



# INTELLIGENT AUTOMATION IN HR SERVICES AND SOLUTIONS

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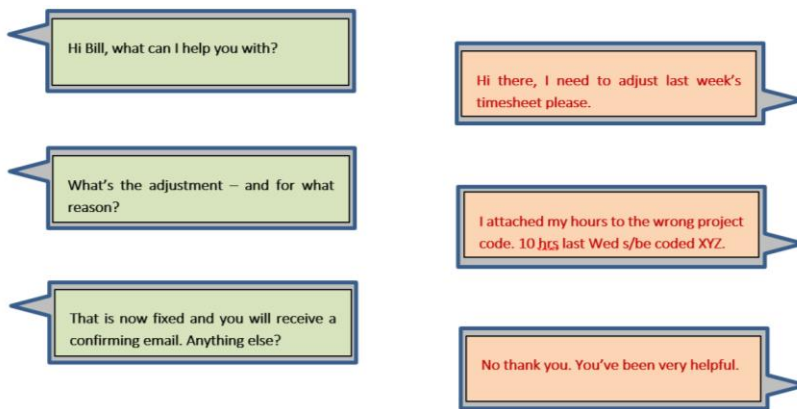
## Introduction

As discussed in HfS Research's groundbreaking Blueprint Report entitled *Intelligent Automation 2016*, "IA significantly accelerates the speed and effectiveness of service delivery by embracing the notion of straight-through-processing." In a follow-on conversation with Dr. Tom Reuner, the report's author, we discussed the difference between evaluating IA capabilities within a services vendor vs. a solutions vendor context.

Our take was that services providers pursue an IA strategy largely by de-coupling labor arbitrage benefits from the rest of the service delivery value chain. This is to determine which customer business problems could be solved by ramping up staff capacity vs. cognitive computing horsepower. In contrast, enterprise software companies are exclusively centering their IA strategy around cognitive computing (e.g., using Algorithms, Natural Language Processing and Deep Learning techniques). The results are chatbots that propel Employee Self Service to a whole new level and move predictive tools into a very practical arena for the first time. These IA capabilities clearly demonstrate how Artificial Intelligence has become part of HR service delivery—to both internal and external customers.

## Chatbots Become the New HR Help Desk

Here's the type of HR/HCM chatbot capability a number of HCM solution vendors will be launching in the near future, with a few vendors already gearing-up for their second wave of chatbots. Again, this type of interaction is only made possible in this new era of Intelligent Automation.



Other types of chatbots or IA-supported HR processes include the quick checking of PTO balances and upcoming deadlines in a task-list before a time off request is initiated. Another example is a timesheet being auto-filled based on past patterns in conjunction with data sourced from the employee's calendar. In addition, another type is a payroll "pre-run" being kicked off by the system to check for possible errors before the actual run.

We expect to see a proliferation of new cognitive capabilities in the HR/HR Technology domain in the next 1-2 years. Examples include:

- » The system asking if a salary change reason was intended to be "merit" vs. market adjustment or promotion when it is a significant policy exception
- » More personalized on-boarding processes
- » The system taking a first cut at identifying best-fit coaches and mentors
- » Or even a dashboard highlighting the fact that while the number of successor candidates for an exec role is at "target," the same successors have been mapped to multiple roles

## Drilling Down into One HR Function: Recruiting

In Recruiting systems, as with enterprise software as a whole, IA refers to providing game-changing capabilities vs. features for specific task automation. Such capabilities allow an organization to achieve broad-based business objectives across all aspects of the talent acquisition life cycle (e.g., improving candidate and ultimately employee quality while still filling jobs quickly *and* keeping hiring managers reasonably satisfied).

Of note, HfS recently conducted some research for a major Retail sector client about practices and trends in the Recruitment Process Outsourcing space, including investigating where RPO vendors were leveraging IA capabilities (sometimes also referred to as Robotic Process Automation or RPA) within their services-enabling technologies. Apparently, there's more IA or RPA going on than some (other) industry analyst/research firms are giving the RPO players credit for. A recently perused article is a case in point. The author asserted that Candidate Sourcing was only being moderately optimized with IA/RPA tools, as keyword searches were still the hallmark of this automated activity. The fact is that keyword search capabilities in Recruiting solutions have now largely been replaced by contextual and semantic searches which are much more accurate, and they are classic examples of machine learning.



Modern Recruiting technology tools now find, source and proactively engage prospective talent—including those not currently on the market or passive candidates. Recruitment marketing capabilities are also leveraged to stay connected to targeted talent, create communities of value to keep them engaged, communicate personalized messages that market an organization's brand and culture, and track what types of communications and outreach efforts work best with different candidates and roles.

The following examines ten of the most popular capabilities offered by leading enterprise Recruiting solutions – and used by RPO vendors to service customers. The recruiting solution categories covered include Applicant Tracking (to manage in-process candidates), Recruiting CRM (to manage Recruiting activities across customers) and Recruitment Marketing (to effectively promote employers and jobs). The system capabilities mentioned, when most or all are part of a seamlessly integrated Recruiting technology infrastructure, go a long way to achieving an IA model. Note that for each functionality item, it is the system doing the heavy lifting!

## Foundational Recruiting Systems Capabilities for Achieving Intelligent Automation

1. The system determines sourcing and screening steps based on the role being filled, what has yielded the best results, and the process preferences of the user.
2. Integrated assessments and pre-qualifications reduce recruiter workload, including system-generated feedback to the candidate after each incremental investment of time.
3. 2-way matching within a search/match engine (i.e., person to job requisition, or vice versa)
4. Not just keyword search but also contextual or knowledge-based search and match capability.
5. Candidate source effectiveness, measured by volumes generated *and* by future qualitative indicators.

## Innovative Recruiting Systems Capabilities for Achieving Intelligent Automation

1. Technology that goes where potentially relevant talent is, and not just prominent social media sites like LinkedIn, Facebook, Twitter, Google+, Instagram and YouTube, but also discussion boards, blogging sites and the “deep web” in general.
2. Selection science, or a closed loop model that continuously validates the predictive value of assessment tools based on subsequent employee performance, retention, etc.
3. Voice and communication pattern analyzers (for predictive value) within a video interviewing platform.



4. Immersive tools and simulations for candidates to “pre-experience” what a role and company will be like, and if appropriate, opt-out before everyone invests time
5. Inherent system intelligence that guides the employer/recruiter on the best ways to engage with each person on their radar

## Complicated Recruiting Tech Vendor Landscape

There are likely at least 15 Applicant Tracking System (“ATS”) purveyors with a 1% market share or greater, led by such established players as Taleo/Oracle (with perhaps more than a 30% market share), Brassring (Kenexa, IBM), iCIMS, Jobvite, ADP, SAP/SuccessFactors, PeopleFluent, and Silkroad. Additionally, the landscape includes other relatively mature ATS offerings from PeopleSoft, Ultimate Software, Lumesse and Kronos, plus more recently launched Recruiting solutions from HCM powerhouses Cornerstone OnDemand and Workday. And several smaller operators are gaining serious traction including Greenhouse, Lever, SmartRecruiters, HireBridge, ATS OnDemand, PCRecruiter and ApplicantPro. Finally, rounding out the broader recruiting solution category are the well-known brands with a heritage in job boards, such as Monster, CareerBuilder and Dice, and the emerging recruitment marketing sub-category players like Avature, Jibe, Broadbean, Findly, Smashfly, Talemetry, etc.

This HR technology niche area has arguably bucked the trend of consolidation that perpetually hovers above the rest of the HR tech landscape. It seems that the increasing manifestations of exciting cognitive capabilities and the IA service delivery model are influencing individual players to take more time to see how far they can take things on their own, and what customer uptake will be.

## Final Thoughts

While people, process, technology, data and delivery models are all core elements in a recruiting technology infrastructure (in-house or through a third party), it is the technology component that forms the DNA of a solid intelligent automation program—one where a broad range of systems capabilities come together to achieve a correspondingly broad range of talent acquisition business objectives. Customers evaluating these market capabilities for themselves, or within a vendor’s infrastructure, are well advised to avoid thinking “task automation” and focus instead on what would holistically tie together all the critical piece-parts, aka “IA.”



# About the Author

## Steve Goldberg



Steve Goldberg is Research Vice President, HR Technology and Workforce Strategies at HfS Research. Steve brings to HfS a unique combination of insights and experiences from 30 years on all sides of the HR Technology domain.

Steve's previous roles included leading HRIS and Talent Management functions at investment banks in the US and Europe, heading up HCM Product Strategy and serving as primary spokesperson at PeopleSoft, co-founding a boutique HR Software company, operating as VP HR-M&A and HR Shared Services at industry consolidator Wayne Huizenga's corporate center, and even a stint as a principal analyst

at Bersin & Associates.

In recent years, Steve's HR Technology and Change Management advisory practice has been engaged by over 30 solution vendors around the globe, and some fairly prestigious corporate HR clients in the US. He's also delivered dozens of compelling white papers, webinars and feature talks as part of the thought leadership services he's provided to his HCM solution vendor clients.

Steve's thought-provoking, but in true HfS fashion -- "keeping it real and making it actionable" -- research agenda will be shaped by the aforementioned experiences, his close collaboration with HfS colleagues, and his tireless commitment to knowing what keeps both buyers/end-customers and solution providers up at night. He is a proven industry influencer who enjoys being influenced just as much.

Specific focus areas of Steve's HfS research will likely include the relationship between As-a-Service themes and HR Technology themes, leveraging change management and other value drivers in deploying HR Technology. Steve will also focus on the changing face of HR Outsourcing (multi-tower and specifically RPO), best practices relative to people analytics roadmaps, frameworks for defining what global or vertical solutions really means, and the true sources of product differentiation within the HR Technology landscape.

Steve holds a BBA in Industrial Psychology and an MBA in Human Resource Management.



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HfS Research coined the term **The As-a-Service Economy** to illustrate the challenges and opportunities facing enterprises to re-architect their operations and thrive in this era where emerging disruptive competitors are using digital platforms and cognitive computing that can wipe out traditional enterprises overnight. HfS' **OneOffice™ Paradigm** is centered on creating the digital customer experience and an intelligent, single office to enable and support it. HfS' vision is about helping clients achieve an integrated support operation has the digital prowess to enable its enterprise to meet customer demand—as and when that demand happens.

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Now in its tenth year of publication, HfS Research's acclaimed blog **Horses for Sources** is the most widely read and trusted destination for unfettered collective insight, research and open debate about sourcing industry issues and developments. Horses for Sources and the HfS network of sites receive more than a million web visits a year.

*HfS was named **Analyst Firm of the Year for 2016**, alongside Gartner and Forrester, by leading analyst observer InfluencerRelations.*

To learn more about HfS Research, please email [research@HfSResearch.com](mailto:research@HfSResearch.com).