number of integrations, handles the highest volume of transactions, and owns the most immediate access to critical records such as customer, product, and order information. As such, it often evolves into an integration hub for the entire ecosystem by default, despite the fact that the majority of these applications were never designed to function in this manner.

## Your Commerce Ecosystem Tomorrow

Although the scale and pattern of commerce ecosystem integrations is already problematic, much of the effort expended so far has been limited to functionality directly associated with the primary website, such as customer experience features, email marketing, web campaigns, CRM, or the analytics associated with these programs.

This traditional view of how customers interact with an enterprise is currently undergoing a fundamental shift. In 2010, more than 60% of the US online population had at least two unique devices connected to the internet, and one third had more than four, the majority of which were mobile rather than conventional PCs<sup>2</sup>. Worldwide, phones are forecast to overtake computers as the most common web access device within the next three years<sup>3</sup>, and in many developing nations, such as Egypt and India, this shift has already happened, with up to 70 percent of the online population exclusively using phones to access the Internet<sup>4</sup>. The explosive adoption of smartphones, tablets, and other connected devices is catalyzing ferocious innovation in monetizing new touchpoints such as social networks, group buying, augmented reality, and location-based services. To remain competitive, businesses will need to follow their customers into these channels, quickly and effectively<sup>5</sup>. This means that many more unique and specialized integrations will have to be built and deployed at an extremely rapid rate.

Against this backdrop, the biggest challenge faced by ecommerce organizations is that no single monolithic platform, software application, or engineering team can conceivably keep pace with the introduction, adoption, success, and obsolescence of an infinitely growing number of touchpoints. Since trying to predict the overall landscape beyond a tactical timeframe of about 12 months is impossible, the only effective strategy when considering an ecommerce upgrade will be to ensure that both your organization and its core platform are stable, flexible, and open enough to accommodate a virtually unlimited number of potential integrations with third-party systems, many of which do not even exist yet.

How do you go about doing this?

## Integration First

The first step in the “integration first” re-platforming approach is to take one step backwards. Given the unprecedented complexity of today’s projects, traditional paradigms of software procurement (such as the perennial “buy, build or leverage” question) have become largely irrelevant, especially for sophisticated enterprises already selling online. Conventional approaches tend to overlook critical strategic and organizational preparation steps, instead leaping to an acquisition phase driven primarily by metrics such as feature lists and licensing costs.

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<sup>2</sup> Source: Forrester Research, January 2011

<sup>3</sup> Source: Gartner, January 2010

<sup>4</sup> Source: On Device Research, December 2010

<sup>5</sup> For more information, see the Elastic Path white paper “Are You Ready For the New Mobile Commerce?”

While these considerations remain important, they can only be evaluated successfully based on a very comprehensive understanding of what both the current and desired commerce ecosystems look like. Inevitably, these are highly complex and arbitrary, and when set against the broad range of stakeholders that must be satisfied by a re-platform, it is easy to see how many ecommerce projects start off on the wrong foot simply by focusing too heavily on procurement at the expense of a broader integration picture.

Based on our hands-on experience implementing a wide variety of ecommerce re-platforming projects, here are ten of the most common mistakes made by teams that rush towards procurement during the initial stages of a re-platforming project. These actions tend to immediately short-circuit the “integration first” approach, so avoiding them goes a long way towards streamlining the next steps: vendor evaluation, software selection, and implementation.

## Top 10 Ecommerce Re-platforming Mistakes

### Mistake #1: Misunderstanding the new reality of ecommerce

**Integrate or perish.** In the era of elastic commerce, consumers interact with enterprises across a multitude of touchpoints extending far beyond the traditional notion of a website. As they demand more sophisticated access to content and services in a way that is frictionless, social, and everywhere, the ecommerce platform must shift from being a monolithic application that provides functionality across the entire spectrum of customer experience to being an agile, easily-integrated hub that provides stable, high performance shopping and transaction features to an infinitely expanding universe of channels and touchpoints.

Because these channels may be accessed anywhere, for a growing range of purposes (that may include research, price comparison, purchasing, fulfillment, or customer service) the functionality provided by the commerce ecosystem now affects, and is affected by, almost every department in the enterprise. This means that re-platforming projects can no longer be placed in a silo and managed by a single group within the organization. The level of effort, risk, and divisional cooperation involved in re-platforming calls for a dedicated, highly technical team with both a singular focus and a mandate from the highest executive levels.

## Mistake #2: Focusing on a channel at the expense of core goals

**Don't neglect your basic ecommerce infrastructure.** A re-platforming initiative often provides an opportunity for business stakeholders to inundate the project team with lists of desired features that are often highly tactical. While these business drivers are an important part of the overall roadmap, their perceived urgency often drowns out more technical or strategic goals with ROIs that are equally impressive, but harder to articulate. Because the right ecommerce platform brings a wide spectrum of benefits ranging from the highly visible but tactical (e.g., this year's hot user experience feature) to strategic but practically invisible (e.g., a stable enterprise services bus), great care must be taken to evaluate and document potential returns for the entire range of goals. This ensures that a truly representative goal list can be compiled and objectively prioritized.

## Mistake #3: Not prioritizing the goals collectively and objectively

**There can only be one list of objectives.** Not only do the goals of a re-platforming project range from tactical to strategic, but they also span many different departments, each with its own KPIs and metrics. For marketing or sales groups, these will be growth and revenue driven. For IT and operations, they are frequently cost centered, revolving around efforts such as the elimination of redundant, duplicate or legacy systems. Often overlooked during goal-setting are capital investments, such as the amortized benefits of moving to open technologies or developing APIs for emerging touchpoints.

Every objective needs to be quantified and consolidated into a single, unified master list spanning every department with a stake in the re-platform. Only at this point will there be sufficient visibility across the entire enterprise to prioritize the goals fairly and effectively.

## Mistake #4: Trying to do everything at once

**Phase your project wisely.** The unified list of objectives will undoubtedly be long. Executives from each affected department must collaborate and make tough decisions regarding the appropriate phasing for the project based on the net benefits to the enterprise as a whole. Given the ever-expanding complexity and scope of the typical commerce ecosystem, "doing it all before the Q4 freeze" is no longer a viable option, and is instead a recipe for unmitigated disaster.

Because well-designed core elements such as basic transaction services and APIs can have a much longer shelf life than most user experience features or touchpoint optimizations, enterprises should follow a two-speed, two-team approach to maintain a steady capital investment in foundation systems, infrastructure, and services architecture, while simultaneously pursuing lightweight, agile methods to extend and enhance their customer touchpoints. This strategy allows the enterprise to keep pace with the market without neglecting their underlying ecosystem.

## Mistake #5: Underestimating the impact of changes

**Study every facet of your existing platform.** As ecommerce software evolved from sales enabler to integration hub, the sheer number of technical and business processes that have grown dependent on it has skyrocketed. Decommissioning an existing application almost always has far-reaching and unexpected impacts throughout the enterprise, from finance to operations. Many re-platforming projects have been significantly delayed, or even completely derailed, when it was discovered too late that an undocumented backdoor or hack in the old software was being used to perform a critical business function, and the trick could not be replicated in the new application. Before moving on to vendor evaluation and selection, make sure that you fully appreciate exactly how your commerce ecosystem is being leveraged by every user.

## Mistake #6: Overlooking scalability

**More complexity means more metrics.** Before the era of elastic commerce, scalability was primarily concerned with transaction processing on the web, as well as the ability of a given platform to support a specified volume of traffic, orders, or records in a database. While these are still important criteria for the evaluation of ecommerce software, the new reality of the multichannel marketplace with its infinite number of emerging touchpoints also means a much broader definition of scalability. Delivering goods and services in a way that is frictionless, social, and everywhere means that new dimensions must also be considered.

Will the new ecommerce platform need to handle digital downloads of 100 KB or 100 GB? Does the peak volume of 1,000 orders per hour happen on the desktop web, or through a mobile portal? What are the success, stability, and performance metrics for each API or integration in the ecosystem? Understanding the new dimensions of “scale” is quickly becoming an essential component of planning a re-platforming project.

## Mistake #7: Not documenting your ecosystem assessment

**Write it all down.** If mistakes #1 to #6 have been successfully avoided, you should now have broad organizational agreement on the objectives, goals, and priorities of the re-platforming project, as well as a comprehensive understanding of the current commerce ecosystem and how it is leveraged by each stakeholder. The next step is to capture these insights in a formal audit or assessment document (significant portions of which should make their way into your RFP and briefing presentations).

Given the complexity of the ecosystem you’ve just discovered, having this information in hand will greatly streamline your work with potential platform vendors and systems integrators, allowing them to quickly and accurately quote your project and work with you effectively during the requirements, business analysis, or elaboration phases.

## Mistake #8: Attempting to predict all future requirements

**Stay agile and concentrate on actionable requirements.** Many traditional procurement approaches dictate that a highly detailed requirements exercise be undertaken at this point as part of the due diligence process. In some cases, given the multi-year funding commitment typically needed for a re-platforming project, getting budget approval requires predicting detailed technical requirements several years into the future.

Given the accelerating pace of innovation and change in the ecommerce market today, this vestige of the waterfall project methodology may not be the best way to achieve a fast time to market. While a solid envisioning of potential touchpoints and services is needed, many components will not require full elaboration at this stage, and attempting to do so will result only in endless paper iterations with no functioning deliverables. Instead, concentrate valuable business analysis and solutions architecture resources on the pieces that matter now, and use agile processes to work towards demonstrable short-term goals as part of a larger, more flexible plan.

## Mistake #9: Delegating the entire project to any one department

**Keep everyone involved.** As a result of following the “integration first” approach, it should be clear that the prioritized objectives of the re-platforming project do not fall completely in the realm of any one department within the enterprise. In many cases, specific goals may be irrelevant, unimportant, or detrimental in the short term for a given group, so the risk of project sabotage or covert reprioritization is often high in re-platforming projects.

The successful execution of these relatively high-risk initiatives requires diligent interdepartmental coordination, diplomacy, and executive involvement at the highest levels. Throughout the life cycle of the project, a unified and consistent message regarding goals and progress must be communicated both internally and externally, which frequently does not happen when the re-platform is delegated entirely to a single department.

## Mistake #10: Not establishing cross-functional program management

**Establish focused, independent project management.** Thanks to the rise in complexity and interdependence within the typical commerce ecosystem, the relative importance of a dedicated program manager or management team has increased. While an ecommerce project may once have fallen under the auspices of a lower-level IT manager, a re-platforming initiative is now so large and complex, with so many moving pieces, that dedicated resources and a high level of executive involvement must now be committed.

An effective program management group for such an undertaking would ideally be independent from the stakeholder departments, be responsible for the unified list of objectives, and provide a single point of reference and contact for vendors, contractors, and systems integrators. This frees your external resources from having to understand and navigate the internal idiosyncrasies of your organization, so they can concentrate on the actual execution.

## Conclusion

By avoiding these ten common mistakes, businesses at the planning stage of an ecommerce re-platforming project will ensure that they do not overlook critical activities that contribute significantly to the ultimate success of these initiatives. Although they involve committing significant time and resources prior to vendor evaluation, these preparation steps will lay the groundwork for an “integration first” approach that is the only effective strategy for keeping pace with the rate of change in the online market.

Enterprises without the skills or resources needed to successfully complete these planning activities internally should consider partnering with an experienced ecommerce consulting organization. Whether achieved in-house or with the assistance of a trusted advisor, the benefits obtained by following this approach will go a long way towards ensuring a successful ecommerce project.

## About the Author



David Chiu is the ecommerce industry strategist at Elastic Path Software and a veteran internet marketing specialist with fifteen years of experience delivering business solutions to Fortune 500 companies. Prior to joining Elastic Path Software, David was director of product management at a global ecommerce software company and an award-winning information architect and designer for several prominent interactive marketing agencies.

## About Elastic Path Software

Elastic Path is the leader in digital commerce technology and expertise for enterprises selling digital goods and content. Major global brands such as Google, Time Inc., and Virgin Media rely on Elastic Path to monetize digital relationships with their customers in ways that are frictionless, social, and everywhere.

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