

Brief: Address Today's SaaS Integration Challenges To Increase Business Value

Fixing The Dark Side Of SaaS Adoption

by Liz Herbert and Randy Heffner

December 11, 2015 | Updated: December 30, 2015

Why Read This Brief

Software-as-a-service (SaaS)-based business applications promise fast time-to-deploy and an Agile, iterative approach to improving business results. But try-and-buy, under-the-radar self-provisioning, and incremental rollouts have a major downside: Solutions are fragmented, with integration too often an afterthought. As a result, business value suffers — due to fragmented user experiences, siloed data, and breaks in business process flow. This report surveys the state of SaaS integration and identifies best practices for AD&D pros for fixing common issues.

Key Takeaways

Assess Integration Capabilities During SaaS Selection

Focus on investigating integration capabilities when selecting a SaaS solution; they will be a key differentiator in user experience (UX) and business results. Be on the same page with your business buyers about how critical integration is and reach out to educate them.

Focus On UX Integration -- Not Just Data And Process Integration

App users need a cohesive user experience, not an array of fragmented SaaS silos. Build a custom UX for each role or drive SaaS vendors to prioritize UX-level integration as an essential component of their offering.

The Future Is Prebuilt Integration

Choose solutions with tight integration between SaaS players and major marketplaces to avoid the challenges of building custom integration with web services. Moving forward, look for increasing prebuilt integration between these small SaaS vendors and existing platforms.

Brief: Address Today's SaaS Integration Challenges To Increase Business Value

Fixing The Dark Side Of SaaS Adoption

by [Liz Herbert](#) and [Randy Heffner](#)

with [Christopher Mines](#), Claudia Tajima, and Rachel Birrell

December 11, 2015 | Updated: December 30, 2015

SaaS's Fast, Self-Service Nature Is A Double-Edged Sword For Value

Software-as-a-service (SaaS)-based business applications have a deep heritage of adoption by empowered business users, achieved by lowering purchasing barriers through try-and-buy, credit card purchasing, and self-service. But these buying patterns that attract users to SaaS also wreak havoc on subsequent integration efforts because companies end up with a portfolio of disconnected apps, bought with little or no provision for integration.

This creates two significant problems: 1) Buyers skimp on due diligence, choosing SaaS solutions before fully assessing their integration needs and SaaS apps' integration capabilities and 2) SaaS integration is left out during technology strategy and enterprise architecture discussions. Even purchasers who do upfront integration planning face a challenge to achieve coherent business operations across SaaS apps, since the apps vary widely on the features they provide for integration. On the plus side, some of the same traits that enable business buyers also ease integration with other applications. For example, most SaaS apps feature modern architectures born in a services-oriented era and a "one version" design approach, both of which simplify integration.

SaaS Buying Patterns Create Problems For App Integration

The very traits that have made SaaS so appealing to business users exacerbate integration issues as SaaS adoption grows.¹ Specifically:

- › **Try-and-buy purchases grow into real usage without considering architecture strategy.** SaaS buying is like a small chip in a car windshield; it starts off too small to notice or properly address — but can soon grow into an unwieldy problem. Many SaaS purchases are "just for a few users" or "just for a short time" — but then grow to become important, entrenched enterprise solutions. For example, we commonly speak with clients who are dealing with multiple (sometimes 10 or more!) Salesforce deployments that are disconnected from other apps because line-of-business buyers have self-provisioned the technology to solve a short-term need — with little or no eye to data integration or technology architecture strategy.

FORRESTER®

Forrester Research, Inc., 60 Acorn Park Drive, Cambridge, MA 02140 USA
+1 617-613-6000 | Fax: +1 617-613-5000 | forrester.com

© 2015 Forrester Research, Inc. Opinions reflect judgment at the time and are subject to change. Forrester®, Technographics®, Forrester Wave, RoleView, TechRadar, and Total Economic Impact are trademarks of Forrester Research, Inc. All other trademarks are the property of their respective companies. Unauthorized copying or distributing is a violation of copyright law. Citations@forrester.com or +1 866-367-7378

Brief: Address Today's SaaS Integration Challenges To Increase Business Value

Fixing The Dark Side Of SaaS Adoption

- › **Business users skimp on due diligence.** SaaS vendors have a long track record of appealing to and selling directly to business users. They show sleek demos and boast about great integration and platform capabilities. But business buyers rarely do the proper due diligence to understand technical integration capabilities, technical or contractual limitations, developer resources, or skill requirements. One SaaS buyer we interviewed remarked that, “Going from the dog and pony show and then putting it in, we realized that we couldn’t do half of what we wanted.” Even when they know they will need integration, business buyers fail to do the requisite due diligence during vendor selection.
- › **The fragmented landscape of point solutions amplifies integration issues.** The current state of the SaaS vendor landscape further complicates integration scenarios.² The world of SaaS consists of hundreds of niche solutions, few of which are built on the same platforms. It’s not uncommon for a large enterprise to be running dozens of SaaS solutions. Even buyers that opt for multiple SaaS solutions from a major vendor like IBM, Oracle, or SAP still face diverse architectures and integration challenges due to the layers of acquisitions that built up the SaaS portfolios at those larger software firms. There are still no true end-to-end SaaS suites for large enterprises, despite continued momentum in that direction.³
- › **SaaS apps vary widely in the integration features they provide.** If the majority of SaaS apps provided a rich portfolio of options for integration, it would simplify your SaaS integration strategy — but they don’t. The wide variation across SaaS app integration support exacerbates integration difficulties. The most widely available integration mechanism, data import/export, provides a minimal (though important) level of integration. Many SaaS apps provide for inbound API calls, which is a step better, but API designs vary widely. Advanced mechanisms like UX-level integration are spotty at best.⁴

But The Standardized “One Version” Approach Gives SaaS Some Integration Advantages

The news is not all bad for SaaS integration. Several traits of SaaS solutions can help with integration, including:

- › **An API-centric, web services approach — at least inbound to SaaS.** Unlike older bespoke and packaged applications that grew up before web services became prevalent, today’s leading SaaS solutions were born in the era of service-oriented design. This means that most SaaS apps have inbound access in the form of APIs (REST, SOAP, and others) or data services (e.g., OData). Using these services makes it easier, for example, to update the customer master and trigger an update to the corresponding customer record in a leading SaaS app. But buyers beware: Not all SaaS apps have these capabilities, and some may still rely on more resource-intensive polling for changes. And the story about outbound integration is typically weaker than inbound; it is less common for SaaS apps to have rich support for outbound service calls. This means that updates made in the SaaS app may not trigger changes or alerts in other systems, and thus data can get out of sync.

Brief: Address Today's SaaS Integration Challenges To Increase Business Value

Fixing The Dark Side Of SaaS Adoption

- › **The prevalence of open standards.** SaaS apps have also grown up in an era of broad adoption of selected open standards and data interchange formats — including HTTP, XML, JSON, SOAP, and comma separated values (CSV) — which are commonly the foundation of SaaS app integration. This means that the skills that app owners need for integration will be easier to come by — whether in your own technology management team or in the third-party ecosystem. On the other hand, SaaS vendors use these lower-level standards in widely varying ways, so teams will still have to adapt to each vendor's design models.
- › **A growing focus on app stores and ecosystems.** Leading SaaS vendors know that their buyers' technology strategy increasingly revolves around ecosystems of add-on software solutions, services partners, and developer components.⁵ Some SaaS vendors — such as Intuit, NetSuite, and Salesforce — have been beefing up their own ISV community and app stores. Other SaaS vendors, particularly smaller and industry-specific ones, have started offering their solutions in app stores like Salesforce's AppExchange and SAP's Hana App Center. Often, important app-to-app integration code is prebuilt and available in an app store.

Five Best Practices For SaaS Integration

The negative impact of siloed SaaS application portfolios can be severe — ranging from “swivel chair” user experiences, where users have to swing between multiple apps to accomplish a single task, to broken business processes or to redundant and conflicting data. We have identified five best practices for AD&D leaders to stop the bleeding and get ahead of the SaaS integration problem.

1. **Get real about SaaS ROI and the business value lost due to integration issues.** SaaS ROI has long been a hot topic, but looking at the ROI of a single SaaS app in a vacuum is a dangerous local optimization. Optimizing SaaS ROI more globally requires assessing how business processes flow across multiple SaaS apps; when buyers get into the real integration work (versus the vendor demos), unforeseen limitations often diminish business results. Account for the extra costs of integration to fix or work around such problems as: 1) technical limitations, such as the limited APIs exposed to you; 2) contractual limitations, such as limits on the number of API calls within a time frame; and 3) network limitations, as real-time integration of large amounts of data can be slow in even the most bandwidth-rich countries.
2. **Educate business buyers on integration needs, strategy, and issues.** AD&D pros can avoid or reduce many of the integration issues arising from business-led SaaS purchasing if they make their business counterparts more aware of the need for integration. For example, sharing a few horror stories of SaaS solutions that couldn't support late-breaking integration requirements can go a long way in getting business buyers to think about integration and “true” ROI before jumping in.
3. **Proactively support business-led SaaS selection.** Enterprise architects and application development pros should create tools and checklists that outline integration considerations. Insist on answers to questions about end-to-end process flows, user experiences, desired insights, and

Brief: Address Today's SaaS Integration Challenges To Increase Business Value

Fixing The Dark Side Of SaaS Adoption

other factors that drive business effectiveness, and use those answers to derive requirements for SaaS integration. It's unlikely that business execs will be equipped to confirm these requirements on their own, so technology management must make resources available to help the business here.

- 4. Evaluate integration before making (or continuing) significant SaaS investments.** Make integration a focus of SaaS selection criteria. It might lack the appeal of a sleek UI or cool mobile app — but it will make a huge difference in user experience and business results. Where SaaS is already in place, examine integration tools before signing any renewals — addressing issues or exiting relationships as necessary.
- 5. Re-evaluate your cloud strategy to reduce the fragmentation.** A SaaS strategy that is too fragmented is a challenge for many reasons, not just integration. A proliferation of vendors and SaaS apps requires too much costly vendor management and monitoring in areas such as pricing, security, and new feature rollout. AD&D pros should work with key business stakeholders to constantly re-evaluate the overall SaaS/cloud road map.⁶ Standardizing as much as possible on the same platform (such as Force.com or AWS) or the same vendor (such as IBM, Oracle, Salesforce, or SAP) simplifies not only the integration approach but also other vendor management challenges.

What It Means

Integration Will Be A Differentiator For SaaS Apps

SaaS applications are here to stay — and are only growing in number and scale. This increasing SaaS adoption will bring the integration issue front and center for customers, SaaS vendors, SaaS integration tool vendors, and the third-party services vendors that support them. For AD&D pros, this means that:

- 1. SaaS integration complexity will drive buyers toward the major marketplaces.** As SaaS adoption grows and enterprises experience more of the integration issues associated with SaaS silos, they will recognize the value of prebuilt integration with the major SaaS apps and marketplaces. This will drive smaller SaaS players to prebuild integration with the majors and to list themselves in their app stores, which expands the business value of both the smaller SaaS players as well as the majors. For even tighter integration, some smaller SaaS vendors will build fully on top of an existing SaaS platform rather than rely on web services integration. For example, FinancialForce.com and Kenandy have built directly on top of Salesforce Force.com, which means tighter integration rather than web services calls outside the platform.
- 2. Nondifferentiating SaaS apps will be commoditized, but integration to them will not be.** Running counter to the trend of prebuilt integration will be a new perspective on nondifferentiating apps. We often hear CIOs say that they will acquire nondifferentiating apps like finance or purchasing and build other apps in-house for competitive advantage, such as customer engagement.⁷ That said, while an optimized business process may not need a custom general ledger, it may require specialized accounting: For example, private aircraft management

Brief: Address Today's SaaS Integration Challenges To Increase Business Value

Fixing The Dark Side Of SaaS Adoption

firm Solairus Aviation accounts for each jet as a project and each flight as a task within that project. Requirements like this will add new value to rich integration between “custom” and “commodity” SaaS apps.

- 3. The UX-level integration of SaaS apps will become increasingly important.** Demo after demo at tech conferences shows the creation of a compelling UX for an isolated need like sales analysis. But what application users need is not a growing array of disconnected user experiences but rather a small set of integrated, contextual, and multitouchpoint tools. To fight back against UX fracturing across SaaS silos, AD&D pros can either build a custom UX for each role, live with swivel-chair UXes, or push SaaS vendors to enhance their capabilities for UX-level integration. For example, Salesforce makes it possible to integrate apps built on Force.com directly into the Salesforce UX, such as through a custom tab that has the same look and feel as the rest of the Salesforce UX.

Engage With An Analyst

Gain greater confidence in your decisions by working with Forrester thought leaders to apply our research to your specific business and technology initiatives.

Analyst Inquiry

Ask a question related to our research; a Forrester analyst will help you put it into practice and take the next step. Schedule a 30-minute phone session with the analyst or opt for a response via email.

[Learn more about inquiry](#), including tips for getting the most out of your discussion.

Analyst Advisory

Put research into practice with in-depth analysis of your specific business and technology challenges. Engagements include custom advisory calls, strategy days, workshops, speeches, and webinars.

[Learn about interactive advisory sessions](#) and how we can support your initiatives.

Brief: Address Today's SaaS Integration Challenges To Increase Business Value

Fixing The Dark Side Of SaaS Adoption

Supplemental Material

Companies Contributing To This Report

ClickSoftware	Marketo
Concur Technologies	NetSuite
Coupa	Salesforce
CrownPeak	ServiceNow
Keste	SugarCRM
KPMG	

Endnotes

- ¹ SaaS apps still carry substantial risks — which will only magnify as SaaS gains adoption and SaaS vendors get bigger. See the [“Four Reasons CIOs Should Still Hedge Their SaaS Bets”](#) Forrester report.
- ² Nearly 15 years after the appearance of software-as-a-service (SaaS) startups such as Salesforce, NetSuite, and Google, software-as-a-service is nearing its tipping point. With the greater prevalence of SaaS across applications categories, technology sourcing executives must help with researching solutions, piloting and purchasing them, and contract negotiations. For more information, see the [“TechRadar™: Software-As-A-Service, Q1 2014”](#) Forrester report.
- ³ Major ISVs — IBM, Microsoft, Oracle, and SAP — are racing to enable a broad suite of SaaS solutions, but they still have a way to go to offer a true end-to-end SaaS portfolio. Today, Salesforce remains the behemoth of the SaaS world. See the [“Salesforce Is Bidding To Be Your Strategic Customer Platform; Should You Accept?”](#) Forrester report.
- ⁴ To connect across the silos and recover coherent business operations, AD&D pros must sort through each of their SaaS vendors' distinct features for integration and decide how best to use each. To facilitate this process, Forrester reveals the integration mechanisms commonly provided by SaaS applications as well as our guidance on key usage scenarios for each type of mechanism. See the [“Options For Integrating SaaS Applications”](#) Forrester report.
- ⁵ Today's SaaS app stores come in a variety of flavors. For more details about the types of app stores, see the [“Market Overview: Service App Stores”](#) Forrester report.
- ⁶ The SaaS landscape continues to move quickly, with SaaS pure plays such as Coupa, Salesforce, and Workday continuing to grow. SaaS buyers should also keep a close eye on the major ISVs, which are all reinventing themselves to be SaaS vendors. For more information, see the [“Are The Biggest Enterprise Software Vendors Now The Best Cloud Platform Bets?”](#) Forrester report.
- ⁷ Nimble customer engagement apps and analytics must activate customer experience ecosystems — the web of relations among all aspects of a company that determine the quality of its customers' experience. To learn more, see the [“Crafting Software For Your Firm's Customer Experience Ecosystem”](#) Forrester report.

We work with business and technology leaders to develop customer-obsessed strategies that drive growth.

PRODUCTS AND SERVICES

- › Core research and tools
- › Data and analytics
- › Peer collaboration
- › Analyst engagement
- › Consulting
- › Events

Forrester's research and insights are tailored to your role and critical business initiatives.

ROLES WE SERVE

Marketing & Strategy Professionals

CMO
B2B Marketing
B2C Marketing
Customer Experience
Customer Insights
eBusiness & Channel Strategy

Technology Management Professionals

CIO
› Application Development & Delivery
Enterprise Architecture
Infrastructure & Operations
Security & Risk
Sourcing & Vendor Management

Technology Industry Professionals

Analyst Relations

CLIENT SUPPORT

For information on hard-copy or electronic reprints, please contact Client Support at +1 866-367-7378, +1 617-613-5730, or clientsupport@forrester.com. We offer quantity discounts and special pricing for academic and nonprofit institutions.