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INTRODUCTION

If CMOs and CIOs can agree on anything, it's that ecommerce replatforming is a daunting project to have your name tied to. Almost every company's website is a high-visibility, highly politicized property. And, of course, your online store is tied directly to both revenue generation and the overall brand experience.

Unless you're talking about a routine upgrade of an existing system, you have to negotiate a delicate balance of risk and reward. On the one hand, a major replatforming requires a big investment in planning, technology and personnel. It introduces major uncertainties: How will the project impact daily business? Will you select the right platform? Does your team have skills to support the new platform? How will your team deal with the unforeseen roadblocks – both technical and institutional – that will, inevitably, arise?

On the other hand, there are tangible rewards for ecommerce stores that replatform every few years. Improving site performance and leveraging new features help ensure a more consistently engaging online experience. As fast as the technology landscape is moving, this can be a major point of differentiation that, ultimately, leads to more sales and customer loyalty. And that's to say nothing of the cost efficiencies you can realize with a more scalable platform that's easier to manage and support.

However, a truly successful replatforming initiative is not an exercise in meeting current needs. It's a strategy designed to position an organization to move into the future, minimizing risks while maximizing return. This paper outlines how to do exactly that.

Topics include:

- Should you replatform?
- How do you go about defining requirements?
- How do you choose the right backend infrastructure?
- How do you choose the right implementation partner?

Is It Time to Replatform?

Most ecommerce stores upgrade or migrate every two or three years, according to the most recent Forrester report on the subject, "Understanding TCO When Evaluating eCommerce Solutions."¹ But that doesn't mean you have to. When it comes to designing a sleek, intuitive online store, there's often significant pressure to "keep up with the Joneses" – both from internal leadership and from ecommerce vendors – that can make it hard for stakeholders to make clear-headed technology decisions.

Replatforming Red Flags

There are, however, certain red flags that can make the decision clear-cut:

- Frequent and/or prolonged outages
- Severe, recurring performance issues
- Major security and/or compliance incidents
- Unsustainable platform management costs
- Unacceptable customer support response times
- Lack of future vendor support for your platform

If any of the above points apply to your current ecommerce platform, you should strongly consider making a change (and skip to the following section about defining requirements). Most of the reasons should be self-apparent: if your site is down, or if it's painfully slow, or if your customer data is compromised, you're losing sales and damaging your brand. Similarly, if you can't afford to run your platform or get the timely help you need to keep it online, then it's time to look elsewhere.

"A THOROUGH COST-BENEFIT ANALYSIS IS ABSOLUTELY CRITICAL BEFORE YOU INVEST BIG IN GATHERING REQUIREMENTS, EVALUATING VENDORS AND PLANNING IMPLEMENTATION."

Lack of future vendor support for your platform or deployment method is perhaps the biggest red flag of all. Even if your platform isn't being entirely decommissioned, it's still probably time to jump ship. Management costs will inevitably climb; accessing relevant expertise and professional services will become increasingly difficult; and your online store will struggle to keep up with the functionality arms race.

Pay careful attention to industry media, colleagues using the same platform and analysts from research firms like Gartner and Forrester. If you see clear signs that your vendor will no longer be investing in your existing platform, it's time to plan for the future.

Additional Signs It's Time to Replatform

More often than not, however, the decision to replatform isn't so clear-cut. The following considerations, although critical, tend to be more ambiguous:

- **Widening feature gap** – You need more functionality around key areas such as mobile and personalization. Alternatively, you realize your current platform has a lot of unused bells and whistles that add unneeded complexity and cost.
- **Accelerating company growth** – You're growing unexpectedly fast and need to plan further out for future functionality, performance and security needs.
- **Vendor misalignment** – Your vendor's long-term strategy conflicts with your business goals. For example, your vendor prioritizes other applications over yours or they're pushing customers to adopt an "as-a-service" model on their own cloud. This might conflict with your need to customize and closely control your infrastructure or to avoid vendor lock-in.
- **Expertise crunch** – You can't access the right platform-specific skills to successfully build, deploy, customize, operate and optimize your site.
- **Inadequate integration** – Your platform lacks sophisticated enough integrations with other key business applications to empower your omnichannel sales strategies and provide consistent, high-quality customer data.



- **Too much dev or IT work required** – You become increasingly aware that your solution requires extensive customization to meet your online store’s requirements or that routine ecommerce operations like marketing promotions rely too heavily on IT to execute.
- **Other major changes in your requirements** – Shifting requirements could include things like your database needs changing as the product catalog expands or a sudden increase in concurrent users impacting web server configuration. Or perhaps you’re entering new markets and now require more robust internationalization features.

Conduct a Cost-Benefit Analysis

If several or many of these points sound familiar, it’s time to conduct a rigorous cost-benefit analysis (CBA) to help you make a final determination about whether the potential payoffs of replatforming will outweigh the risks and the expense. CBAs are seldom a pleasant process, and many businesses rush them or forgo them entirely. However, whether you’re a sprawling enterprise or a five-person startup, it’s absolutely critical to ensure replatforming is the right decision before you invest big in gathering requirements, evaluating vendors and planning implementation.

The nature of this analysis will depend on the structure of your company and your available resources. For instance, you may or may not choose to hire a third-party consulting firm to help. However you complete the analysis, it should thoroughly account for every aspect of the project. This includes the estimated monetary value of tangible costs, intangible costs and projected benefits.

Examples of Common Ecommerce Replatforming Costs and Benefits

TANGIBLE COSTS	INTANGIBLE COSTS	PROJECTED BENEFITS
Additional licensing or hardware costs	Possible temporary disruption to ecommerce site operations	Increased sales across multiple channels
Migration costs	Time spent on project implementation	Reduced risk (e.g., of downtime, breaches, vendor misalignment)
Professional services fees and other implementation costs	Change to existing processes	Improved brand perception and loyalty
Added ongoing operational costs (e.g., new IT staff or managed services)	Time spent training existing staff	Better ability to execute marketing initiatives
	Risk of project failure	Higher quality customer data
		Reduced reliance on developer or IT resources

Only after you’ve taken the time to complete a comprehensive CBA – and verified that the benefits of replatforming significantly outweigh the costs – should you set the project in motion.

DEFINE PLATFORM REQUIREMENTS

Replatforming an ecommerce operation encompasses the two main components of the ecommerce store: the platform of the store (i.e., the software used to manage the look and feel of the site, inventory, payment processes and so on) and the underlying hosting of that platform. Both elements are equally important to an ecommerce store’s success. Putting a resource-heavy ecommerce platform on subpar hardware can be just as disastrous as deploying a restrictive ecommerce platform on enterprise-class infrastructure.

Your specific requirements are defined by a spectrum of interrelated factors, including:

- The specific needs and expectations of your customers
- Your current traffic and rate of business growth
- Long-term brand goals and marketing initiatives
- Regulatory and compliance considerations
- How your current site stacks up against competitor sites

The first step here is to make sure all the major stakeholders’ demands and goals for the project are aligned. Business leaders may be focused on issues such as conversion rates and customer retention while technologists may be more concerned with security, compliance and performance. And, of course, you have the customer to keep at the center, who wants fast access to quality content and ease of completing a transaction. Everyone on the project should have a clear, consistent understanding of how the company intends to balance these goals.

What Outcomes and Platform Features Matter Most?

After your team is aligned on project objectives, it’s best to start by making a prioritized list of desired outcomes, ideally based on the “projected benefits” from the CBA you just completed. Is the top concern improving the scalability of the platform to handle more traffic and serve more web pages? Is it more important to improve the system’s customizability or its extensibility to integrate with third-party systems? Or is the primary aim of the project to improve the customer experience in order to boost sales and customer loyalty? How important is security? What about internationalization?

Develop this list of desired outcomes and get buy-in first; then dive into the weeds of specific feature requirements and “nice-to-haves,” making sure to take your prioritized goals into account.

Here’s a breakdown of common ecommerce functionality to use as a starting point:



Ecommerce Functionality

Rather than going into an exhaustive catalog of every single ecommerce feature you should consider (consult vendor websites and product documentation for that) we'll instead focus on the key areas where there's the most differentiation. These are the most important to consider for requirements gathering:

- **Omnichannel** – It's becoming increasingly important to track customer interactions and maintain a consistent experience across channels, including in-store, desktop and mobile. Do you need your platform to connect all three of these touchpoints and get that data back to marketing? Do you need responsive design, real-time processing or mobile shopping cart optimization?
- **Personalization** – Do you use a third-party tool to handle personalization? Or do you need your platform to differentiate customer segments, serve dynamic content and offer alternative pricing to selected customers?
- **UI Tools and Templates** – Do you need non-technical staff

to make frequent changes to the front-end? How well do the vendor's templates align to your needs and how much front-end customization will be required?

- **B2B vs. B2C** – Do you need B2B-specific features such as more robust account managements (e.g., individual accounts and linked corporate accounts with different ship-to addresses, order histories, etc.?). Do you need to set up client-specific ecommerce experiences?
- **Internationalization** – Do you operate in a highly global environment? If so, do you need the ability to localize content, display and handle transactions in the buyer's local currency and manage local compliance requirements?
- **Product Merchandizing** – Do you need a separate product information management (PIM) tool? Or do you need sufficient functionality to manage your product catalog within the ecommerce platform itself?
- **Refunds, Renewals, Etc. (to keep cap scheme)** – What features do you need to meet requirements for dealing with renewals, expired cards, refunds and such channel issues as affiliate marketing commissions?

Customization

How customizable do you need your platform to be? While small retail businesses can often get by with templates and a bare minimum of customizations, most large companies need one of the five leading enterprise-class platforms to meet their customization requirements.



For example, how much do you need to customize your product metadata? A hybrid B2B/B2C technology company with a diverse set of products and services will need a much more customizable product catalog compared to a specialty retailer.

The need for customization – or the lack of a need for customization – should be considered across the entire feature-set of the application, from merchandizing to account management and beyond. Not having enough customization means you'll be spending a lot of time and money developing it yourself. Having too much means you're paying for more than you need and burdening users with unnecessary complexity.

Extensibility

What other systems do you need your platform to integrate with, and how sophisticated do you need those integrations to be? Are there hooks built-in for your preferred systems?

The following integrations are typically the most important for ecommerce platforms:

- Web Content Management systems (e.g., Adobe Experience Manager, Sitecore)
- Payment systems (e.g., PayPal, gift card and credit card vendors)
- Order management systems (e.g., Manhattan, Oracle Financial)
- Accounting systems
- Inventory systems
- Customer Relationship Management systems (e.g., Salesforce)

As noted previously, many businesses also increasingly prefer to use best-of-breed standalone cloud-based tools to handle areas like personalization, UI tools, templating and merchandizing. Work with stakeholders across the business units and IT to compile a comprehensive list of must-have and nice-to-have integrations.

Project Timeline

How quickly do you need to get your new store running? Is your timeline defined by fixed constraints such as the holiday shopping season? How difficult will it be to migrate from your existing platform? Because ecommerce solutions vary wildly in complexity and offer different deployment options, some are much faster to implement than others.

Scalability, Performance and Security

Scalability, performance and security requirements have a decisive role in determining which ecommerce solution and deployment method will best suit your business. While these areas are more closely tied to your infrastructure choice than your platform – more on that later – it's important to understand that different platforms scale and perform differently from one other, especially depending on the infrastructure mix.

Factors That Determine Performance Requirements:

- Projected business growth
- Seasonality of your business
- Average “spike-iness” of your web traffic
- Cadence of major marketing campaigns
- Need to prepare for unexpected spikes (e.g., a marketing campaign goes viral)

When gathering requirements, technical subject matter experts (SMEs) should conduct an analysis to project both short-term and long-term scalability needs, and to help stakeholders understand how security and regulatory concerns must inform platform decisions.

For instance, to maintain PCI compliance, the platform may require certain features around areas such as authentication, access control and auditability. Or, to balance security and flexibility concerns, you may need a platform that performs well in a hybrid environment that

can burst into the cloud while keeping sensitive customer data on-premises.

INFRASTRUCTURE AND IMPLEMENTATION PARTNER SELECTION

Infrastructure and Operational Expertise

As with platform selection, the hosting requirements for your ecommerce site will depend heavily on your performance, scalability and security needs (outlined above). In many cases – the best configuration for a site includes more than one option, encompassing a combination of cloud, on-premises or hybrid. Other factors to consider: having access to scalable, dedicated bare-metal components; implementing cloud expandability for bursting; meeting PCI compliance; and building in redundancy for disaster recovery.

When evaluating hosting options, it's important to consider whether potential integration and deployment issues are aligned with the organization's IT resources and experience. In addition to skilled front-end developers, you need solutions architects who have experience designing infrastructure solutions to support your specific platform – ideally for a wide range of use cases – as well as IT administrators with experience operating, securing and optimizing these kinds of systems in production.

Ask if the infrastructure provider can...

- Demonstrate experience running your platform at scale?
- Refunds, Renewals, Etc. (to keep cap scheme)
- Help you handle unexpected demand spikes
- Help you prepare for seasonal traffic peaks (e.g., Black Friday)
- Balance out internal expertise gaps

Make sure your project team understands your internal technical resources and which platforms your people have worked with in the past. If you lack platform-specific expertise in-house, you should consider partnering with a managed cloud provider who can provide extra IT manpower and experience required to architect, operate, secure and optimize these systems for you.

Implementation and Partner Selection

It's also crucial to choose an ecommerce platform implementation partner that can help you set the foundation for a successful, scalable ecommerce implementation. Some businesses may need more assistance with the backend technologies while others may need more marketing assistance with site design and user experience elements. But in most cases, the right implementation partner will be able to marry the user experience skills of a digital agency with the technology-specific expertise of a systems integrator.

Key considerations for choosing an ecommerce implementation partner include:

- Project methodology – What is the partner's methodology for delivering projects, and how well does it align with your own project management philosophies? Does it equip them to adequately handle adjustments you might make to the scope of the project?
- People and culture fit – How many resources do they have on staff and which will roles be assigned to your project? What kind of experience do they have with similar projects? Will there be a dedicated project manager or development team?
- Post-implementation support – As with your infrastructure provider, it's important to ensure that your implementation partner can provide the support you need after launch (e.g., application management and production support).
- Budget – Can the partner design your solution and help you realize the benefits you require within the budgetary restrictions established during your CBA process?
- Timeline – As with platform selection, it's important to ensure the partner can deliver the solution quickly enough to meet any fixed timeline requirements you may have.



- End-to-end services – In most cases, it's beneficial to choose a partner who can provide not only implementation services, but also the full range of agency, technology, consulting, order fulfillment, order management, operational and other services your business requires in order to minimize the complexity and overhead of partner management.

In order to mitigate the risks of project failure or delays, you also need your vendor to provide tangible evidence of their experience delivering successful ecommerce replatforming projects of equivalent (or greater) complexity in the past. Look for case studies, certifications, positive analyst recommendations, peer referrals and customer testimonials that reflect the following:

- Successful deployments at scale
- Platform-specific experience, certifications and relationships
- Infrastructure-specific experience, certifications and relationships
- Relevant integration experience (i.e., integrating your platform of choice with payment systems, order management systems, content management systems, etc.)
- Vertical-specific experience (e.g., comparable industries, related products, similar seasonality, etc.)
- Globalization assistance with new countries, languages and currencies

CONCLUSION

Ultimately, replatforming an ecommerce system comes down to clearly defining your business goals, ensuring the requisite investments are worth it, and thoroughly vetting both platforms and prospective partners. Choosing the right ecommerce platform software should balance the cost of implementation, licensing and management against the benefit of instant access to the tools needed to build and grow a competitive site. Your infrastructure and implementation partners should be able to demonstrate proven experience architecting, deploying, integrating, operating, securing and optimizing your platform. They should also have the technology-specific expertise on-

hand to help fill any existing internal skills gaps.

Transforming your ecommerce store is often extremely costly and time-consuming. The complexities and risks involved can be overwhelming for CMOs and CIOs alike. But as long you're methodical, objective and thorough at each step along the way – from conducting your CBA to defining requirements to choosing the right partners – you'll have a site that provides a truly differentiated shopping experience, boosting sales and strengthening your brand. And, best of all, you can rest assured that it was worth the investment.

Learn more about Rackspace Ecommerce Hosting solutions at: www.rackspace.com/ecommerce-hosting

And learn more about PFS:

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FOOTNOTES

1. <http://www.slideshare.net/Carnage3604/forrester-tco-comparison>



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