



If We Have SaaS, Do We Need BPO? *An Introduction to SaaS – Architecture, Business Model and Deployment Option – and to its Relationship to HRM BPO*

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Before We Got SaaS

From the perspective of an HR leader or specialist, what matters about technology is how it helps them achieve the human resource management (HRM) outcomes, not just the HR department's outcomes, that lead to and support their organization's business outcomes. At what cost, to include risks and demands for talent, with what pain and suffering and/or how easily and reliably does technology, and very specifically business applications software, deliver the needed administrative and strategic HRM capabilities? That's the bottom line; all the rest is tactics.

Today, HR leaders are interested in using technology for purposes that go way beyond traditional administration and compliance and drive to the heart of improving business results. They want to improve the quality of their hire decisions, engage the workforce in productive behaviors, enhance the capabilities of that workforce, manage key employee segments on a regional or even global basis, reduce or hold steady their overall compensation and benefits budgets while achieving the same or better attraction and retention results, increase workforce agility – the list is long and very challenging. There's no question that HRM applications software, at least the best of the available software, really can help organizations accomplish all of this and more when selected and implemented properly (where doing both of these properly could be the topic for another article or even a book). But there's little value, if any, to those HR leaders from applications software that limits the creativity of their strategic business processes and rules, takes forever to implement or calcifies once implemented.

Not so long ago, the only really practical tactics available to mid- to large-size firms to obtain the needed HRM application software were to:

- 1) License a core ERP or standalone HRMS, at a considerable capital outlay and 20+ percent annual maintenance payments, from a relatively small number of vendors – and then execute major upgrade implementations every few years in order to take advantage of the new capabilities that are only delivered on the latest release;
- 2) License (or not) equally expensive add-ons, with their own capital outlays and annual maintenance fees, from so-called best-of-breed, specialist HRM package vendors;
- 3) Implement all of that HRM software themselves or with the help of even more expensive (often by a factor of ten) systems integrators or transformational consultants; and,
- 4) Run all of that HRM software in data center facilities, which they operated themselves, or in data center facilities operated for them by yet another third-party – an IT facilities provider.

The *architecture* of these licensed HRM software packages was designed to support one enterprise (or just one part of an enterprise bounded by geography or line of business) running on one instance of the software with one set of databases specific to that enterprise; the architecture was known as single tenancy. There was a lot of complaining about the costs, the infrequent and very painful upgrades, and the tendency for these packages to constrain what they were supposed to be enabling, but no one was challenging their basic, single tenancy architecture.

The *business model* was for those package vendors to sustain fairly long and complex pursuits (interesting that the sales process for big ticket software, consulting, systems integration and now outsourcing contracts is described in terminology taken from the "hunt") in search of mega-buck deals, both as to up-front license fees and in perpetuity annual maintenance fees. The top ERP/HRMS salesmen, in the heyday of these mega-buck deals, were looking at quite addictive million dollar annual commissions, and they were VERY happy. But more importantly, the vendors got their money essentially up-front, whether or not the software was ever implemented or utilized fully. When you combined that up-front license fee with those year-over-year maintenance payments that were a large percentage of that license fee, the profit potential from this business model was huge once the software vendor had recovered their large initial costs to deliver that first release and built up a decent-sized, maintenance-paying installed base.

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The *deployment option* for this licensed HRM software was either in the enterprise's own data center or in a third-party's rent-a-center, with legions of their own staff or of staff paid for on a time and materials basis from third-party system integrators doing the implementation work. And it should be noted here that, quite often, the HRM software's self-service capabilities had to be licensed separately with a license fee that penalized in its cost structure putting everyone online. Thus, if the customer wanted to reap the benefits of universal self-service, their up-front costs to do so were considerable.

Selecting, licensing, implementing, and building-out from these ERP/HRMSs were expensive, time-consuming, and risky undertakings, albeit ones with which the industry developed a lot of experience. However, these undertakings were not very hard to understand from a business model, architecture or deployment options perspective for all those HR leaders who really needed the results of this automation. And there was considerable comfort in knowing that you controlled (in reality, your IT organization controlled, which may have been less comforting when there were no service level agreements or business-driven IT oversight Boards) the data center where your data resided and in which your software was operated.

During the late 1990s, a number of new HRM software vendors, heavily focused on staffing automation and funded entirely by not always smart venture money, came to market with the idea that they would host their own software for each customer and that customers would pay for the use of that software on a subscription (pay-as-you-go) rather than a license (large up-front capital outlay with substantial annual maintenance fees) basis. In this way, so they thought at the time, they could manage very rapid upgrades, thereby allowing them to come to market more quickly and to build out functionality behind the scenes. They also thought that they could make the buy decision a lot easier for their customers, thereby shortening the sales cycle considerably, by taking the in-house IT costs (and the HR department's heavy dependence on partnering with a not always enthusiastic internal IT organization) out of the evaluation. This early version of on-demand applications, where the vendor was called an ASP (application software provider), hosted their own software, and charged for the use of that software on a subscription rather than capital outlay basis, did shorten the "sales" cycle by removing much of the IT footprint and capital outlay angst. However, few to none of these ASP vendors ever became profitable let alone survived in their original form, and therein lies a cautionary tale.

There was a lot of good thinking here about deployment options and business models, but many of these early "on-demand" HRM software vendors went through their cash like it was ice cream on a hot summer day and have long since disappeared into various software graveyards. They discovered that their installation, operations and support costs were totally unaffordable because they were essentially running an instance of their software for each and every customer. Furthermore, many of them came to market without solid underlying object models or architectures, and their rapid release of enhancements was hampered by the burden on their clients of incompatible data and functionality from release to release, not to mention constantly changing user interfaces. And with no big up-front license payments to fund them, these pioneers of ASP/on-demand software lost money during the early years of every customer relationship. They might have gotten to profitability for a given customer if that customer had stayed with them long enough, but then came the dot-com bust. And that too was a cautionary tale.

How We Got SaaS

But the enduring value of those early ASP/on-demand vendors was the important lesson learned. These experiments in off-premise deployment and pay-as-you-go business models have provided the real (as opposed to the marketing literature only) SaaS (Software-as-a-Service) vendors with critical insights upon which to build:

- 1) Without being able to run their software on a one-to-many basis, the costs to the vendor for deploying/upgrading/supporting the software are just too high, not to mention the opportunities for operational errors;
- 2) Off-premise doesn't mean out of sight or disconnected; all the same inter-

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- faces that keep that on-premise portfolio of applications connected must be recreated when an off-premise application needs those same connections;
- 3) Configuration by client is just as important a capability in off-premise as it is in on-premise software, perhaps even more so, and it takes much greater and more accurate depth of domain model and architectural analysis to understand and abstract all of those business rules/processes/UI, etc., capabilities for which configuration is needed into the chosen configuration technology;
 - 4) Without full architectural multi-tenancy (as opposed to multi-client approaches, e.g., those provided through the use of blade servers and/or virtualization), no vendor of off-premise software can begin to cope with extensively configured customer instances at a profit-making cost *unless no otherwise capable competitor has full multi-tenancy*;
 - 5) While it's certainly possible to use single-tenant software as the platform for some flavor of on-demand, subscribed software and virtualization techniques can reduce the costs and risks of deploying single-tenant software in an on-demand business model, without properly done, full architectural multi-tenancy, the costs (given otherwise equivalent functional and configuration capabilities) for the single tenancy on-demand software vendor are always going to be higher than for the SaaS vendor with truly multi-tenant software; and
 - 6) When you add the additional, architectural multi-tenancy capabilities needed for customer-satisfying on-demand software, e.g., establishing a cascading set of inherited cross-client, within client, cross-geography and within geography business rules and changing your object model to allow some data to transcend clients, not only are the total costs of ownership (think IT-related costs) reduced tremendously, but the improvements in total costs of service delivery (think IT-related plus customer servicing costs) are also substantial.

And here's it's important to note that it's total cost of service delivery that matters more to HR leaders than just total cost of ownership because these HR leaders must deliver the service, to employees, managers, and many others, for which the software is just a component, albeit the critical one.

SaaSy is as SaaSy Does

Software-as-a-Service is the response to these lessons. It is an architectural, business model and deployment approach taken by the vendor/owner of an application software package in which (with apologies to Gartner for building upon some of their terminology) the application is owned, delivered, and managed remotely by one or more application software vendors – the *deployment* perspective. Software-as-a-Service applications are NEVER implemented in-house by their customers but they are designed to provide substantial integration capabilities to those still in-house applications or otherwise deployed applications with which they must interoperate. I would add that, while the server environment might be outsourced by the SaaS software's owners, managing those servers and related resources for incredible up-time and response-time is a core competency of a SaaS vendor.

Software-as-a-Service applications are based on a single set of common code and data or object definitions which are consumed in a one-to-many model by all contracted customers at any time – the *architectural* perspective. I would add that there may be reasons of operational performance to load balance or to configure the software differently for different target markets, i.e., to split the set of all customers across two physical instances of the code and databases and use cloning or other techniques to keep both instances in sync, but there is only one logical instance even in this case. And architectural multi-tenancy is not just about sharing code and a database but much more importantly about sharing those business rules, workflows and other configurations that should be shared (e.g., U.S. tax tables when the SaaS application is payroll) while having the fullest possible configuration by individual client (including the user experience look and feel, client-specific coding structures, client-specific naming conventions and client-specific processes).

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Finally, SaaS applications are always subscribed on a pay-per-use or subscription basis – the *business model* perspective. Here, too, I would add that there is usually a subscription period of at least one year with incentives provided for longer subscriptions. The broader, the more complex and the more implementation work that the software requires, the longer the subscription period needed to ensure profitability for the vendor, as well as a return on their implementation investment for the customer. Thus, for many HRM SaaS subscriptions, a period of three or more years is common.

Small or less complex organizations may be well-served and get much of the benefit of SaaS via pre-configured versions of on-premise/single-tenant software delivered on a hosted, subscription basis where the vendor has done an excellent job of achieving the maximum possible operational efficiency that is possible without multi-tenancy. Much larger or more complex organizations may well prefer the sense of control that comes with having their own software and database instance delivered on a hosted, subscription basis, and here, too, vendors can achieve a reasonable degree of cost-effectiveness via a disciplined approach to client configuration control and operational efficiency. But these other approaches simply can't achieve the lower costs of software delivery, the higher levels of client-specific configuration, or the highly beneficial cross-client analytics that can be achieved by an equally disciplined vendor with a highly configurable, architecturally multi-tenant platform.

If We Have SaaS, Do We Need BPO?

Having carefully defined SaaS, we need to do the same for BPO before tackling this question. As in so many things, vocabulary shapes our thinking, and few terms have been as misunderstood as business process outsourcing (BPO). Human resource outsourcing (HRO), the umbrella term, is the use of an external provider to do any aspect of what we need done rather than doing it ourselves. This includes outsourcing to software package vendors (including SaaS vendors) the design, development, maintenance and enhancement of software; to training course providers, regardless of delivery technology, the design, development, maintenance and enhancement of training courses; and to compensation plan designers and staffing strategy consultants the provision of expertise and/or staff augmentation, either of which may be delivered in the form of documents and/or software setups. HRO also includes every flavor of IT outsourcing, e.g., applications hosting, hosting and managed services, SaaS, and implementation services when applied to HR technology, and every flavor, however narrow, of BPO, from being our payroll office to doing our background checks to providing whole chunks of our HRM delivery system.

Business process outsourcing, specifically HRM BPO, is a special case of HRO in which the provider delivers the end results of an HRM business process with responsibility for quality, timeliness and cost. Although we should have evaluated the HRM BPO provider's people, processes and technology as part of our evaluation and selection of the provider, and we should certainly, as part of vendor management, conduct ongoing checks to ensure that the provider continues to perform as expected, our day-to-day use of the provider isn't burdened with the specifics of how they deliver the results but rather focuses on those results. Classic examples of HRM BPO can be found in background checking or tax filing, in single benefit plan administration to much more comprehensive benefits administration (assuming that this isn't just about systems but includes responding to employee/manager questions, either online or via a contact center, and providing related analytics), payroll (but not on a service bureau basis, which is much more of a managed IT service, but rather as if the provider were our payroll department), and job board delivery of vetted applicants, search firm delivery of qualified candidates, and RPO (recruitment process outsourcing, a much broader use of BPO that encompasses much beyond sourcing). What's important in BPO that distinguishes it from the rest of HRO is that we judge the BPO provider on the results of a business process rather than on the basis of tasks, products, utility services, etc.

One type of HRM BPO that's generated a lot of attention is comprehensive enough that the provider delivers not only a collection of important process results but also maintains the customer's core HRM system of record, the transac-

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tion processes that maintain that system of record, and enough of the using processes (e.g., payroll, benefits administration, training records administration, performance management, etc.) to move the center of gravity for the customer's HRM delivery system's software applications from the customer to the provider. Comprehensive HRM BPO, while of great interest and potentially the future of the HRM delivery system for some set of end-user organizations, is by no means the whole story of HRM BPO. And it should be noted that the vast majority of mid- to large-market end-user organizations, while they may consider comprehensive HRM BPO anathema, are today making considerable use of process-specific HRM BPO providers.

Once the distinction between SaaS and BPO is clear, it's obvious that YES, even with today's best SaaS HRM software, there remains a tremendous business case for HRM BPO. Although the level of benefit differs greatly by size and current HRM delivery system of the buyer, the business case for HRM BPO, even when the HRMDS' core platform is entirely SaaS, includes:

- 1) Reducing the total costs of service delivery (not just the total costs of IT ownership), making them variable with business activity and creating predictable expenses. This service delivery includes everything that cannot be done entirely via the software, and there are many HRM processes for which 100 percent automation is simply not achievable or not cost-effective to achieve. Processing U.S. payroll garnishments is a mind-numbing example of a strictly administrative process that must be done correctly and on time to avoid serious penalties but which is nearly impossible to automate fully because of the lack of standards in the related documentation, the sheer number of jurisdictions that may levy a garnishment, the wide variety of garnishment types for each of which the processing is slightly different, the complications of multiple concurrent garnishments for an individual, etc. Where payroll is delivered as SaaS, the in-house payroll department still has a great deal of work to do to prepare the garnishment deduction and then to reconcile and report on their garnishment processing. Where payroll is delivered on a BPO basis, doing this work moves to the BPO provider.
- 2) Gaining access to best-in-class HRM consulting, programs and delivery system capabilities whose costs are prohibitive if obtained directly for all but the very largest organizations. Using our garnishment example, the in-house payroll department using a SaaS payroll system would need to have all the relevant expertise in-house or access it via a consulting contract. The company using a BPO provider for payroll would draw upon that provider's center of excellence in such matters to provide the needed expertise, which expertise would be leveraged across all of its customers, thereby achieving a much lower total cost of service delivery in this area.
- 3) Gaining access to good HRM and HRM delivery system (HRMDS) practices. An end-user organization may well accomplish this via a collection of never-ending consulting engagements, but only the very largest organizations can spread those consulting costs far enough to begin to approximate the leverage that an HRM BPO provider can achieve when building and then using that expertise on behalf of their entire customer base. Furthermore, a successful HRM BPO provider can draw upon the experience of their growing customer base, through various bench marking and data mining techniques, to add to their knowledge about what works and what doesn't work in HRM and the HRMDS. I should add here that no HR executive in his/her right mind shares freely a truly best HRM or HRMDS practice because that's what creates competitive advantage, but there's a growing body of research-based recommendations around what constitutes good practice.
- 4) Moving more quickly than we could on our own to implement specific HRM and/or HRMDS capabilities that are needed to run the business, e.g., widespread self-service and/or the ability to handle important new programs in variable compensation or candidate sourcing. While SaaS-delivered HRM software can play a very large role in enabling a new program or policy, and it can often be implemented fairly quickly with the help of the vendor or third-party implementers, that still leaves all the surrounding process-re-

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lated work squarely with the customer. With BPO, not only is the technology and associated implementation support provided for new capabilities, assuming it's within the scope of what the BPO provider can deliver, but the rest of the work needed to "turn on" the capabilities is also provided. For example, when an end-user organization needs to conduct their first major downsizing ever, there are a whole range of strategic decisions to be made which, once made, lead to a flurry of execution activity, only some of which can be automated fully, even with the best of today's SaaS offerings. Much of the surrounding work, e.g., selecting and contracting with an outplacement advisory firm, setting up and testing the agreed severance business rules within the payroll software, and providing offboarding scripts to the service center representatives who will be taking employee calls once layoff notifications have been delivered, can be done by a BPO provider if we've put one in place to handle the broader process of offboarding.

- 5) Achieving better service levels than we could on our own because that business process – and not just that SaaS automation – will be delivered by a BPO provider for which delivering that HRM process is their core competency. There's a major caveat here that great care is needed to select the right metrics and target values so that you don't just hire poor performers faster, but this would be true whether process responsibility remained in-house or was contracted with an HRM BPO provider. Where that service level includes customer service center responsiveness, accuracy, etc., it's obvious to all that there's more going on here than can be done solely via SaaS. But even when the human intervention needed by that business process, over and above what can be done solely via software, is largely invisible to HR's customers, i.e., to managers and employees, it's no less real or administratively critical in order to deliver the results of that business process. For example, we can automate much of what's needed to conduct performance reviews and to use their results across other HRM processes, once the business rules for same are defined. We can even include automated content review to help ensure that those performance reviews do not create obvious risks of regulatory or contractual non-compliance. But we still don't have software that, out of the box, can ensure that all managers are "grading" on the same curve, and there's still a need for employees to turn to someone when they need advice on how to handle a problem with their manager that surfaced in the performance review process. While many firms would prefer to have their HR department handle the non-automated portions of the performance review process, a BPO provider can also do much of this. Whether in-house or via BPO, what's important here is that there's work that cannot be eliminated via the SaaS delivery of the relevant software.
- 6) Augmenting HRM software, even that SaaS-delivered, with all of the content, business rules, analytics, and advisory needed to meet today's expectation by managers and employees of an Amazon-like online experience can be done in-house, but BPO providers have more incentive and resources to do and sustain this level of embedded intelligence than do all but the very largest end-user organizations. The more embedded intelligence via self-service, the less call center activity to be sure, and that's a great source of economy of scale for the BPO providers. But that level of embedded intelligence takes far more expertise and resources than can be cost-justified without the ability to leverage that investment across many, many clients. Thus, the real work of technology enablement of highly automated HRM processes is also the real work of Amazon.com, creating and maintaining all of the relevant content and business rules.

Clearly, there's more to HRM processes than can be accomplished solely through purely software-based technology enablement, whether or not delivered via SaaS. While SaaS goes a long way toward eliminating a whole list of IT footprint considerations, it doesn't address all of the surrounding manual effort needed to deliver HRM. It's certainly true that some HRM processes, especially those that are highly regulated and which have been automation targets the longest, like U.S. employment tax filing and payment, can be substantially deliv-

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ered via software. But even here there's a very significant amount of work needed to ensure that all tax changes are received, confirmed, set up in the relevant software, payments reconciled and inquiries from the taxing jurisdictions resolved promptly. Business process outsourcing takes that work off the customer's plate in addition to providing the underlying payroll tax calculation software as part of the overall payroll application. A SaaS payroll application will not file your tax returns nor make those payments nor respond to questions from employees about their withholding.

Software-as-a-Service can bring major benefits to its customers, always presuming that the underlying software is terrific, that the vendor is strong, that the software's implementation is highly automated, and that new releases of the software can be accommodated via opt-in for much of the new functionality. Business process outsourcing can bring even greater benefits to its customers, when equally well-done, particularly for those HRM processes that carry a lot of surrounding work to achieve the needed process results. This isn't an either/or situation. I expect to see the best of HRM BPO using SaaS HRM software, thereby providing two sources of leverage to serving their customers and achieving their own business outcomes.

Naomi Bloom is a leading independent voice, strategy consultant, analyst and thought leader in the HR technology/HRO industry. Her specialty is the application of HR technology and innovative service delivery models to achieve breakthroughs in organizational business outcomes. Leveraging a considerable body of intellectual property, she acts as a change agent and HRM delivery systems strategist/coach for global corporate clients, an advisor on business strategy and product/service design to HRM software vendors and HR outsourcing providers, and a provider of competitive insight and due diligence for the investment community. Bloom has built the only vendor-neutral HRM domain model and application architecture "starter kit," which has been licensed across the industry. A frequent speaker and author, she has been on the analyst panel at HR Technology since its inception, a columnist for HRO Today since January, 2003, and is the author of Human Resource Management and Information Technology: Achieving a Strategic Partnership. In 1995, her contributions to the industry were recognized with IHRIM's Summit Award, and she has been named an HRO Superstar each year from inception, 2004 through 2009, by HRO Today magazine. Bloom's undergraduate degree is from the University of Pennsylvania, and she holds an M.B.A. from Boston University. Bloom & Wallace is her solo consultancy, founded in 1987, before which, beginning in 1977, she was a senior principal with American Management Systems (now owned by CGI). You can follow Naomi Bloom on Twitter @naomibloom or reach her directly at naomibloom@mindspring.com.