State and Local Government in the Cognitive Era

Powered by IBM and Oracle
State and Local Government in the Cognitive Era: Powered by IBM and Oracle

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Evolution from digital to emerging cognitive solutions for employees and stakeholders

State and Local government employees come to work every day with one goal in mind, to serve the needs of their constituents in the best way possible. They are undergoing a major shift from the digital age to a new generation of automation - The Cognitive Era - that includes artificial intelligence, robotic process automation, and insightful analytics helping organizations provide services and lower operational costs. To remain competitive, organizations are rapidly adopting this change and training their people to upskill and add skills to their existing talent.

Why are these changes happening? Why does this industry even need the Cognitive Era?

According to NASCIO, security management and cloud enablement are the key challenges for government CIO’s.

Another challenge that is dominating CIO conversations around the country is the modernization of legacy systems. Management of applications on these outdated systems is rigid, and they don’t provide the proper resiliency architecture in case of a disaster scenario. State and Local governments and agencies are also increasingly concerned with their level of citizen engagement. With the technology and expertise that we consistently provide to our clients, they will have more resources available to focus on the immediate concerns of their constituents. Our clients are also increasingly interested in the power of business intelligence and analytics. IBM, powered with Oracle, is uniquely positioned to capture these opportunities and offer high-value solutions.
What is a Cognitive Enterprise?

To understand what a Cognitive Enterprise is, it is important to understand a fundamental concept called Business Platforms.

As state and local governments around the world describe their strategies in terms of platforms, they are anchoring to the idea of a “stage” or “field of operation” — an area where a range of unique capabilities can be deployed and where the governments can seek to establish a control point over a range of value-creating activities.

Thus, Business Platforms differentiate an organization by combining data, unique workflows and expertise to drive competitive advantage. Examples include claims processing for an employee, talent acquisitions for a hospital that has ongoing demand to hire and retain top talent from the industry.

Such Business Platforms will often be underpinned by technology platforms and may connect into other ecosystem business platforms as well.

Imagine the Cognitive Enterprise as composed of multiple business platforms. One or more of these acts as the core or primary platform(s), providing key differentiation.

At IBM, we see governments placing bets on the creation of business platforms to solidify competitive advantage and differentiation. These platforms must be digitally connected from the outside-in and cognitively enabled from the inside-out.

Others see the chance to play a platform role across their industries. A few agencies are using platforms to expand their expertise and compete in markets adjacent to — but until now separate from — their traditional businesses.

**Figure 1**

Types of Business Platforms

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**Cross-Market platforms**

Capture new and adjacent marketspace by managing essential or value-added processes on behalf of a broader ecosystem of partners that could be previously unrelated.

**Internal platforms**

Enable operational competitiveness and make activities within the company more effective and efficient by using new technologies and skills.

**Industry platforms**

Enhance the company’s relative market relevance and position by delivering key process capabilities on behalf of partners and potentially competitors.

Source: IBM Institute for Business Value (IBV) analysis
Inside the Cognitive Enterprise

The business platform is made up of capability layers. Each is subject to major transformation with a huge potential for government organizations. We think that incumbents will—as we are increasingly seeing—strike back if they can orchestrate change at scale.

Government organizations have the opportunity not only to secure new service markets but also to restructure their cost bases for the long term—with a possible huge payoff to their bottom lines and their citizens.

**Figure 2**
Capability Layers for the Cognitive Enterprise

**The Cognitive Enterprise**

<table>
<thead>
<tr>
<th>Culture</th>
<th>Skills</th>
<th>Ways of working</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry platforms</td>
<td>Transaction platforms</td>
<td></td>
</tr>
<tr>
<td>Decision processes</td>
<td>Front-office processes</td>
<td>Back-office processes</td>
</tr>
<tr>
<td>Artificial intelligence</td>
<td>Blockchain</td>
<td>Automation</td>
</tr>
<tr>
<td>Licensed data</td>
<td>Proprietary data</td>
<td>Public data</td>
</tr>
<tr>
<td>Custom</td>
<td>Legacy</td>
<td>API-enabled applications</td>
</tr>
<tr>
<td>Public</td>
<td>Private</td>
<td>On-premise</td>
</tr>
</tbody>
</table>

A culture of **agile innovation** that embraces new skills, workforces and ways of working, and humanizing the enterprise

An **ecosystem of business platforms**, both industry specific and transactional

**Cognitively enabled workflows** for front- and back-office processes and decision making

Applied **exponential technologies**—for example, AI, IoT, automation and blockchain

**Data that is curated** to support key workflows and platforms

**Next-generation applications** that span new and legacy solutions

Open, hybrid and secure **multi-cloud** infrastructures

Source: IBM Institute for Business Value (IBV) analysis
37% of cities are currently using AI technology, with a further 27% planning to incorporate it in the near future.

The six most popular types of AI that cities invest in are: analytics, automated traffic control, benefits eligibility, infrastructure inspections, and robotic controls. 

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**State and Local Talent Evolution in a Cognitive Enterprise**

Although frontrunning governments are rapidly adapting to newer technologies such as Artificial Intelligence (AI) and Robotic Process Automation (RPA), *humanity remains at the core of such Cognitive Enterprises.*

AI-powered diagnostics can scour through legacy and new datasets at much faster speeds than humans. Yet, the traditional *human touch has remained a strong necessity in successfully identifying meaningful results*. AI-powered results, and management’s experience leads to recognizing actionable data.

Similarly, management empowered by AI-based Intelligent Automation helps eliminate erroneous claims, reducing the cost burden across the procurement system. The inherent benefit also allows the workforce to focus more on the process and technological advancements supporting the process. This has increased the demand for new skills and continuous re-skilling in government organizations requiring them to change how they hire and manage their workforce.

Today’s government organizations must keep human factors at the core of their Cognitive Enterprise and allow its people to use Intelligent Automation to deliver best results. This entails *reinventing human capital and managing evolving talent* in the industry.

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**Figure 3**

*Capability Layers for the Cognitive Enterprise*

<table>
<thead>
<tr>
<th>Transaction Processing</th>
<th>The Digital Enterprise</th>
<th>The Cognitive Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WHAT</strong></td>
<td><strong>HOW</strong></td>
<td><strong>WHAT</strong></td>
</tr>
</tbody>
</table>
| Early information technology improved efficiency by applying technology to individual resources or processes. | • Paper tracking  
• Lift and shift  
• Limited-use productivity tools  
• Cognitive insight  
• State and Local mandated reporting  
• Civil Service requirements | Digitization transforms whole aspects of a business producing customer experiences that support what individuals need or want  
• Process automation point solutions  
• Design thinking principles  
• Enterprise adoption and change management  
• Platform as a Service for custom regulatory process |
| The cognitive enterprise incorporates exponential technologies to create revenues and results via innovative strategies, products, platforms, process transformation, and user experiences. | • Intelligent workflows  
• Pervasive automation  
• Design Thinking + agile  
• Rapid experimentation  
• Embedded change mindset  
• Work elimination with Blockchain  
• Talent acquisition with Cognitive |
Employee Lifecycle

A typical employee lifecycle at a State and Local government begins by attracting the right talent into the organization. With the advancement of technology and readily accessible information, there are multiple methods for enabling a complete and seamless employee experience, with personalization.

Today’s talent expects their jobs to provide them with the same experience they enjoy in their day-to-day consumer and social space. In order to achieve this experience, *every organization needs to engage with their employees continuously* during their tenure at the organization—actively developing and growing them. This can be especially challenging in a highly visible industry like in state and local government organizations. Therefore, the need for employee engagement throughout the lifecycle of an employee is a must for a healthier workforce and overall success of the organization.

83% of surveyed employees said they would participate in an employee listening program.

Only 62% of Baby Boomers surveyed believe management will act on their input, compared to 78% of millennials.

HR practitioners who use multiple listening methods rated their organizational performance and reputation 24% higher than those who do not.

Source: IBM Institute for Business Value

Amplifying Employee Voice
IBM and Oracle technologies are designed to work cohesively for State and Local governments to adapt to the future demands of change across multiple talent, work and cultural dimensions. At every stage in the employee lifecycle there are solutions geared to ensure State and Local governments can acquire, manage and retain top talent in the industry.

**Digital**

**With IBM and Oracle**

IBM and Oracle technologies are designed to work cohesively for State and Local governments to adapt to the future demands of change across multiple talent, work and cultural dimensions. At every stage in the employee lifecycle there are solutions geared to ensure State and Local governments can acquire, manage and retain top talent in the industry.

**Figure 6**

With IBM and Oracle

<table>
<thead>
<tr>
<th>Attract</th>
<th>Hire</th>
<th>Engage</th>
<th>Retain</th>
<th>Develop</th>
<th>Grow</th>
<th>Serve</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM</td>
<td>IBM's Watson Candidate Assistant Adverse Impact Analytics (AIA)</td>
<td>IBM's Watson Recruitment</td>
<td>IBM's Shift Rostering</td>
<td>Your Learning Skills Inference</td>
<td>IBM's Watson Career Coach</td>
<td>IBM's Watson Services IBM's Employee health and Safety</td>
</tr>
<tr>
<td>ORACLE</td>
<td>Oracle’s Talent Acquisition Solution (ORC (Fusion) and OTAC (Taleo))</td>
<td>Global Human Resources</td>
<td>Talent Profile Goal Management Performance Management</td>
<td>Workforce Predictions</td>
<td>Learning Management</td>
<td>Career and Succession Planning</td>
</tr>
</tbody>
</table>
Change Management

Developing and delivering a robust Change Management Program is critical to drive adoption of the new technology and realization of the benefits. Our philosophy to approaching change is proven: make it clear, make it known, make it real, make it happen, and make it stick. We provide State and Local government’s stakeholder with the appropriate time to understand the change and sustainably adapt to the transformation.

Our training approach will set up your staff with system knowledge to help support you post go-live. For this purpose, we leverage Oracle training content and supplement it with Job Aids and Train-the-Trainer approach.

Our proven Change Management Framework:

- We create the change approach for your transformation based on your needs and our experiences
- We develop a living change roadmap that you can use locally to facilitate your roll-out readiness
- We help you define key personas and build employee transformation experience
- Together we co-create a communication approach and define main communication channels
- We act as the supporting partner for your HR system implementation
- Let us share our know-how: we will provide methods, tools and accelerators for a smooth transition

The core components of IBM’s Change Management Plan’s approach are:

- **Align**: Your development of the case for change that integrates needs and requirements and codifies these as the change vision and desired outcomes. IBM will work to define employee personas and map, design, develop and realize the program benefits and outcomes to these representative personas.

- **Envisage**: Kick-start the program team on the business change agenda by exploring the immediate challenges and solutioning a quick win plan, defining the Change Program work elements, planning the interactive change journey workshops, determining the support activities and accelerators, and creating a ‘living’ roadmap

- **Guide, Create and Perform**: Working at your project sites, the Change Ambassador (Executive Change Management Practitioner) will provide expert guidance and implementation leadership for the Change workshops defined in the Roadmap drawing upon an extensive Subject Matter Talent pool, roadmap will be regularly iterated by Change Creation Studio Sessions. These are joint Client and IBM workshops. The Change Creation Studio will ‘sense’ - using our Employee Experience Dashboard, and ‘respond’ - by delivering impactful, simple, time efficient, and creative change initiatives. Our ‘sense and respond’ model will address surfacing change momentum and adoption issues amongst the stakeholders prior to go-live and beyond.
**Beyond**: Change Management extends past go-live to facilitate that the program’s outcomes, defined in the ‘Align’ session, come to fruition. We understand that measuring the realization of your program’s benefits means you need to know the performance level of your organization and your people. We can support you to embed the changes by using ‘continuous listening’ methods to embed and build your enduring solution.

**IBM Digital Change®** engages the Client in an end-to-end change lifecycle, integrating both the required and proposed change activities throughout each project phase, as shown below.

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### Optimize Employee Engagement

Focus relentlessly on the employee experience to engage, inspire and drive performance.

### Amplify the Employee Voice

Co-Create with employees, stakeholders and influencers at every stage in a transformation process.

### Measure the Transformative Value

Provide a structured, data driven approach to measure the value of ongoing change initiatives.

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![Change Management Lifecycle Diagram]

- **Envision**: Mobilize and Prepare
  - Conduct leadership alignment
  - “Envision studio”
  - Develop change management plan
- **Create**: Assess change impacts and risks
  - Develop communications campaign
  - Develop training plan
- **Adopt**: Develop training
  - Kick-off change agent network
- **Go-live**: Knowledge transfer
- **Project end**: Hypercare
  - Monitor change insights dashboard
- **Delivery assurance**

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Engage stakeholders and Change management solution
In an interview with Forbes in 2018, IBM’s Chief HR Officer, Diane Gherson, highlighted on historic shifts impacting HR today.

**Consumer-grade expectations.** Employees and job applicants have new expectations because of their rich digital experiences outside of work. They express themselves and connect on social media, their world is searchable and transparent, their questions can be answered around the clock in a live chat. Employees now expect that this degree of utility and innovation extends into their daily jobs. Our job in HR is to create that connected, transparent, personalized, and searchable universe through our workplace and our tools, and to make it available from any location at any time. It means investing in new technology and reinventing all our processes through the lens of the employee.

**Ready access to artificial intelligence and deep learning is creating the opportunity to spot patterns and predict outcomes.** This improves our decision support capability and workforce management — whether it is to select candidates who will be more successful, match an employee to job openings or infer an employee’s skills from her digital footprint. We also can use bots to improve our productivity — for example, our analysis tells us that last week we saved 500 hours of Q&A time by training a Watson AI powered bot that answered more than 10,000 questions.

**Skills obsolescence.** Governments are being massively disrupted by technology and they have a desperate need for their employees to reskill themselves for the digital age.
The increasing call for transparency and open communication poses several challenges to State and Local governments and agencies across the country. Additionally, in the United States tax revenue continues to shrink, and government agencies are increasingly expected to do more with fewer resources. Because of these challenges, organizations must increasingly adopt, adapt, and thrive with the latest technology innovations available. At the core of these challenges is acquiring, rewarding, and managing the talent that makes organizations successful. The top six talent related challenges faced by State and Local governments and agencies today are:

**Talent Acquisition**
Tapping into highly skilled and trained talent pool is every organization’s primary challenge. Evolving recruitment processes that are staying abreast of the changing technological landscape such as social hiring and talent identification are taking an increasing toll on organizations’ resources, time and money.

**Unified People Experience**
For employees that must engage daily with their government or agency, the lack of a cohesive experience results in the entity having to provide and maintain multiple disparate systems. This severely prevents a seamless integration between various business functions, which end users are conditioned towards.
**Upskilling and Talent Management**
The rapid evolution of technology results in an ongoing need to upskill employees and get them ready for changing times. In addition, they must ensure they remain compliant with regulatory licenses and certifications needed for the services they provide.

**Licenses and Certifications**
Ensuring regulatory compliance with licenses and certifications for employees poses a recurring challenge for every organization. Typically, disparate systems are used in the industry to maintain active credentials for professionals leading to increased time, resources and costs.

**Work Scheduling**
Complex and ineffective work scheduling due to fluctuating business demand, people availability, skills, pay grade match and flexible work schedule is resulting in higher than ever labor costs for State and Local governments.

**Predictive Workforce**
Employee turnover costs in State and Local governments can hurt their profitability significantly, and not being able to predict workforce longevity poses serious challenges in achieving business objectives and long-term goals.

The challenges mentioned above can be addressed effectively by solutioning Cognitive workflows that comprise a layer in the business platform. IBM and Oracle provide solutions that can be deployed to mitigate the risks from the above challenges and help government organizations evolve in the Cognitive era. These solutions are designed around how our clients already do business.
Cognitive Talent Acquisition

Hiring and Retaining IT personnel ranks as key priority for CIOs
— According to an e.Republic survey of State, County, and City CIOs (respectively)

During most of the Digital Enterprise era, HR departments were focused more on record keeping via some digital medium. Although this allowed for efficiency gains by being more organized, HR continued to face critical challenges such as quality of hire, time taken to onboard, high employee turnover and attrition. This directly caused government organizations to hire more temporary and contractor workforce to meet their demands especially in mission critical roles such as IT professionals, auditors, accountants, and change management, resulting in high operational costs and lower revenue. Currently, there is a growing gap in talent between the government workforce and the private sector. As more of the Baby Boomer generation approaches retirement, not enough Millennials are being recruited to replace them.

Private Sector outpaces Public sector in hiring millennials by 9%, as per eRepublic report.

With the advent of the Cognitive Enterprise era, “Intelligent Automation” enables State and Local agencies to leverage Artificial Intelligence (AI) to solve people and mission related challenges. AI allows for faster talent acquisition by better matching skills with roles, improving Key Performance Indicators (KPIs) such as time to fill a position thereby resulting in better predictability and revenues. Cognitive tools such as chatbots have allowed HR departments to improve exponentially with volume, precision and speed in their daily tasks.

Hiring the right talent quickly saves money and increases revenue and profits. IBM and Oracle have specific AI and Cognitive solutions to address this need.
All Talent Offerings are Embedded with Cognitive and Automated Assets and Services.

IBM Talent and Transformation Offerings Combine Breadth of IBM Capability.
IBM Talent Acquisition Solution Suite

IBM Watson® Candidate Assistant

IBM Watson Candidate Assistant is an AI and cognitive talent management solution that engages job seekers in personalized discussions and recommends positions that fit their skills and experiences to help them find a job that they will thrive in and grow with. By building trust and confidence in their first interaction with your company and recommending roles for job seekers that will fit their skills and experiences, costly hiring mistakes are avoided, and new hires turn into valued employees who will contribute to the success of the company.

IBM Watson® Recruitment

IBM® Watson Recruitment (IWR) is an AI-powered talent management solution that works seamlessly with your Applicant Tracking System (ATS) to increase recruiter efficiency. It surfaces the most qualified candidates for the job — without human bias — and identifies adverse impact. IWR focuses on skills and experiences. It does not take into account things such as a candidate’s name, which human recruiters and hiring managers are likely to use to infer gender, ethnicity and other potential conscious or unconscious identifiers.

IBM Watson® Talent Match

With IBM Watson Talent Match, you can look beyond keywords to evaluate important intangibles — such as indirect skills — that are not explicitly specified on a resume. Rigorous evaluation of unstructured information, job classification, competency, skills and behavioral traits, and more.

Watson Candidate Assistant wins:

- Ventana Research 2018 Digital Innovation Award
- Human Resource Executive Top HR Product 2018
Oracle Recruiting Cloud (ORC)

**Additional information request** from candidates after the initial application has been submitted.

**Automated candidate selection** facilitates a candidate to automatically move forward in a selection process if certain criteria are met in their current status.

Oracle HCM Cloud offers multiple options for talent acquisition including Oracle Recruiting Cloud (ORC) and Oracle Talent Acquisition Cloud (OTAC). ORC is a new recruiting and candidate relationship management solution delivered natively as part of the Oracle HCM Cloud suite. It enables employers to track and measure complete information about their talent across the HR spectrum. It keeps the candidate experience at the center of the recruiting process by leveraging innovative technologies such as chatbots, and a modern and mobile-friendly User Experience (UX). A key differentiator with ORC is the seamless integration with key onboarding processes that are part of the HCM Cloud suite of services.

**Multichannel sourcing** of talent by integrating with job boards and social networks such as LinkedIn.

**Customer branded** career portal/site with the ability to incorporate media support for video, audio and other forms.

**Interview scheduling** ability for a candidate to select an interview time slot made available by the recruiting team.

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**Key considerations**

A. ORC is delivered natively as a part of the Oracle HCM Cloud Suite. This means in order to take advantage of the ORC you must have purchased Oracle HCM Cloud.

B. IBM’s Talent Acquisition Solution Suite has the ability to integrate with existing Oracle Taleo customers without requiring them to purchase any other Oracle products — such as the Oracle HCM Cloud.
Modern users expect mobile and predictive applications when interacting with government. State and Local organizations are lagging in providing these user-friendly cognitive and predictive applications.

Oracle’s State and Local government-focused solutions provide a single platform and unified experience across the entire government.

Employees and other users expect a similar experience to how they shop online or use social media interactions that allow for seamless navigation and user experience. The Oracle Master Person Index solution along with Oracle HCM Cloud enables HR departments to bring that unified user experience to its people along with a single point of reference enabling real-time, unified, trusted data.

This also enables comprehensive enterprise-wide analytics that provide valuable insight to help State and Local governments gain high efficiencies in government delivery.

Organizations are improving work efficiencies by simplifying and providing a consistent user experience to its people across technology deployed in the various business functions and day to day tasks performed by their people.
IBM and Oracle provide a unique partnership to transform organizations to an optimal state by automating enterprise-wide business processes. From deploying a single source of information to a consistent omni-channel experience, IBM and Oracle make it simpler for government employees to conduct their business and focus more on what they do best — serve the needs of their stakeholders.

Oracle Human Capital Management Cloud using the Oracle HCM Mobile Platform allows useful features available in the mobile app including:

- **Learning**: Employees can view learning assignments offline
- **My Day**: Employees can view events scheduled for the day
- **Talent Profile**: Employees can view skills and qualifications
- **Goals**: Employees can track goals on the go
- **Pay**: Employees can view and download their pay slip PDF
- **Absences**: Employees can view planned absences and available balances
- **Time**: Employees can view time-cards

Supplementing the delivered Oracle functionality is IBM's Watson® Career Coach. A virtual assistant that aligns your business goals with your employees’ career aspirations. Watson Career Coach learns about an employee’s preferences and interests and makes recommendations for job roles based on their current role, skills, and career moves others have made from this role. Watson serves as a personalized development coach and recommends learnings to close skill gaps to their preferred role. Internal mobility is encouraged by notifying employees of internal opportunities that are consistent with their career objectives.
Watson Career Coach

- Choose best-fit roles and apply directly
- Explore career options and plan next steps
- Seek answers to career-related questions

Job Opportunity Match

Employees can find open job positions deemed a good fit for them, by answering a set of skills-based questions or uploading their resume. Using IBM Watson APIs, Career Coach matches users to internal job opportunities that are relevant to their current career experiences. Users can refine their search using location filter and apply directly from Watson Career Coach to initiate their next professional move.
Career Navigator

Employees can define a personalized career progression and receive guidance based on job transitions of others in similar positions and roles. Career Coach makes recommendations for each next step with multiple job role choices with ratings for each based on organizational demand and skill match.

Personal Career Advisor

*Myca* (My Career Advisor) is the mobile chatbot that employees can engage with anywhere, anytime. It interviews users, understands their needs, and provides instant, personalized career advice to the most commonly asked career-related questions. Powered by IBM Watson, *Myca* supports 40+ career-specific questions as well as general out-of-the-box ‘chit-chat’ queries. This cognitive-bot learns from user feedback on its answers and additional comments, to personalize and refine its future responses.
Payroll Advisor
Cognitive assistance

This is a mobile chatbot which helps employees to answer payroll policy related questions. Watson Payroll Advisor offers users a cognitive, conversational self-service engine that can provide answers to Payroll specific queries. This is an automated employee service system that:

• Provides answers and acts using natural language interaction
• Can be tailored to fit a specific business need
• Uses an intuitive chat interface
• Requires no user training
• Is available 24x7, “Always on” service becomes a reliable and trusted source of information

Trained on intents like Pay Check & Tax related queries, Update Direct Deposit (Bank Information), Update Address, etc.

Lower ticket costs
Lower call center costs
Improved employee productivity
Improved business productivity

Employees

Conversation
Employee Health and Safety Alert for Public Safety

Protecting Your Employees Is Your Priority — And Ours

You Can’t Change The Weather, But You Can Outthink It

When it comes to dangerous weather, your public safety employees are on the front lines.

- **Utility Workers**: One of the top 10 most dangerous jobs
- **US Field Workers**: 2630 suffered heatstroke, 18 deaths in 2014
- **Truckers**: 6.5X more likely to suffer fatalities on the job

With personalized, accurate weather alerts, The Weather Company, an IBM Business, offers a timely, automated warning system to help keep field workers safe from weather events.

Until recently, field managers relied on manual communications to inform employees of weather conditions, leaving far too much room for error. Weather Alerts offer the most efficient and effective way to protect people, property and profits, by sending timely, prebuilt alerts of approaching weather dangers directly to your workers via mobile device.
Hyper-local Alerts Powered by The Most Accurate Weather Data

Weather Alerts are based on the industry’s most precise and accurate forecasts. So, you can trust what you send—and your employees can trust what they receive.

• Updated every 15 minutes
• 2.2 billion locations, delivering 26 billion “pinpoint” forecasts a day
• Over 200,000 sensors — 100 times more sensors than public sources

Get Started Quickly and Easily

The Weather Alerts system is fast, easy and self-service. It’s Cloud-based, with no hardware or software to buy. So, you don’t need support from IT, but live help from The Weather Company is always available.

• Select the weather peril(s) that will trigger alerts.
• Specify the threshold level where you want an alert triggered.
• Specific temperature levels, precipitation, and wind speeds.
• Decide what you want that alert to say.
• Reinforce your brand and relationship along with the alert.
• Choose who you want the alert sent to.
• Upload a CSV file OR link to your CRM system through an API.
• Determine how you want the alert sent.
• SMS text message, email, or via a separate system through an API.

Integrate Weather Alerts Into Your Operations

Once a Weather Alert has been deployed, use the administrator dashboard to:

• View who was alerted, where and what kind of alert they received.
• Zoom in and out of geographic areas for more detail.
• Review information for any date range.
• Output results for further analysis with Watson Analytics or any analytics.

Your employees are on the front lines, and directly in the path of disruptive or dangerous weather. With Weather Alerts, you can make sure they have the accurate information they need to stay safe.

To learn more about using Weather Alerts to improve worker safety, contact your representative.
Civil Service and Examination

The main component of recruitment in State and Local government is Civil Service and Examination module. It is a regulatory requirement for multiple State and Local governments.

IBM uses Oracle PaaS solution to help State and Local governments create their own civil service and examination solution with cognitive AI built into the solution. This custom solution enhances the overall requirement with cognitive insight and solves the client needs. IBM uses Oracle PaaS solution to build this application which is configurable, easy to integrate, and customized for client specific needs.

In addition, IBM leverages State and Local leading solutions which are fully integrated with Oracle Talent Acquisition Cloud. These solutions enable State and Local governments to meet unique recruitment and compliance challenges in an ever-tightening labor market. Specifically, these Cloud solutions support multi-phase assessments and eligible list management within the Uniform Selection Guidelines used in Civil Service and Merit systems.
State and Local governments are recognizing a major skills crisis looming ahead as they struggle to not only fill positions with skilled people, but also upskilling their existing workforce to ensure they remain current with the changing landscape of the modern economy.

Learning delivery has evolved to digital platforms that provide consumer grade learning experiences along with the flexibility to scale. **Coupled with cognitive tools and AI, learning management delivers bite-sized content to help technicians, agents, brokers and claims adjudicators learn and adapt to newer technological advances in their daily tasks.**

Upskilling your existing workforce is directly connected to Talent Management. As more and more Gen Y and Gen Z employees join the workforce, the need to manage talent with effective career development and succession planning is essential for the continued success of State and Local governments. Allowing people to define their individual goals and tracking their performance provides valuable insight into current performance levels as well as sets the stage for predicting their growth in the company.

As more employees reach retirement age, it is imperative government organizations are proactive in retaining existing talent, and in recruiting new talent.

“60% of executives globally confirmed that they are struggling to keep their workforce current and relevant”
—IBM Institute of Business Value
Oracle Learning Management

**Oracle Learning Cloud** is available for everyone, anytime, anywhere. Learners can discover, consume, publish, and collaborate using the social features of liking, recommending, or contributing to the conversation. They can also download content to mobile devices to consume learning offline.

**Learners** can discover and consume learning that is relevant to their job roles. Subject matter experts can easily share their knowledge with the rest of the organization and gain recognition for their contributions. In government agencies, immediate ramp up of new employees is critical to increase productivity - upon onboarding, managers can push learning to their staff members and track the teams’ progress.

**HR specialists** can manage the learning catalog and drive compliance needs by administering required learning across the organization.

Government agencies require their employees to maintain current licenses, certifications, and compliance trainings to meet the mandates of the organization. **Automation and Assurance of Compliance Training** is available in Oracle Learning Cloud.

HR specialists can set up certification compliance with complex assignment rules around expiration and renewal.

**Oracle Learning Cloud**
One of the most common activities in any State and Local government is to maintain employee licenses and certifications as required for K-12 school teachers, health and safety professional, public works employees and healthcare professionals. Mandatory and regulatory compliance rules prevent employees from doing their jobs without specific certifications and licenses. Even their job shift is dependent on certification and licenses.

The Oracle HCM Cloud solution, as part of its Profile Management features, allows for tracking of licenses and certifications. Professionals may use the self-service tools available in Oracle to keep their information current while the organization can integrate with third-party verification providers to update or override certifications.

Oracle Learning supports certification’s compliance with complex assignment rules around expiration and renewal. With robust reporting tools, managers and administrators can track compliance training and reduce the risk of non-completion of courses and certifications.

IBM cognitive tools in conjunction with Oracle HCM Cloud intelligently track and allow scheduling or shift assignment for professionals only in locations and positions where they are licensed to perform their service.

**Oracle Validated Integrations (OVI)** allow for State and Local governments to verify their staff licenses.
Hourly employees comprise a significant portion of many State and Local governments’ workforce. These hourly workers record time against shifts worked in order to earn their pay. This process is called positive time reporting. There are several challenges and factors which need to be accommodated while managing an hourly workforce. Some of the common challenges are:

1. Creating a shift roster
2. Identifying required/necessary skills per shift
3. Matching employee availability, preferences, seniority, pay rates, skills with fluctuating business demand
4. Managing overtime while scheduling resources
5. Enabling shift swapping flexibility amongst resources

Lack of an efficient way to manage the above has a direct impact on operations and contribute to the following management challenges:

1. Absence of a sophisticated scheduling tool, visibility on shift details, overtime opportunities, shift swap functionality
2. Inefficient scheduling, low employee utilization, higher labor cost and reduced employee morale
3. Managers spend more time on administrative work — shift planning, approvals, reporting
4. Minimal visibility to shift data of an employee, department and company which impacts planning, budgeting and business targets
5. Ineffective scheduling triggers compliance issues like the risk of not adhering to policies, labor laws and union rules
6. Limited and low utilization of modern technology and real-time data for self-service and administrative tasks
**IBM’s Shift Rostering solution**, built on Oracle Platform as a Service (PaaS) and mobile platform powered by IBM Watson®, is fully integrated with the Oracle HCM Cloud SaaS solution. IBM has developed this supplemental solution to further enhance the delivered functionality in the Oracle HCM Cloud product. Our solution is designed for State and Local governments of all sizes and business models and incorporates chatbots for both managers and employees, while offering a personalized employee experience.

**IBM’s Shift Rostering solution includes:**

- Shift swap by employees and managers
  Bot-enabled user interface, which is conversational, for example, “What shift do I work on Thursday?” or “Can I swap my shift?”

- Integration with Oracle HCM Cloud to retrieve employees’ personal data and work schedule data

- Integration with Oracle HCM Cloud to update employee shift changes after shift swap

IBM’s Shift Rostering solution is time-efficient and user-friendly, providing the user with a convenient and intuitive way of creating and swapping schedules quickly using natural language.
Oracle HCM Workforce Predictions provides forward-looking insight into your workforce trends capital plans with organizational business objectives.

Predictions uses current and historical indicators to predict performance and attrition, determines corrective action through “what if” scenario modeling and provides the ability to implement that corrective action. Several factors are taken into account while constructing the “what if” scenarios such as historical and current employee performance, their compensation history, vacation and time off patterns.

Predict Worker and Team Performance
Insights regarding how a worker may perform in a new role, given their current skills and experience.

Predict Worker and Team Attrition
Leverage 9-box view of your workforce to identify “at risk” top performers and focus on taking steps to retain them.

Improve Performance and Reduce Attrition through “What If” Modeling
Model different scenarios to see how changes in policies, vacation, pay, or promotions can affect your organization.

Data analytics has emerged as a Top 10 CIO priority across all levels of government
— e.Republic report
The convergence of technological innovation, social and regulatory transformations have changed State and Local governments to be even more focused on value-based care. To stay in step with the disruption and remain competitive in the marketplace, the emergence of the Cognitive Enterprise on the cloud is inevitable. The ability to manage the needs of your workforce from recruitment and learning to retention is paramount to the success of the enterprise. The opportunity to harness Oracle’s vertically integrated HCM Cloud with IBM’s Cognitive capabilities has the potential to accelerate industry transformation into intelligent automation.

To learn more or to request a demo of IBM’s Oracle HCM Cloud capabilities with Cognitive Solutions, please reach out to your IBM client executive.

“63% of state and local organizations are looking to cloud to reduce overall costs, 54% are hopeful cloud will increase their cybersecurity, and 48% believe cloud will deliver easier and shorter implementation times”
— e.Republic report

17%

Amount by which IT procurement volume increased from 2015 – 2017 in the state and local market
— e.Republic report
IBM Services was very supportive and fully focused on helping us understand what we needed to achieve and how to achieve it within the timescale.

— Paul Ryder, Chief Executive Officer, Gov Facility Services Ltd

Government Facility Services Limited

Secures financial controls at Her Majesty’s Prisons in just three months with Oracle and IBM Services

Problem

When an existing private-sector prisons maintenance provider failed, the UK Government had to step in, fast. How could it form a new company with secure procurement, payroll and financial controls?

Solution

– Oracle ERP Cloud (Financials)
– Oracle HCM Cloud (Global HR)
– Oracle Payroll Cloud
– Oracle SCM Cloud (Procurement)

Results

– >1,000 staff and contractors and hundreds of supply partners paid on time each month
– Thousands of work orders, repairs and requisitions processed automatically
– Helps to maintain estates compliance and support the Prison Service to uphold order and deliver effective rehabilitation.

Read success story ibm.biz/gfslcasestudy
Why IBM?

- Platinum and Cloud Elite status
- 2019 Oracle Excellence Award for North America Oracle HCM Cloud Partner of the Year
  [link](ibm.biz/hcmcloud2019award)
- Preferred partner of choice for BPO for Oracle Payroll Cloud and Oracle HCM Cloud
  [link](ibm.biz/preferredBPOpayrollpartner)
- 1,000+ dedicated Oracle HCM Cloud consultants
- 75+ Oracle HCM Cloud go-lives
- 70+ Oracle specializations
- 450+ Oracle HCM Cloud certifications
- 275+ Oracle Cloud go-lives
- 9 Oracle HCM Cloud Excellence Implementer (CEI) modules
- 10+ Oracle-specific delivery centers
- Oracle Cloud Garage
  [link](ibm.biz/oraclewave2018)
Read IBM Thought Leadership on Oracle’s HCM Blog

ERP/EPM and HCM Together: Why Tackle Them at Once?  
ibm.biz/multipillarcloud2

Global Legal Firm Embraces Diversity — and Drives Efficiency — with HCM Cloud Platform  
ibm.biz/hcmclouddiversity

Read about IBM’s Oracle HCM Cloud clients

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