



The Cognitive Enterprise for Oracle Cloud HCM in Higher Education

Powered by IBM and Oracle



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1

Higher Education in the Cognitive Era

Evolution from digital to cognitive solutions for professors, administrators, and students

Higher education institutions 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 universities create more personalized services for students and employees. To remain competitive, organizations are rapidly adopting the change and training their people to add skills to their existing talent.

While attracting, retaining, and training faculty, professors, and administrators is essential, the university must also keep pace with cognitive solutions focused on the student. Cognitive solutions, like IBM Watson are being used to address the critical needs of student engagement, academic discovery and teacher advising.

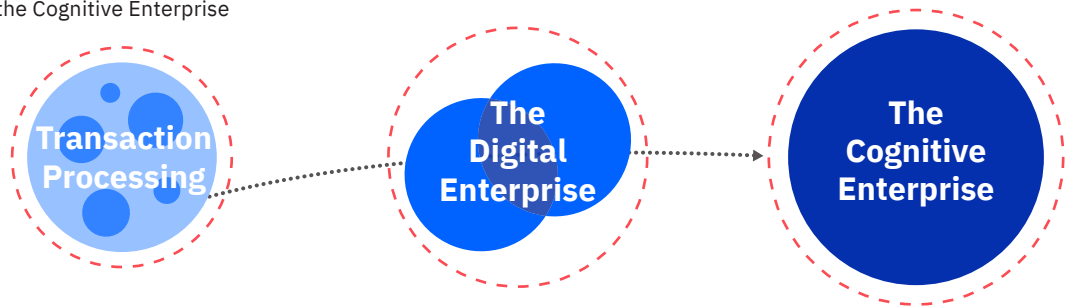
There are three things very important for education leaders to know about the Cognitive Era and its impact.

1. These systems will permeate many different parts of the economy, which will both create higher expectations for services among constituents, but also change the way new professionals are taught.
2. Institutions will need to be more proactive to develop the data foundations to enable new cognitive systems, taking a more holistic approach.
3. These new systems will transform how outcomes are enabled. Institutions will be better able to improve learning outcomes, including aligning to career needs. This will foster economic vitality and become more important within the region.

The shift to a Cognitive Enterprise

Radically changes how organizations create, deliver, and capture value

Figure 1
Capability Layers for the Cognitive Enterprise



WHAT	Early information technology improved efficiency by applying technology to individual resources or processes.	Digital transformation digitizes whole aspects of a business producing customer experiences that support what individuals need or want.	The cognitive enterprise incorporates exponential technologies to create revenues and results via innovative strategies, products, platforms, process transformation, and user experiences.
HOW	<ul style="list-style-type: none"> • Paper tracking • Lift and shift • Limited-use productivity tools • Localized practices • Global Design 	<ul style="list-style-type: none"> • Process automation point solutions • Design thinking principles • Enterprise adoption and change management 	<ul style="list-style-type: none"> • Intelligent workflows • Pervasive automation • Design Thinking • Blockchain and Chatbots • Cognitive Talent Acquisition and Management • Watson Candidate Assistant • Watson Payroll Assistant

What is a Cognitive Enterprise?

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

As educational institutions 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 companies 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 talent acquisition predictive models for an institution that experiences friction

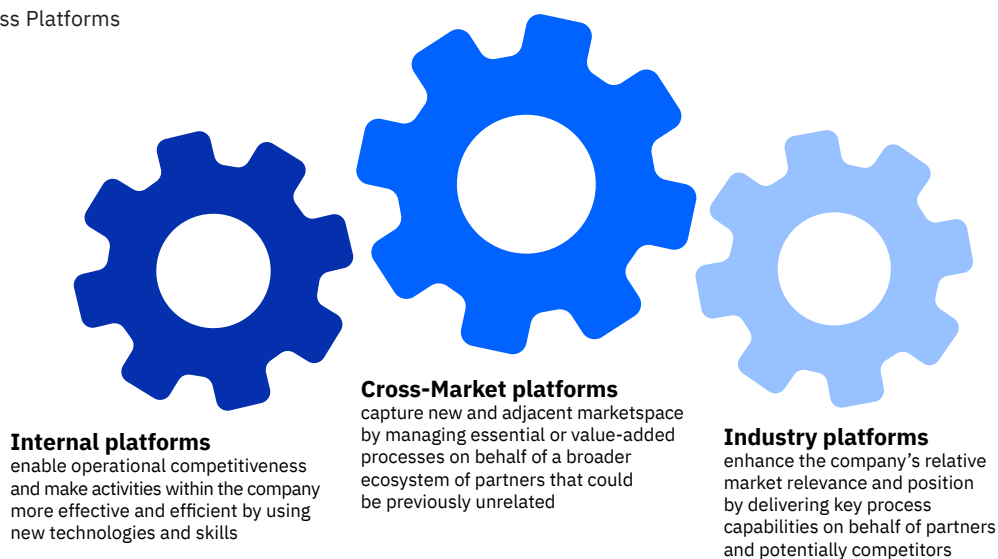
hiring and retaining top talent from the industry. Such Business Platforms will often be underpinned by technology platforms and may connect into other ecosystem business platforms as well.

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 companies 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 companies are using platforms to expand their expertise and compete in markets adjacent to — but until now separate from — their traditional businesses.

Figure 2
Types of Business Platforms



Source: IBM Institute for Business Value (IBV) analysis

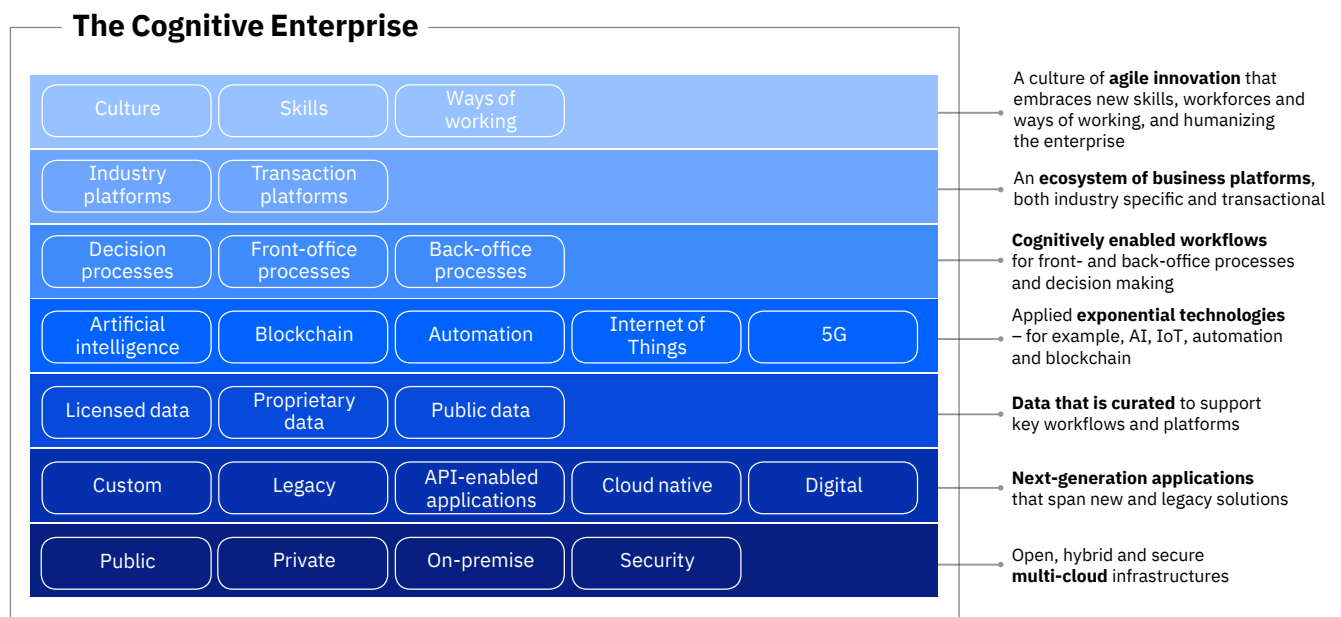
Inside the Cognitive Enterprise?

The business platform is made up of capability layers. Each is subject to major transformation with a huge potential for educational institutions. We think that incumbents will – as we are

increasingly seeing – strike back if they can orchestrate change at scale. Universities have the opportunity not only to invade and secure new markets but also to restructure their cost bases for the long term – with a possible huge payoff to their bottom lines.

Figure 3

Capability Layers for the Cognitive Enterprise



Source: IBM Institute for Business Value (IBV) analysis

The Cognitive Enterprise for Higher Education

Technology has greatly influenced and changed consumer behavior and expectations. New technologies enable deeper, richer experiences, which consumers have come to expect and, in fact, demand. Higher education's consumers — students — are no different. They expect institutions to deliver enhanced experiences. For the most part, today's higher education experience is not in synch with customer expectations.

The bulk of higher education students are Millennials — the first generation to grow up immersed in a digital world. Using mobile and social technologies, immediately accessing data, and instantly communicating and collaborating are all second nature for them.

And while Millennials are adept at interacting online, their top-three preferences for learning new skills at work are physical not virtual, tying back to the need for practical education experiences. Infusing technology into the higher education system is not simple. Technology needs to be used in the right ways to enhance the overall education experience. Educational institutions adopting cognitive computing systems will have the ability to collect data over a long period of time and analyze it. Digital education creates a tremendous amount of data about all aspects of teaching and learning. And it's not only test scores, but also information about student behavior on digital learning platforms, attendance, and more. Data collection and analysis systems could give teachers the information they need to provide personalized learning experiences for their students. These systems could also help

teachers identify students who are most at risk, determine why they are struggling, as well as provide insight into the interventions needed to overcome the challenges.

Source: IBM Education Industry Blog

Higher Education Evolution in a Cognitive Enterprise

Although frontrunning universities 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, an automated assistant on the career portal can guide candidates through providing profile information. Candidate information is evaluated against job frameworks, job requirements and matching history to suggest potential jobs based on the strength of fit. The Assistant answers FAQs about the company, available jobs and the application process. Once a job is selected, the candidate is guided to complete the application in the career portal. **Machine learning adapts the job matching recommendations as business needs change over time.**

Today's learning institutions 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.

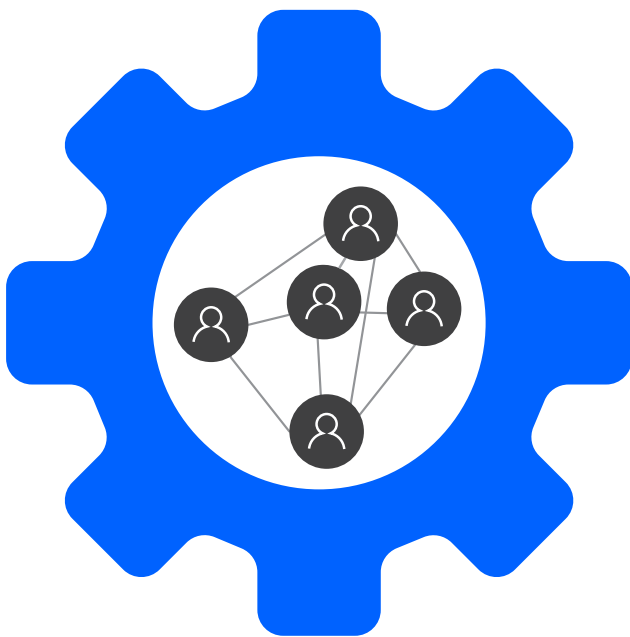
Experts expect that cognitive computing will transform the educational landscape by making education more interactive and creative.

IBM Watson is an example of such a cognitive computer system that will completely change how schools, colleges, and universities are run, and how they offer their services. For students and professors, cognitive computing will radically change their learning experience.

-
- It usually takes weeks to analyze trends in enrollment campaigns. Cognitive computing can reduce that time to hours or minutes
 - Cognitive computing platforms can analyze and distill torrents of data and produce actionable suggestions to staff and students.
 - Adaptive intelligent virtual assistants can free the advisor from mundane tasks allowing them to provide more focused, higher-level interactions with the student who need assistance.
-

Figure 4

Educational Cognitive Enterprise has its people at the core



Talent Management in the Cognitive Era:

Retain Top Talent: Listen to them, survey them, make them realize by action that their opinion matters!

Employee

A typical employee lifecycle at a higher educational institution begins by attracting the right talent into the organization. With the advancement of technology and ready access to 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 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 high-demand environment such as higher education, with a high rate of turnover. 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**



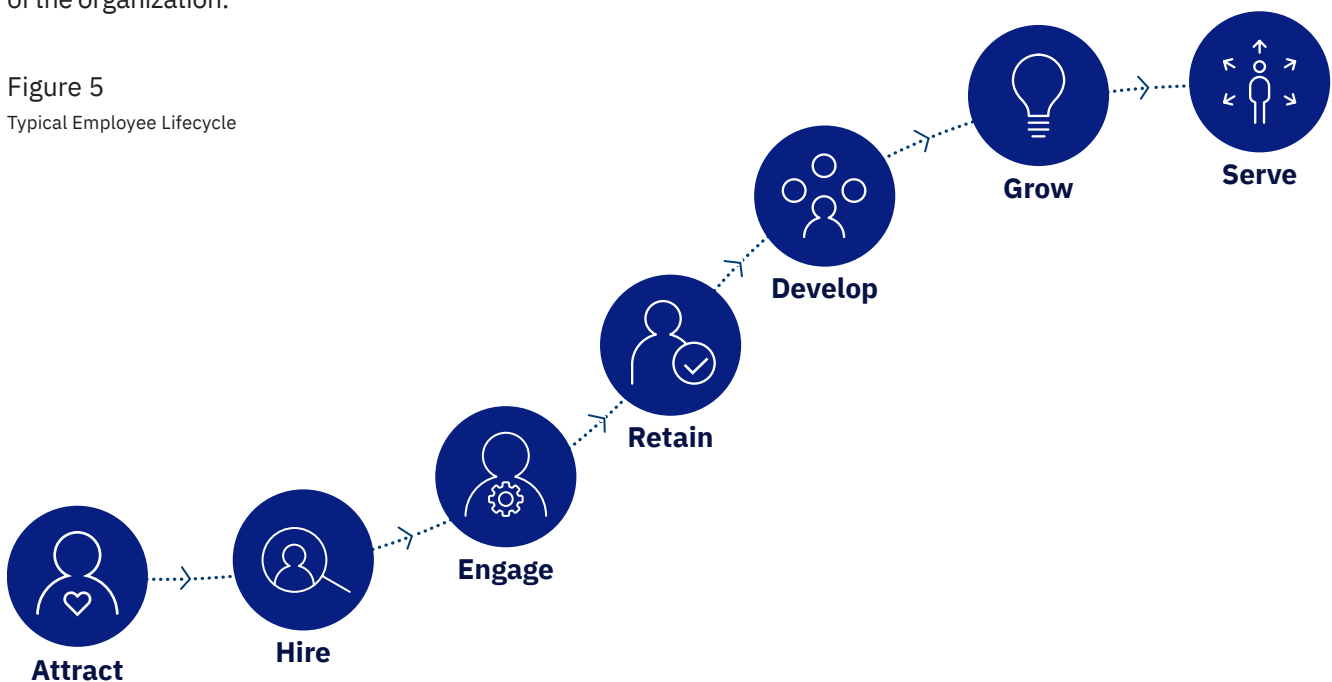
Only 62% of Baby Boomers surveyed believe **management will act on their input**, compared to 78% of millennials



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

Figure 5
Typical Employee Lifecycle










Digital

With IBM and Oracle

IBM and Oracle technologies are designed to work cohesively for higher education institutions 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 universities can acquire, manage and retain top talent in the industry.

	Attract	Hire	Engage	Retain	Develop	Grow	Serve
							
IBM	Watson Candidate Assistant Adverse Impact Analytics (AIA)	Watson Recruitment	Shift Rostering		Your Learning Skills Inference	Watson Career Coach	Chatbots
ORACLE	Oracle's Talent Acquisition Solution (ORC (Fusion) and OTAC (Taleo))	Global Human Resources	Talent profile Goal management Performance management	Workforce Predictions	Learning Management	Career and Succession Planning	Oracle Digital Assistant

IBM and Oracle a Complete Solution for Higher Education

Transforming Education Through Innovation

IBM + Oracle Cloud applications provide a robust, integrated solution for Higher Education institutions. Administrators, students, professors, teachers, and alumni needs can be met wide a broad and deep portfolio of applications. These applications can:

Promote Student Success

- Improve student outcomes
- Engage students with personalization
- Empower student actions
- Deliver timely and effective interventions



Foster Operational Excellence

- Reduce financial risk
- Improve financial sustainability
- Attract, develop and retain the best talent
- Create and support a collaborative productive environment



Accelerate Innovation

- Drive digital transformation of your institution
- Provide rapid delivery of new technology
- Enable a differentiated constituent experience



Enable Data-Driven Action

- Identify and anticipate each student's unique needs
- Leverage analytics to optimize operations
- Provide workforce insights to every department
- Visually analyze enterprise data



To survive in a highly competitive landscape, higher education institutions must modernize their educational offerings focusing on how they engage with professors, administrators and students. They must develop the ability to enroll students in a variety of ways in order to achieve their enrollment objectives. And they need

to adopt flexible learning paths to effectively define, monitor, and report on student progress. Attracting and retaining highly skilled and specialized resources, is critical to the long-term success of colleges and universities. Oracle's Cloud applications for Higher Education include:



Oracle Student Cloud

Oracle Student Cloud is a comprehensive approach to managing the student lifecycle, communications, and relationships, from recruiting through alumni and donor management.

[Oracle Student Management Cloud](#)
[Oracle Student Financial Planning Cloud](#)



HCM

Hire and retain top faculty and staff. Recruit, grow, and retain your employees with talent acquisition, learning, and performance management.

[Oracle Global Human Resources Cloud](#)
[Oracle Talent Management Cloud](#)
[Oracle Workforce Rewards Cloud](#)
[Oracle Workforce Management Cloud](#)
[Oracle Work Life Solutions Cloud](#)



ERP

Empower modern finance to unite disparate accounting systems, improve project profitability, and streamline payment processes through automation and social collaboration, while controlling costs.

[Oracle Financials Cloud](#)
[Oracle Procurement Cloud](#)
[Oracle Risk Management Cloud](#)
[Oracle Project Portfolio Management Cloud](#)



EPM

Drive accurate and agile plans across finance and lines of business, analyze data across the institution, and improve data-driven decision-making.

[Oracle Enterprise Planning](#)
[Oracle Financial Close](#)
[Narrative Reporting](#)
[Oracle Enterprise Data Management](#)



PaaS

Oracle Cloud Platform is optimized for hybrid and multicloud environments and built to extend your applications, consolidate your institution's data, and gain insights across multiple systems.

[Application Development](#)
[Business Analytics](#)
[Data Management](#)
[Integration](#)



IaaS

Oracle Cloud Infrastructure provides integrated platform solutions designed to increase agility, lower costs, and reduce IT complexity across your institution. Integrate your data, processes, and applications; migrate workloads to the cloud; and implement unified management and security — all with a single robust platform.

[Networking](#)
[Storage](#)

2

Common Human Capital Management (HCM) Challenges



Nickle LaMoreaux
Chief HR Officer
IBM Corporation

IBM's Chief HR Officer, Nickle LaMoreaux, highlights the 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; the world is searchable and transparent; their questions can be answered 24x7 in a live chat. And then they come to work. Our job in HR is to create that connected, transparent, mobile, personalized, searchable and 24x7 universe through our workplace and our tools. 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. Companies are being massively disrupted by technology and they have a desperate need for their employees to reskill themselves for the digital age.

3

Talent Management Challenges in Higher Education

The increasing call for transparency and open communication poses several challenges to educational institutions across the country. Tax assistance to State Universities continues to shrink, and these universities are increasingly expected to do more with fewer resources.

Because of these challenges, organizations increasingly adopt, adapt and thrive with the latest technology innovations available.

Many universities address these challenges with:

- Modernization of technology and digital transformation to lower costs and improve cross-HCM integration
- Movement to cloud and shift to SaaS for comprehensive systems supporting core HR administration, payroll, talent management, and employee engagement
- Analytics and cognitive capabilities creating a new Cognitive Talent Management work environment that requires consistent jobs, skills, and data across all HR functions
- Introduction of AI, robotics and automation into the workplace can significantly accelerate, transform roles and skills throughout the organization
- Workforce dynamics are now shifting from traditional steady progression along a job-based pathway towards a model that empowers individuals to acquire valuable experiences, explore new roles and continuously reinvent themselves
- The emergence of new communication tools and adoption of these tools from personal life to the workplace, organizations are becoming hyper connected

At the core of these challenges is acquiring, rewarding and managing talent that make organizations successful. The top four talent related challenges faced by higher education 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.
- Administrations in higher education can truly benefit from achievements that talent management has had in organizations within other industries. Institutions must realize growing talent from within can be of considerable benefit, especially given the current economic climate, increasingly competitive environment for human capital, and the ongoing need of being accountable to its constituents.



Upskilling and Talent Management

- The rapid evolution of technology results in an ongoing need to upskill employees and get them ready for changing times along with ensuring they remain compliant with regulatory licenses and certifications needed for the many services they provide.



Unified People Experience

Lack of a cohesive experience for employees and students that engage daily with the school results in having to provide and maintain multiple disparate systems severely hampering seamless integration between various business functions. Higher education employees expect:

- High expectations in self-service capability including use of mobile capabilities, collaborative tools and clear career path guidance
- Clear definition of objectives and goals cascaded throughout the organization results in improved employee engagement
- Career Development and Talent Review should be discussed and conducted throughout the tenure of an employee to promote aspirations, provide feedback and retain talent



Predictive Workforce

- Employee turnover costs at educational organizations can hurt their profitability significantly and not being able to predict workforce longevity poses serious challenges with achieving business objectives.

The challenges mentioned above and others that are not covered here can be addressed effectively by solutioning Cognitive workflows that comprise a layer in the business platform. IBM and Oracle provide the solutions that can be deployed to mitigate the risks from the above challenges and help educational institutions evolve in the Cognitive Era.

4

Higher Education Talent Acquisition

Powered by IBM and Oracle

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 education 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.

With the advent of the Cognitive Enterprise era, Intelligent Automation enabled **Higher Education Institutions 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.

90% of executives believe the labor market is candidate-driven

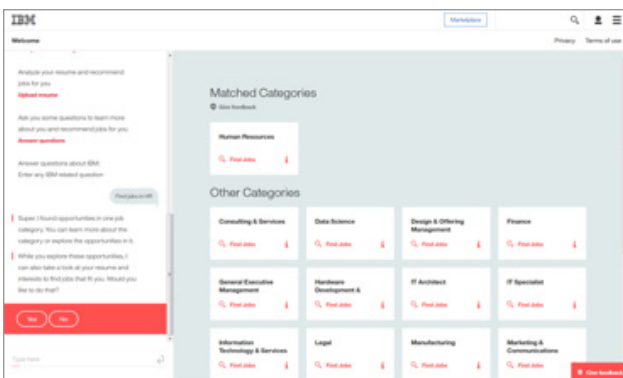
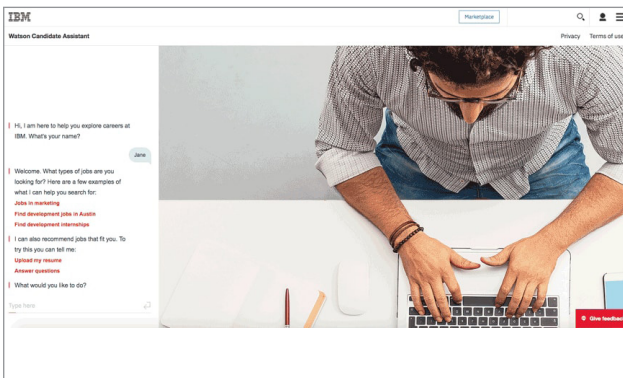
— MRI Network Recruiter Sentiment Study with insights from employers and candidates, June 2017

Watson Recruitment generated 55% screening process efficiency gain according to recruiters.

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.

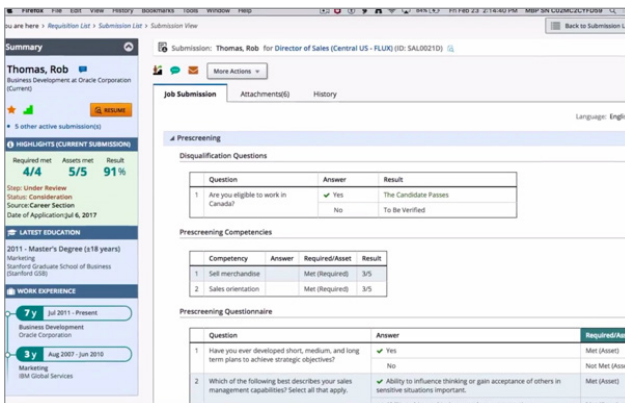
IBM Watson® Talent Match

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)



Oracle Cloud HCM 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 Cloud HCM 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.

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.

Key considerations

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

New Talent Acquisition Capabilities

Attract

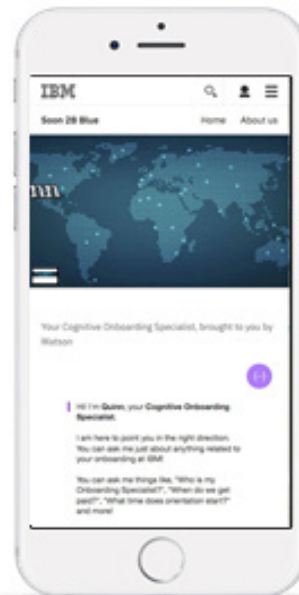
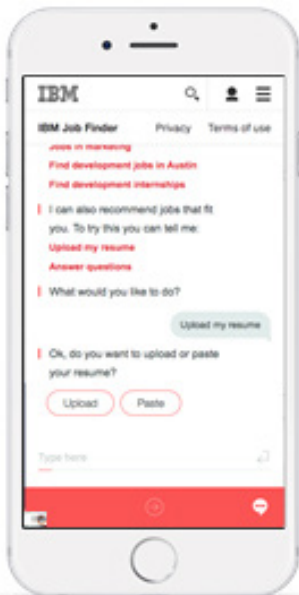
- Improve the candidate experience
- Use cognitive computing to suggest “best fit” roles
- Show candidate why they are a good fit for the role
- Enable candidate to ask questions and get insightful responses 24x7

Recruit

- Accelerate time to fill vacancies with quality hires
- Optimize recruiter workload
- Customize candidate messaging with JIT social insights
- Identify the candidates most likely to be successful in the role

Engage

- Answer pre-hire and new-hire questions accurately and efficiently, 24x7
- Shorten new hire time to productivity
- Reduce new hire demands on hiring managers, recruiters and HR
- Habituate new hires to using cognitive tools



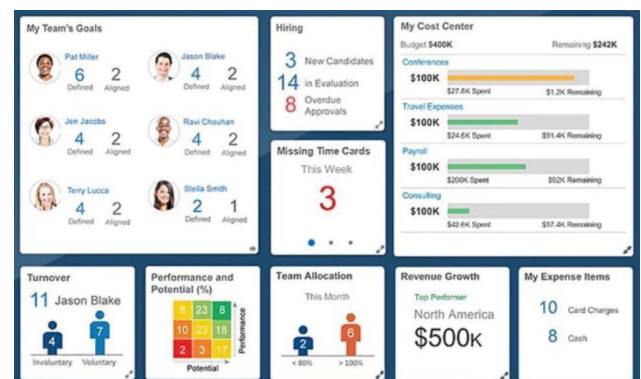
5

Unified People Experience

Oracle's education-focused solutions provide a single platform and unified experience across the entire learning organization.

Employees and other users in the organization 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 Cloud HCM 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 organizations gain high efficiencies in 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 such optimal state in 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 educational workers to conduct their business and focus more on what they do best — serve the needs of their stakeholders.**



Currently there is a lack of overall talent management tools and technology in higher education. It is ironic that the higher education environment that prides itself on continuous learning and forward thinking spends very little time and effort developing its future leaders. Like any organization, institutions of higher education face challenges in managing their administrative talent. Increasing turnover in recent years are requiring institutions to find solutions to remain competitive with their private sector counterparts for key talent ¹.

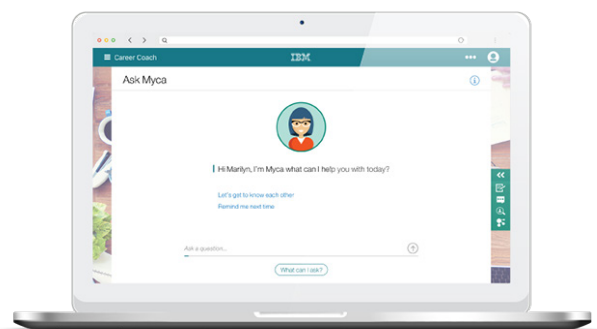
Human resource practitioners play a major role in determining the overall direction of an organization by the way they facilitate the talent management process. HR practitioners gain significant benefits from a Cognitive Enterprise that provides a robust set of integrated applications and tools, such as performance appraisals, management development, other training and development functions, compensation, Equal Employment Opportunity (EEO) regulations, and career planning. A highly effective talent management system is one that is integrated into the overall human resource strategic plan that values both talent development and leadership advancement throughout an organization.

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.



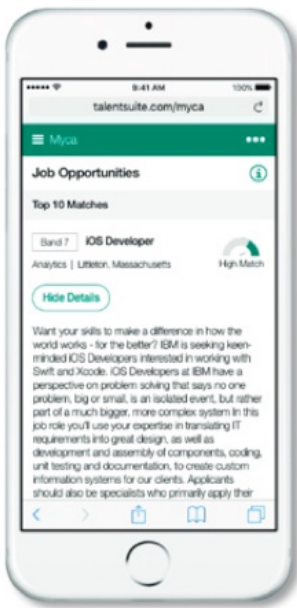
Organizations that extensively use technology for career coaching have better retention plans

1. Riccio, Steven, "Talent Management in Higher Education: Developing Emerging Leaders Within the Administration at Private Colleges and Universities" (2010). Educational Administration: Theses, Dissertations, and Student Research. 34.

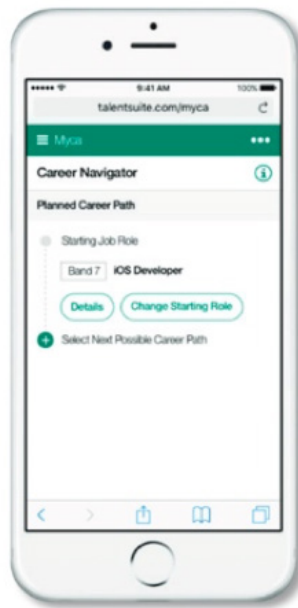
76%

of millennials think professional development opportunities are one of the most important elements of company culture.²

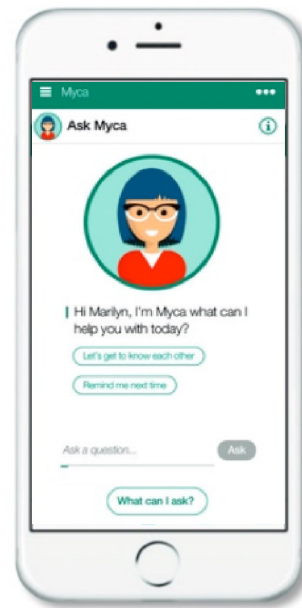
Watson Career Coach



Choose best-fit roles and apply directly



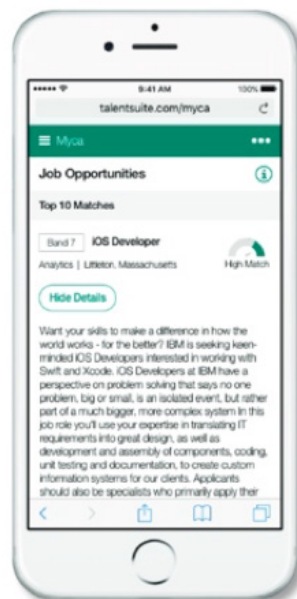
Explore career options and plan next steps



Seek answers to career-related questions

Job Opportunity Match

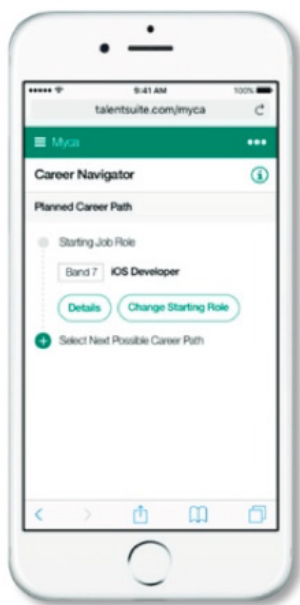
Employees can find open job positions deemed a good fit for them by answering a set of skills-based questions or uploading their resume. Using IBM Watson APIs, Career Coach matches users to internal job opportunities that are relevant to their current career experiences. Users can refine their search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



Choose best-fit roles and apply directly

Career Navigator

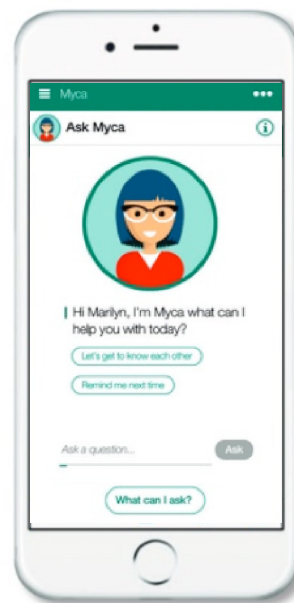
Employees can define a personalized career progression and receive guidance based on job transitions of others in similar positions and roles. Career Coach makes recommendations for each next step with multiple job role choices with ratings for each based on organizational demand and skill match.



Explore career options and plan next steps

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.

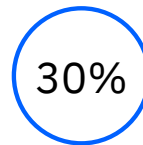


Seek answers to career-related questions

Cognitive HR Journey Map

HR leaders, faced with new sets of challenges, are realizing that they need to rethink strategic objectives, retool their operating model, and essentially reinvent their HR function.

This HR Reinvention is about creating great employee experiences and building talent that drives the business. It's developing the digital capabilities to modernize your HR operating model and leveraging all the data at your disposal to make better decisions and run more efficiently. Bold ambition — but achievable through cognitive.



HR cost
reduction

Creating a Bold HR: Reinventing and deploying an end-to-end operating model unleashes HR professionals to focus on what drives business success—talent acquisition, development, retention, and cost management.

Engage the Workforce

Attract top talent and then retain them as engaged employees who focus on your customers to increase revenue.

Reinvent and Modernize

Drive to digital and automation, reinventing tools and processes along the path to a cognitive future.

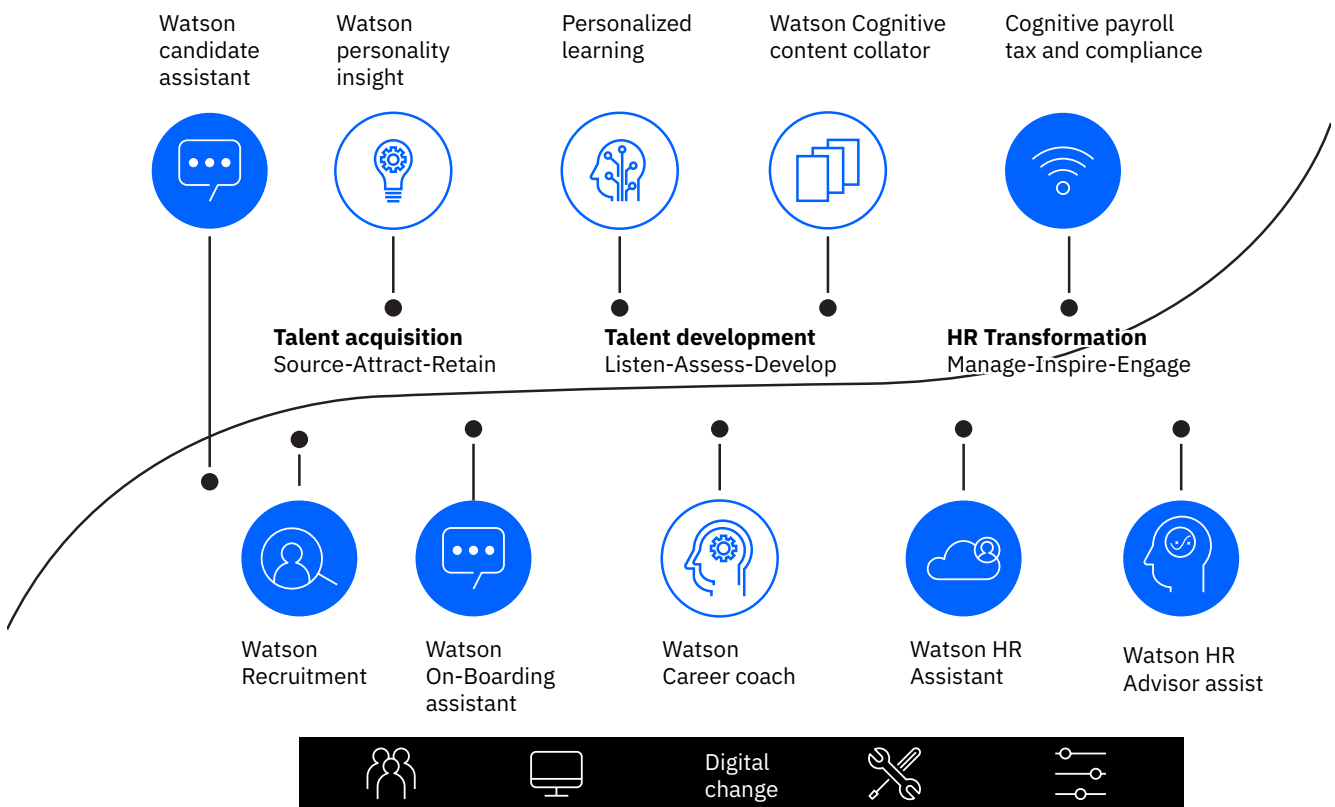
Unlock Capital

Create agility and future proof your organization, while saving money, by moving to a new operating model.

At IBM, we're applying Watson to amplify and accelerate this new type of HR transformation. It's a great fit because Watson Cognitive patterns are ideally suited to address those HR challenges. In this situation, we apply those patterns to:

- Personalize recommendations — for employees, managers and HR
- Transform interactions — re-energizing the ways in which employees engage with the enterprise
- Create empowering insights — making information and knowledge — expertise -- broadly available to support a wide variety of decisions
- Optimize operations — Automating repeatable processes and improving the accuracy and quality of outcomes.

The goal is to equip HR with the capabilities to strategically impact the business. At IBM, we have a rapidly expanding portfolio of solutions where we've assembled Watson services – in some cases even creating new services — to address employee, manager and HR needs. Solutions to improve recruiting, transform learning and create more engaging and satisfying experiences for employees as they engage with the HR function. Below are some examples of the IBM solutions that both compliment and enrich Oracle Cloud HCM:



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Upskilling and Talent Management

“60% of Executives globally confirmed that they are struggling to keep their workforce current,, and relevant

— IBM Institute of Business Value

Higher education institutions 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 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 educational institutions, **the need to manage talent with effective career development, and succession planning is essential for the continued success of higher education organizations.** 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.

Talent Management enables Managers to play a larger role in the professional development and retention of their direct reports

Like any organization, institutions of higher education face challenges in managing their administrative talent. Increasing turnover in recent years are requiring institutions to find solutions to remain competitive with their private sector counterparts for key talent ².

Studies have shown support for the inclusion of an Individual Learning Plans (ILP) as a critical component to a talent management initiative. The IDP is a process that helps employees assess both the skills required to support their career goals while aligning those skills with the organizations' mission and goals.¹

To stay competitive, higher education HR leaders must plan for both short- and long-term talent needs, such as PhD shortages and retirement backfills. Implementing an effective Cognitive Enterprise, you can:

- Reduce talent gaps and prepare for the future by leveraging mobile, social, analytics, big data, and the cloud
- Quickly capture talent data from across your institution and gain insight into your employees' skills, interests, and gaps;
- Identify staff capabilities through insight-driven, collaborative, and secure interactive online discussions.

- Evaluate your talent using advanced visualization (such as an interactive 9-box grid) to view tenure status, risk of leaving, and other performance factors.
- Be ready to ramp up for expanding degree programs and other future market demands by creating talent pools and succession plans.

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 learning institutions, 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.

1. Riccio, Steven, "Talent Management in Higher Education: Developing Emerging Leaders Within the Administration at Private Colleges and Universities" (2010). Educational Administration: Theses, Dissertations, and Student Research. 34.

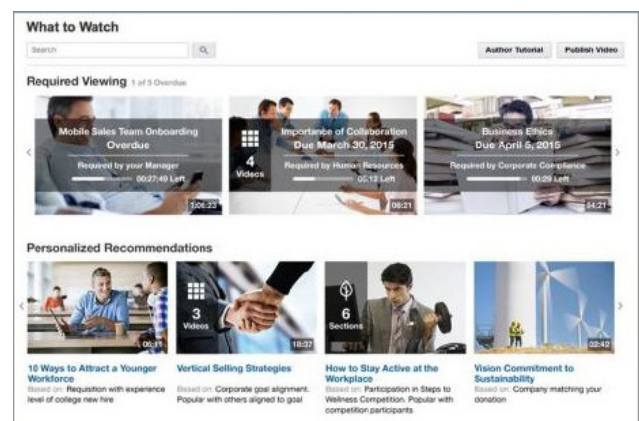
2. IBM Institute for Business Value (IBV)

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

Higher education requires 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



Talent Review

Understand your talents' skills and capabilities by reviewing licenses, certifications, career interests, publications, CVs, and existing talent profiles that are generated from employee self-service portals or auto-populated from recruiting activities. Engage in collaborative and interactive online discussions among HR leaders to further determine current talent aptitude.



Ranking and Assessment

Evaluate faculty and administrative staff performance by using reports and advanced visualization, such as an interactive 9-box grid. View potential, risk of leaving and impact of loss, tenure status, and other performance data. Compare and contrast staff capabilities.



Identify Future Talent Needs

Identify short- and long-term talent needs, such as new PhDs, union negotiators, and successors to the Dean. Ensure that the best talent is in line for the future by creating talent pools to track emerging leaders or make succession plans. Prepare for campus location expansions, new degree programs, and other future institutional goals.



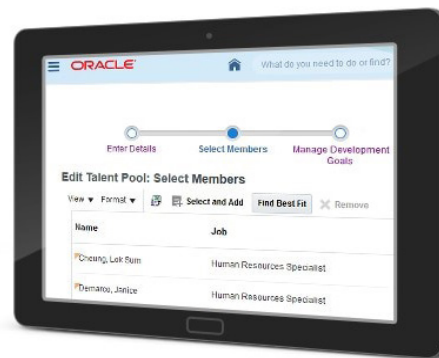
Placement

Creating an internal pipeline of resources to fulfill potential talent gaps. Strategically place faculty and staff into talent pools and succession slates based on ranking and assessment data.



Analyze Talent Pools

Track the readiness of your talent pool by automatically identifying their career development goals and needs.



Succession Strength and Weakness

Analyze individual and workforce strengths and weaknesses to determine bench strength and succession slates. Evaluate faculty and staff performance versus potential by using a 9-box grid



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Higher Education Workforce Predictions

Oracle HCM **Workforce Predictions** provides forward-looking insight into your workforce trends and enables you to take early action, aligning human 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.

To illustrate the urgency to address talent management at colleges and universities, one prediction estimated at least a 50% turnover rate among senior higher education administrators within the next five to ten years.¹

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Conclusion

Transformative HR and Talent Management for a Cognitive Enterprise

HR and talent leaders in higher education face funding challenges, ongoing regulatory oversight, and the need to engage faculty and employees — all while meeting the demand for high-quality education at a lower cost.

With a modern Cognitive Enterprise, you can use mobile, social, analytics, the Internet of Things, big data, and the cloud to empower faculty and staff to cultivate career development, improve retention rates, and work more productively.

Gain a holistic view across the entire campus and understand current and future talent pipelines. Use workforce modeling and prediction to identify staffing needs and faculty turnover trends and impacts. Take advantage of social sourcing to quickly target top academic candidates.

The convergence of technological innovation, social and regulatory transformations have changed educational institutions to be even more focused on value-based services. To stay in step with the disruption and remain competitive in the marketplace, the emergence of the Cognitive Enterprise 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.³

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 Cloud HCM capabilities with Cognitive Solutions, please reach out to your IBM client executive.

3. Oracle Corporation: Transformative HR and Talent Management for an Engaged and Agile Workforce: <https://www.oracle.com/applications/modern-best-practice/higher-education/hr-and-talent-management>

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Client Case Studies

Thanks to our IBM talent assessment solution, we are providing school districts with the insight they need to make better-informed hiring decisions.

– Sandy Roberts, Teacher Job Network
Application Mana



Empowering school districts in Texas to identify and recruit top talent with IBM and Oracle

Problem

Region 10 ESC is based in Richardson, Texas, Region 10 Education Service Center is one of 20 regional service centers established by Texas State Legislature in 1967. The organization has a mandate to support schools across eight north Texas counties and positions of two others, and its services impact more than 810,000 students and 99,000 staff members on 1,220 campus. To Help school districts in Texas attract the skills they need to deliver high-quality learning experiences, Region 10 wanted a cost -effective way to enable them to hand-pick top job applications.

Requirements

- Needed a system that can facilitate a massive recruitment effort (increase employees by 80%)
- Ability to track over 4,000 annual applicants
- Standardized recruiting process

Solution

- IBM Kenexa

Results

- **27% boost** in school districts using Region 10's services drives business growth
- **Help close skill gap** and ensure high-quality coverage across the curriculum.
- Enables School districts to identify and **hire top-performing applicants.**

Read success story ibm.biz/region10casestudy

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Why IBM

IBM is one of Oracle's largest and most experienced systems integration partners jointly helping customers for over 35 years:



Oracle Partner



2019 Oracle Excellence Award for North America Oracle HCM Cloud Partner of the Year
ibm.biz/hcmcloud2019award



Preferred partner of choice for BPO for Oracle Payroll Cloud and Oracle HCM Cloud
ibm.biz/preferredBPOpayrollpartner



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2,000+ Oracle Cloud certifications



375+ Oracle Cloud go-lives



10+ Oracle-specific delivery centers



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