Intelligent HR and Next-Generation HR Service Delivery
The Value of Intelligent Processes in the Digital Economy
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The time to reinvent HR is now! Traditional ways of delivering HR services, from HR business partners to shared services, should be reexamined for new opportunities for automation. More than a trend or fad, intelligent HR delivers a new generation of capabilities that will help HR unleash its full potential.

Automation, robotic process automation (RPA), and machine learning, which once seemed futuristic and even space-age, no longer loom on a distant horizon. The good news for HR is that this new generation of HR innovation isn’t all that scary or obscure after all. It is a logical next step, and one that will transform the way we deliver HR services to the business. It will make HR smarter, more accurate, agile, and efficient. As HR leaders, our choice is not whether we embrace automation, it is when and how.

More than ever, HR contends with changing business demands and an evolving workforce. In the digital economy, HR is finding itself at the crossroads of revolutionizing how HR services are consumed and driven by new technologies that enable employees to define and create their own experiences. HR is tasked with becoming more efficient while increasing its value to the business.

The past two decades have focused on a shift toward adding strategic value, mainly developing and delivering on people and talent strategies. In order to do this, HR first needed to free itself from the transactional load. HR is still working to achieve the full promise of that journey. Technology has played a huge role in enabling the shift to strategic HR, coupled with quality and efficiency initiatives. For example, organizations have embraced an expansion of HR shared-services delivery for transactional work and even trending toward value-added knowledge services. Quality initiatives such as the Lean Six Sigma methodology as well as process design and optimization have also contributed to HR efficiency gains.

With efficiency, cost, and effectiveness now baked into our HR cultures, the next leap forward requires a complete rethink. Instead of small incremental improvements in a process, consider the organizational impact of eliminating human intervention in processes entirely through automation. Or, taking it further, consider what is possible with guided assistance from smart, intelligent solutions that predict, suggest, guide, and simplify HR processes.

The future of automation in HR is ready to be explored and embraced and intelligent processes put HR on the path of rewriting the rules for how HR services are consumed. This paper explores the organizational impact and value of automation and the next step in the HR service delivery evolution.

Of shared-services and global-business-services leaders plan to increase automation over the next 12 months by leveraging cloud computing

“The robots are coming.” Deloitte
HR’s Journey

“Organizations face a radically shifting context for the workforce, the workplace, and the world of work.”

Deloitte Human Capital Trends 2017
How we deliver HR services has changed over the years. At the highest level, HR has been through three waves. Wave One was the administrative phase, where HR focused on terms and conditions of work, delivering HR services and working on regulatory compliance.

With the advent of the Internet and Web 2.0 technologies, Wave Two witnessed enterprise software solutions morphing into a new era of enterprise computing with employee self-service and manager self-service. HR became a transactional hub, facilitating the movement of the workforce throughout the employee lifecycle. The business case for many organizations to adopt these solutions came from the time and cost savings that could be gained by offloading transactional processing tasks from human resources and empowering individual contributors and managers to own the tasks.

Wave Three saw organizations implementing shared services to further streamline these transactional tasks. Several multinational organizations expanded the concept of shared services to emerging markets, delivering further operational and financial benefits. In this phase, HR furthered its strategic footprint with innovative practices in sourcing, total rewards, learning, performance management, and more. Talent practices were acknowledged as key to business success.

Despite tremendous progress, HR’s full potential has not been realized. HR organizations of all sizes are still managing more transactional work than they would like. HR resources are not fully optimized, and sizeable value is still left on the table. In Wave Four, intelligent HR technology offers not just relief from the transaction work, but also enables HR to provide real-time insights, suggestions, and recommendations. The technology has transformed to become truly and independently interactive and just plain smart. HR is on the cusp of business transformation and needs to consider how intelligent automation will impact its workforce and HR service delivery in the years to come.

Automation, robotic process automation, and machine learning, which once seemed futuristic and even space-age, no longer loom on a distant horizon. They represent a logical next step that will transform the way we deliver HR services to the business.
Using Intelligent Technology

To realize the value of intelligent HR requires us to first envision a new world of possibilities, and apply that vision – moving it from concept to real-world application.

It starts with the concept of intelligent processes to provide a new and improved way of managing HR transactions and talent data across the enterprise. With intelligent processes, individual transactions that make up common workforce events crossing organizational boundaries and software systems are consolidated into a single experience. No longer will users have to manage all the tasks they need to complete when executing a multistep HR process. Intelligent processes have the capability to watch, memorize, and predict the next step when a change occurs, guiding users to the right place and intuitively driving end-to-end process orchestration within and outside the HR landscape.

As with any transformative shift, it can be a challenge to answer the user’s question: “How does this apply to me?” To help organizations explore the new intelligent HR era and quantify potential value, the authors collaborated with an array of customers to research real-life applications for intelligent process capabilities.

THE AUTOMATION OF HR EVENTS AND CORRESPONDING ACTIONS
In any HR process, an event triggers subsequent actions. For example:
• A candidate accepts an offer, which triggers a background check.
• An employee gives notice, which triggers actions to disable associated user accounts, recover company property, and issue a final paycheck.
• An employee is relocated, triggering an alert to update the employee position, pay grade, and tax jurisdiction.

In these cases, intelligent processes automate the ripple effect of HR events. It can include pushing data, making system updates, sending notifications, and triggering additional events inside and outside of the human capital management (HCM) landscape. Processes that best fit this model include those which are repetitive, high-volume, rules-based, and do not require judgment. Many shared-services organizations today are engaging to explore this type of RPA and intelligent process automation.

As the enterprise as a whole becomes digital, HR must become a leader in the digital organization.

Deloitte Human Capital Trends 2017
HCM MACHINE LEARNING AND BOTS

Machine learning is the ability of a computer system to learn from data based on algorithms by watching and recognizing patterns without reliance on rules-based programming. Based on machine learning, intelligent process technology can offer suggestions and recommend actions. For example:

- An employee is predicted to be an attrition risk based on multiple factors, such as compensation, time between promotions, and historical performance ratings. This triggers a notification that is sent to the manager recommending actions to mitigate the risk of attrition.
- Employers looking for candidates to fill open positions receive recommendations for people with potential talent that match the job description but who might otherwise not have been considered.
- An employee is promoted to managerial level, triggering recommendations for online leadership courses based on training other colleagues in similar roles completed.
- The software watches and memorizes what you do over and over, then suggests a series of actions that replicate what you do, when you do it, and what the variables are. This reduces the time it takes to configure an HR process flow by up to 75%.

The near term will revolve around helping HR offload repetitive tasks that add less value. Next, the “machine” will help us with service delivery. An example of this is using collaboration technology such as software from Slack Technologies to deliver an intelligent HR bot that answers questions for employees on demand from live data. As this machine learning evolves, it will help HR make strategic decisions. Imagine, for example, a future where a compensation model forecasts the impact of a variable compensation plan on employee engagement, sales performance, and retention of top talent. Another vision is a future where investment in leadership development programs is targeted to individuals predicted to be the most effective future leaders.

With machine learning, the larger the data set studied the more accurate the resulting algorithm will be at predicting outcomes and “next steps.” The HR department of the future will see intelligent HR systems solving problems before they arise and optimizing many of the workforce variables we deal with today.

The availability of these capabilities is increasing. Major software providers, such as SAP SE, Veriato Inc., and BluVision Inc., are offering machine learning technologies to their customers. The machine learning functionality can, for example, identify best-fit candidates, track employee productivity, and gauge positive and negative employee sentiment.¹

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In any HR process, an event triggers subsequent actions that intelligent processes can automate, including pushing data, making system updates, sending notifications, and triggering additional events inside and outside the HCM landscape.
THE FUTURE UI IS NO UI

Intelligent HR solutions will evolve the user experience over time. In our consumer lives, interaction with technology is becoming more intuitive and natural as the solutions evolve to support us better. Data entry is transitioning from keyboard to voice. Business solutions are not far behind, trending toward using intelligence to help us stay informed and take action. For example, asking your phone for directions to the nearest coffee shop is analogous to HR asking HCM how the organization is doing against headcount and budget targets.

The HR of the future will not only be Intelligent, it will learn to gather predictive trends, share what is relevant, suggest actions, provide analytics, and respond to queries. The UI will become increasingly unessential as voice recognition and natural language processing technologies remove the data entry of the past.

Figure 2: Truly Strategic HR

"What is my headcount versus my budget?"

"Please transfer Emily Cruz to Santiago, Chile, as a project manager."

"Today's headcount is 30 positions under budget."

"Emily has been transferred to Chile with updates to her pay and location data. I've sent Emily the Chile relocation packet."

Making informed decisions
Engaging in interactive queries
Requesting analytics
Requesting insights

Making predictions
Making recommendations
Notifying about trends
Answering queries

Truly strategic HR

Intelligent HR solutions
The Value of Automation with Intelligent Technology

Breaking ground with new and innovative ways to automate HR can seem a daunting task. So why do it? The answer is that automation improves an organization’s effectiveness and efficiency, improves employee experience, and reduces costs. Early adopters are already seeing these advantages and realizing savings.

**REDUCE DATA AND ASSET RISK**
Employee events often trigger requirements to secure and protect assets, such as confidential data or company-issued equipment. Manual processes can place confidential data and assets at risk of time delays and inconsistent execution of process. Organizations mitigate risk by putting in place appropriate automated controls throughout their enterprise.

**REDUCE CYCLE TIME AND IMPROVE ON SERVICE-LEVEL AGREEMENTS**
Real-time triggers often eliminate wait time in a processing queue and the need for human responses, speeding up the turnaround time of any process.

**AUTOMATE READINESS TO SCALE**
Once configured, an intelligent process can perform tasks faster than humans and operate 24x7. The process can be scaled with relative ease to manage variations in volume, reducing the need to hire and train new employees.

**BOOST EFFICIENCY AND BUSINESS AGILITY**
Agility fuels HR’s ability to keep up with the pace of rapidly changing business demands. Whether responding to new requirements, a merger, or expansion into new markets, intelligent HR offers a rapid response path. Traditional change management relies on manual modification of processes and behaviors.
Realizing Value

The next wave of intelligent HR will accelerate process-efficiency savings due to fewer human touches, fewer process steps, a more engaging employee experience, and intelligent decision making.

VALUE FOR SHARED SERVICES FOR EARLY ADOPTERS

Shared services are uniquely well suited to be early adopters of intelligent HR. With parallel goals of improving efficiency and quality, shared-services organizations are looking to intelligence and automation to fuel the next generation of progress. Automation offers the opportunity to accelerate and supercharge improvements in key metrics, ranging from quality, accuracy, and cycle time to the reduction of the manual workload. Organizations accustomed to small, incremental improvements will find themselves leaping ahead.

Systematic and rules-based processes are ideal candidates for automation using intelligent processes. Early case studies conducted by the authors found an increase in process-efficiency savings in the range of 17% to 25%. In one extraordinary case, manual effort was reduced by 63% through intelligent process automation.

According to a Deloitte analysis, intelligent HR technologies typically represent a ninth of the cost of a full-time employee (FTE) in an onshore location. Organizations embracing automation through intelligent HR solutions will be able to take advantage of these reductions over time as overhead costs are reduced. Further, automation using intelligent processes can be implemented at a lower cost. It requires less time for implementation and carries lower risks than large IT transformations.

Increasing automation is the second most important strategic priority for shared services and global business service leaders.

“The robots are coming.” Deloitte
CUSTOMER CASE STUDIES AND VALUE
To help organizations explore the new intelligent HR era and quantify potential value, the authors collaborated with a number of customers to research real-life applications for intelligent process capabilities. A broad range of customer needs was explored. Case studies covered industries from engineering and construction to real estate and technology. They included organizations with workforces ranging from 1,000 to 50,000 distributed across global geographies. They examined end-to-end processes such as recruitment-to-offer, new hire onboarding, new hire provisioning, leaves of absence, and offboarding.

Studies revealed that process optimization achieves full potential and impact through a layered, cumulative effect, with leading organizations taking an “all in” approach to completely reimagine the challenging processes.

Every HR process has a foundational requirement for compliance. The first level for HR efficiency occurs when localizations are embedded and maintained by the solution, reducing configuration time and expense. The value of localization in any given process was identified as a minimum savings of 5%. The second phase of efficiency is realized through cloud technology modernization. Process standardization, simplification, support for mobile technology, and the agility of the cloud were cited as delivering process savings of 25% to 30%. These are fantastic, transformational outcomes for any organization. Until now, optimization efforts stopped here.

Intelligent HR now opens a new wave of opportunity, and the case studies demonstrated accelerated savings of an additional 17% to 25%. As machine learning permeates all HR processes, efficiencies and value will surpass today’s expectations. The work of yesterday’s process could be reduced by 70% as HR technology learns from itself, no longer dependent on rules-based configuration.

Figure 4: HR Process Savings Forecast – Process Delivery and Predictive Optimization
Think Big
Almost every HR process you deliver to the business today can be further optimized and automated using intelligent HR and machine learning.

. . . But Start Small
Focus on one critical process that challenges you today.

HR IN THE DRIVER’S SEAT OF INNOVATION
We live in a world of disruptive technology where boundaries and norms are being shattered at a rapid pace. Technology is flooding our personal and professional lives. However, rather than being complex, difficult to control, or overwhelming, it is made available to us at our “point of need.” Whether delivered on our mobile devices, embedded in our TVs, or part of our wardrobe, smart technology has become a part of how we interact with the world.

As influential as Amazon.com Inc., Netflix Inc., and Uber Technologies Inc. have been in their respective industries, we are now on the brink of the next wave of autonomous technologies that are intelligent and predictive. Intelligent HR will anticipate what we need, when we need it, and push it to us even before we recognize the need. Beyond automation efficiencies, intelligent HR is redefining how we engage our workforce and will help the HR practitioner keep pace with rapid business change. HR is newly enabled and propelled as an active participant in the cycle of innovation, capable of delivering business outcomes in amazing ways. Imagine, for example, having answers to the pressing questions and issues you manage every day. Will my compensation plan retain my top performers? Which high-potential employee has the highest probability of success as a future leader? What is the profile of my most productive employee? The solutions of the future will adapt, predict, and interact with employees and managers to meet the specific needs of the individual, while presenting the most relevant information.

The time to engage with intelligent HR is now – through intelligent process automation that is currently available. Organizations shying away from this new wave will rapidly find themselves lagging in user experience and process optimization. Intelligent HR offers HR the opportunity to reinvent, re-imagine, and deliver real business outcomes. From an engaging employee experience to helping HR achieve the promise of talent strategist, intelligent HR technology disruption has arrived and is here to deliver.

Intelligent HR delivers 17% to 25% incremental process efficiency savings on top of cloud optimization savings of 25% to 30%.