

A person is seen from behind, working on a large industrial loom. The loom is filled with many threads, some of which are blue. The scene is dimly lit, with the person's silhouette visible against the threads.

mettl

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HUMAN RESOURCE TECHNOLOGY  
**WEAVING A FABRIC OF  
ORGANIZATIONAL CHANGE**



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“**The only thing that is constant is change.**”

# AND SO THE TALE BEGAN...

History in many ways is what aspires growth. What did it take to end great empires? What did it take to revolutionize change, to invent the wheel? The past is forever a god of infinite wisdom to learn from.

The relatively archaic time between 500 BCE – 475 BCE noted the rise and demise of one of history’s darkest philosophers, so-called because of his hard to understand writings. Little did we realize that in his words echoed wisdom reflective of the world of today, wisdom that continues to baffle.

They called him Heraclitus of Ephesus, who said with provocation and obscurity, “The only thing that is constant is change.”

Nothing is immune to change, be it people, fashion, or even trends. But among them, technology has always remained a beast in its own league, aggressive with its growth in weaving a fabric of change. It has certainly affected us all.

Within Human Resource Management as well, technology has altered considerably over the last decade, empowered but with an unequivocal consensus about where it’s headed.





Through the automation of processes, HR technology has advanced to create an era of HR professionals, who view their roles not as mere administrators, but strategic enablers for key organizational decisions.

This advancement occurred in parallel to the changing needs of organizational HR; whether as a cause or consequence of it is worthy of a debate. But in tandem, over the past decade, HR and its native technology have sophisticated to great lengths in terms of how they measure and justify their purpose.

Consequently, with an increased dependency on HR technology, we are today amid a \$15 Billion industry. This, from HR software alone, resulting in an explosion of start-ups and new ideas.

**“As money comes to HR technology, so do new ideas and smart people. The result: we are seeing one of the most innovative times ever in the HR technology market.”**

Josh Bersin, Principal and Founder, Bersin by Deloitte

**WHAT DID WE TELL YOU? AH YES, A FABRIC OF CHANGE.**



# REDEFINING THE ROLE OF HR

## AND SO THE CAMPAIGN BEGAN...

The story behind Human Resources dates to the 1970s, a concept still in its infancy, but with a potential unknown. Owing to their historical roles as administrators in hiring, firing, managing compensation and payrolls, the entity continues to struggle to be known as business partners within an organization.

Even today, business leaders view HR as a reactive department rather than a more proactive business partner with an ability to help organizations and its people grow.

However, the onset of a change in technology relevant to the fraternity and sorority saw HR mount a campaign against the stigma of the “Human Resource Department” tag and effectively transform into HR Business Partners.

Considered impossible in the 70s, HR is now in the process of a redefinition, much like when Alexander likened his legacy to history’s most unprecedented military campaign through Asian and northeast Africa, creating one of the largest empires of the ancient world.

But, despite the surge in technological advancements, the redefinition was also in part facilitated by recent recognition of the words: ‘Human Capital’ and ‘Talent’.

For years, organizations viewed people as merely another cost centre, leaving it largely unacknowledged for the strategic asset that it is. This, of course, changed with new-era companies like Google, Apple, and Microsoft among others, who brought to focus highly successful products and services that were direct embodiments of their talent pools.





With their wisdom, Human Resources shifted to the science of using strategic planning to improve business value, which would in turn make it possible for companies and organizations to reach their goals.

The shift towards attracting, managing, measuring and retaining talent is a discernible one, indeed. And, while there are those who believe that these are simply new phrases for old work, the reality truly reveals a new identity for HR.



**NOW, HOW THIS WORKS IN THE  
CURRENT ERA IS MOST DEFINITELY  
A TOPIC WORTH EXPLORING.**

A festive night scene with a large, illuminated sign that reads 'HAPPY 2000' in yellow and red. Above it, a smaller sign says 'DISCOVER CARD'. The scene is filled with colorful confetti and lights, suggesting a New Year's Eve celebration. The background is dark, and the overall atmosphere is celebratory.

# THE NEW MILLENNIUM WHAT CHANGED?

Recruitment is no doubt a war, and the new millennium altered the concept of talent management in this regard.

- Excellent Work Space

- Modern Hiring System

- Better Engagement

- Easy Communication

- Learning and Development

- Frequent Feedback

These are merely some of the many asks from the new generation of talent, which now highlights a changing workforce – a generational shift, if you prefer. With this, the perception of HR has also undergone a massive change, moving from a support function into something more advisory in nature.

In fact, HR is no longer the ancillary role that it once was – to employ and manage grievances. They are now an entity that affects the bottom line of an organization, where some of the focus areas now include:

- **Talent Sourcing, Acquisition & Retention**
- **Employee Systems of Engagement**
- **Performance & Productivity Analytics**
- **Learning Management**
- **Training Administration**
- **Succession Planning**

This, to top off the tip of the HR iceberg. In parallel, certain technologies that bind these new focus areas hover in the realms of social recruiting, online skills assessments, Bring Your Own Device (BYOD), e-learning systems and more.

Yes, the HR tech industry is at a stage of rapid innovation to keep pace with the changing demands of Human Capital Management. This eBook touches these disruptions and trends in this multi-billion-dollar business, which in the coming years, is predicted to set the tone for organizational HRM (Human Resource Management).

## **LET'S DIVE A LITTLE DEEPER, SHALL WE?**





# TRENDS IN HR TECHNOLOGY

## **THE THREADS THAT WOVE A CHANGE...**

HUMAN RESOURCE IS ONE OF THOSE INDUSTRIES, WHICH DOES NOT QUITE MAKE ITS WAY INTO SCIENCE FICTION BOOKS. CERTAINLY, NO KID GROWS UP THINKING OF REVOLUTIONIZING THE TECHNOLOGY INSIDE THIS MARKET. BUT IT HAPPENED NONETHELESS.

BEHIND THE SCENES, THE INDUSTRY CHANGED, EVEN IF THE TECHNOLOGY AT ITS INFANCY WASN'T DESIGNED FOR HR TO BEGIN WITH.



# RECRUITING TECHNOLOGIES FOR **MILLENNIALS**

Given the sheer size of the global recruitment market, the traditional **paper-résumé-screen-interview-selection** method is hardly the most optimum in matching talent to the right job.

Online recruiting and applicant tracking systems brought great efficiency to the process, but social recruiting remained a realm apart in providing global businesses a solution to build an effective workforce.

**in**

LinkedIn was first to demonstrate social media prowess in corporate recruitment, while others followed suit, contributing to the **\$1.5 Billion** sized market we know of today.

**THERE ARE TWO SIDES TO THIS COIN.**





## HEADS

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Born into technology, the Millennials also contributed greatly to the entire recruitment process going digital. We often see candidates seek and apply for jobs online, use remote assessments, interview via audio-visual tools and more. We call this market, “Social Referral Recruiting”.

## TAILS

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For employers, social recruiting opened an opportunity to build customized talent networks, which served to improve employer branding, job visibility, interest, sourcing through highly targeted groups and more. Additionally, the end to geographic barriers in the online space opened for HR a chance to map talent to a much larger field

With that out of the way, it is easy to state that recruitment technology is bringing about a change in candidate experience. This is what many would like to call, a primitive to employee engagement – namely candidate engagement.

Why candidate engagement? Simply because, employers are now increasingly aware of the impact a job application process has on their employer brand, future employee engagement and retention levels.

In a bid to create favourable candidate experiences, employers are looking to rise above the usual résumé and screen processes, moving to something we call: **Gamification**.

With game mechanics and simulated environments, employers can test employees more on hands-on skills, doing away with bookish knowledge. It also delivers at great length to a positive brand memory and recall.

## A SUCCESS STORY FOR THE AGES, YOU ASK?

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Marriot International Inc was among the first to use gamification for a unique recruitment campaign. In the online social media game titled **My Marriott Hotel**, the hotel chain invited potential candidates to demonstrate their skills as kitchen manager in a close to real-life game scenario.



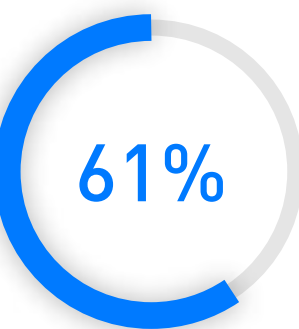


The campaign drove brand recall to astronomical heights, luring many of Marriott’s target audience – the Millennials – between ages 18 and 27 to apply.

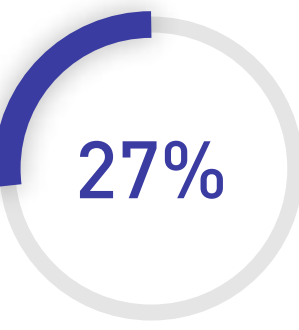
**BUT WHY STRESS SO MUCH ON CANDIDATE ENGAGEMENT AND EXPERIENCE? WELL, PERHAPS A PEEK INTO THE TALENT BOARD’S CANDIDATE EXPERIENCE AWARDS COULD HELP.**

**45000**

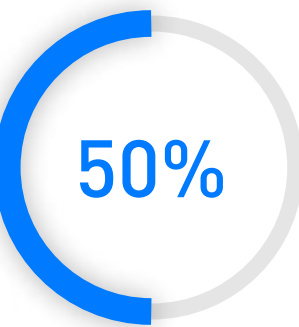
SURVEY RESPONDENTS



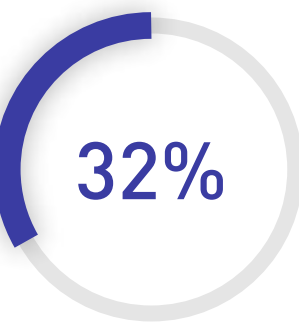
of positive experience respondents agreed to encourage colleagues to apply.



of negative experience respondents would discourage colleagues to apply.



of positive experience respondents shared their experience.



of negative experience respondents broadcast their bad news.

It is easy to note that a bad experience during the interview/assessment stage could stop a good candidate from applying or accepting a job offer in the future.

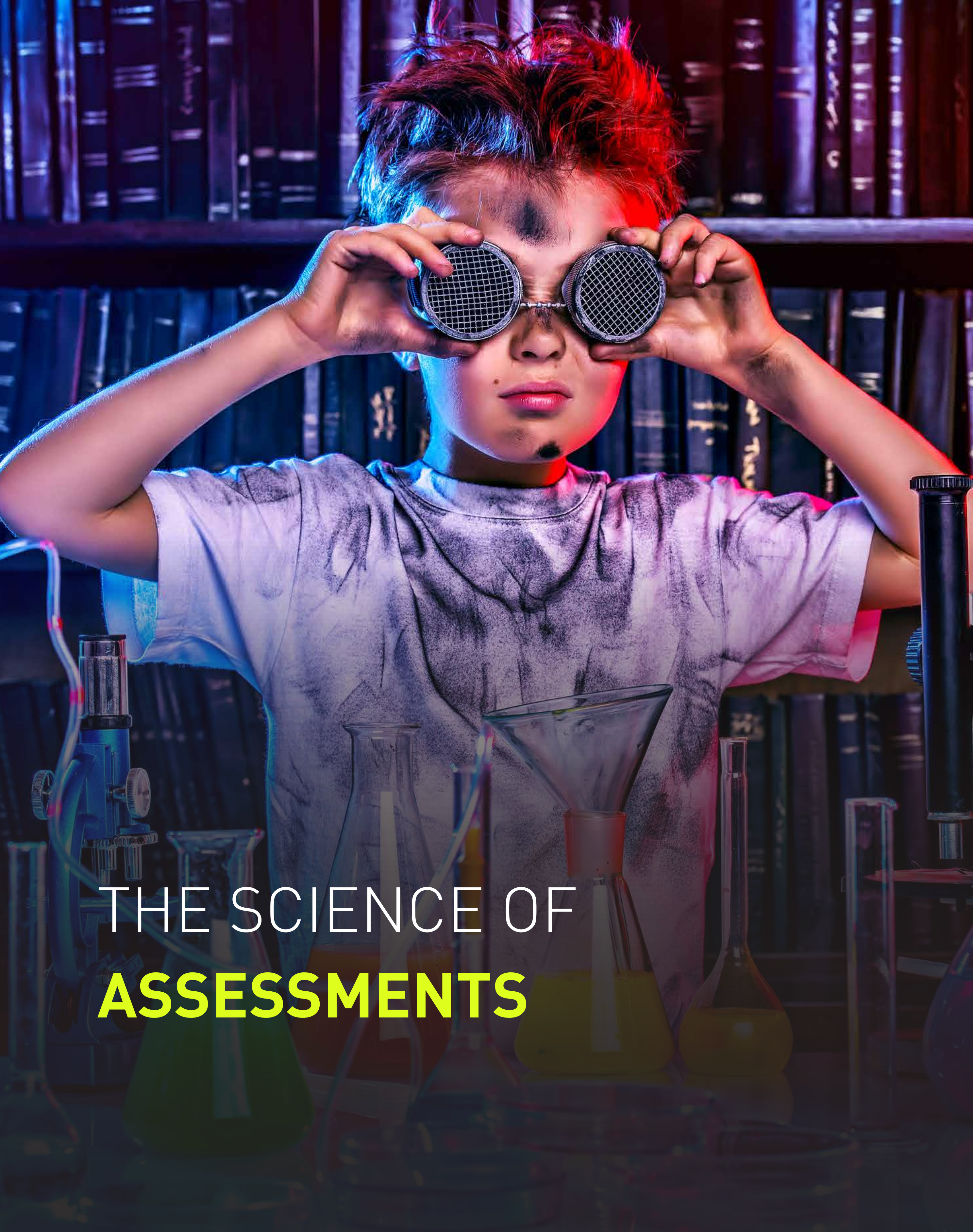
There is much more to be looked at though. Some of the other trends contributing to recruitment technology explained later in the eBook are:

- **Video Interviews**
- **Mobile Recruiting**
- **Online Assessments**
- **Web Proctored Assessments**



A simulation game akin to the annoyingly famous Farmville, My Marriott hit the digital world to engage, educate, and potentially source good candidates into the hospitality industry.





# THE SCIENCE OF **ASSESSMENTS**

Not merely research, but detailed case studies on companies such as Google indicate with ceaseless pressure that data driven assessments lead to better quality of hire. This, even more than several traditional pre-hire screening methods.

Yet less than half of all global organizations include any form of assessments as part of their recruitment strategy.

**Why? Why, indeed.**

The use of assessments beyond recruitment – in the measure of engagement, conducting training, ROI of development programs and more – generates great interest from a variety of organizations. After all, there is immense value in the data acquired from assessments.

This growing interest has led to a sharp increase in the market size for assessments, and more importantly, the breadth of assessment technologies - a goldmine of an opportunity.

With the shift to an online platform, assessments have reached a higher level of sophistication in terms of content, administration, results, benchmarks and more.





This, from the basic multiple-choice question format to simulated environments – a performance based testing that allows candidates to demonstrate what they can do with what they know. Now, from knowledge-by-rote to hands-on skills evaluation, the digital world has created a highly favourable environment for employers to hire the right candidates.

## **YOU DON'T BELIEVE US? WELL, HERE'S AN EXAMPLE TO HELP WARM YOUR TRAIN OF THOUGHT.**

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A top-notch employment agency, headquartered in Boston, sought a way to evaluate IT professionals on coding ability. This, to create a roster of job-ready candidates worthy of recommendation to their prestigious clients.

Using an advanced Mettl front-end coding simulator, the employment agency mandated every candidate to solve challenges around code in real-time; a stroll away from the run of the mill multiple-choice exams.

The effort helped the company hard-verify each claim made by the candidates, effectively improving their process to new heights.

There is no denying that the integrity of online assessments was once in doubt. But with the introduction of technologies to contain fraud in exams, such concerns have since vanished. This also includes one of our highly valued products – Online Proctoring, or the process of using a web camera and its consequent audio technology to capture candidate behaviour.

The system has since evolved into a remote monitoring solution, which allows exam administrators the ability to record test takers even without being around in physical capacity.

### **But how trustworthy is this system?**

Well, the cameras are trained to track movements in the eye, the presence of another person, sounds in the background, attempts to open alternate browsers and a lot more – captured into both static and live feeds.

Such tight security measures have advanced the use of assessments to facilitate remote recruiting, large-scale recruiting, shorter time-to-hire, and improved quality-of-hire among many others.





# MOBILE DOMINATION

Millennials are, as we often love to say, children of technology, or in a classier way – Digital Natives. As employers identify ways to comply with employee needs and desire to use technology, policies such as BYOD (Bring Your Own Device) are offering solutions to integrate the same with the necessary corporate tools for professional success.

In fact, in a 2013 study conducted by a group of Cisco partner firms, 90% of full-time American workers claimed the use of their personal smart phones for work. This was regardless of whether they received allowance or reimbursement from the company for the same.

From answering work related emails to using HRIS (Human Resource Information System), employees of this generation seek flexibility and convenience in all things work-related. This would implore HR to offer specifically-built mobile applications rather than mobile versions of what already exists.

The approach offers organizations the obvious benefit of reduced costs, and an opportunity to appear more favourable to the talent market.

For HR, this revolution translated into the redeployment of several functions to mobile platforms.



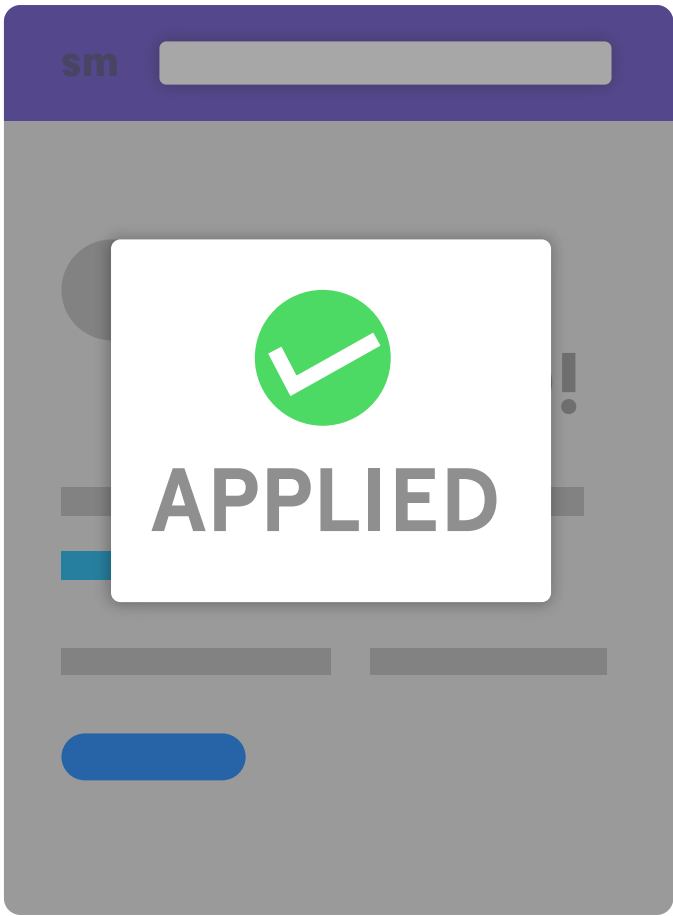
Job applications, candidate communication, feedback systems, learning and training programs, administrative tasks and more now integrate a lot better with mobile, giving employees the capacity to manage just one device and employers the ability to expand access with swift precision.

Simply put, consider a Multinational company with a natural spread of offices across the globe, a learning program for managers made available on mobile could easily generate far greater enrolment from multiple locations , and at a fraction of the cost. Now this is something traditional-office based programs could only ever dream of.

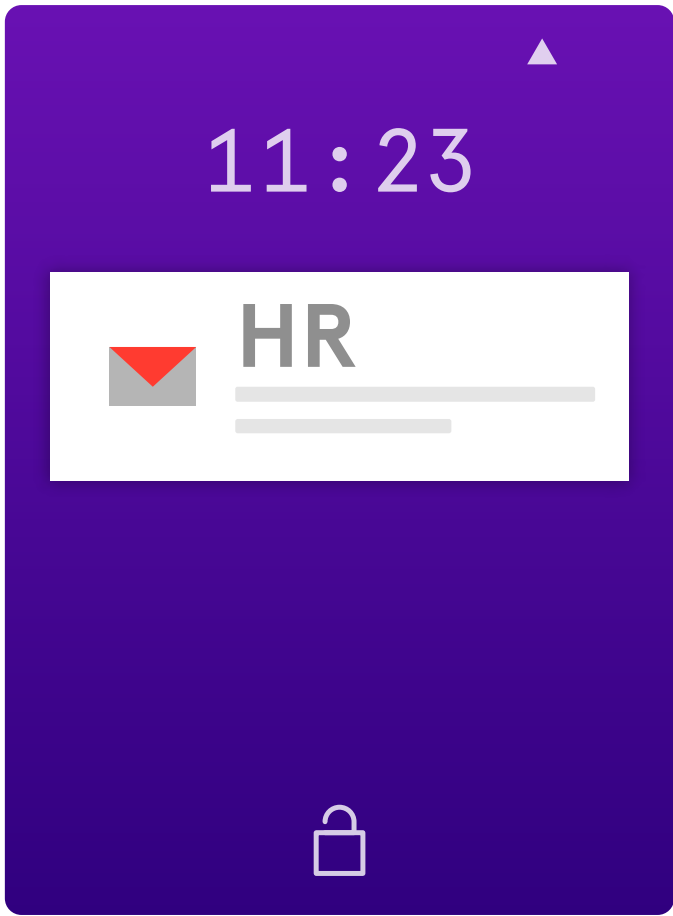
WHAT A RECRUITMENT CYCLE ON MOBILE LOOKS LIKE



1 HR Posts a Job on Social Network



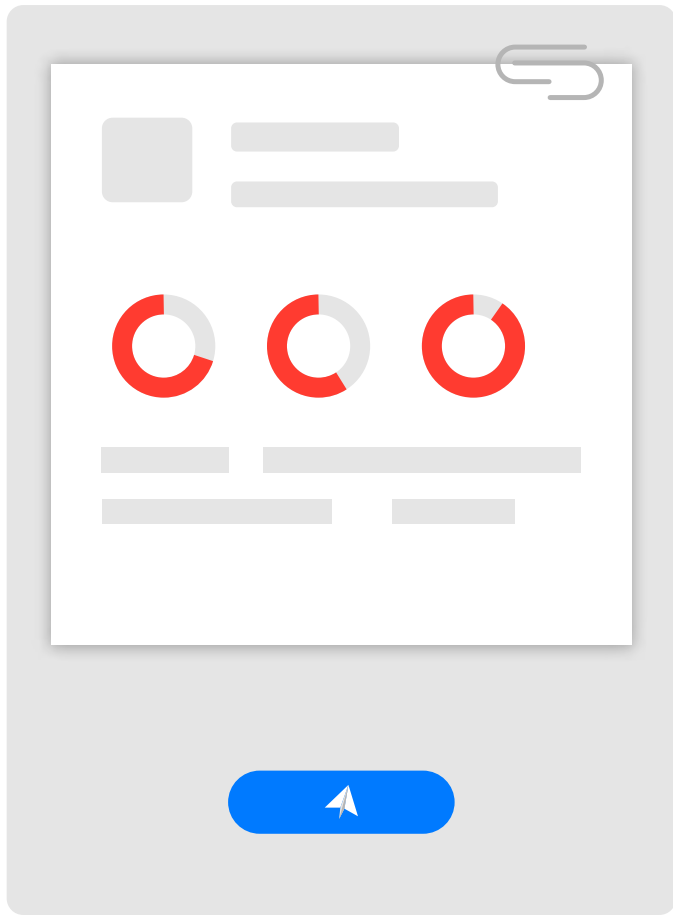
2 Candidate Applies for Job on Mobile



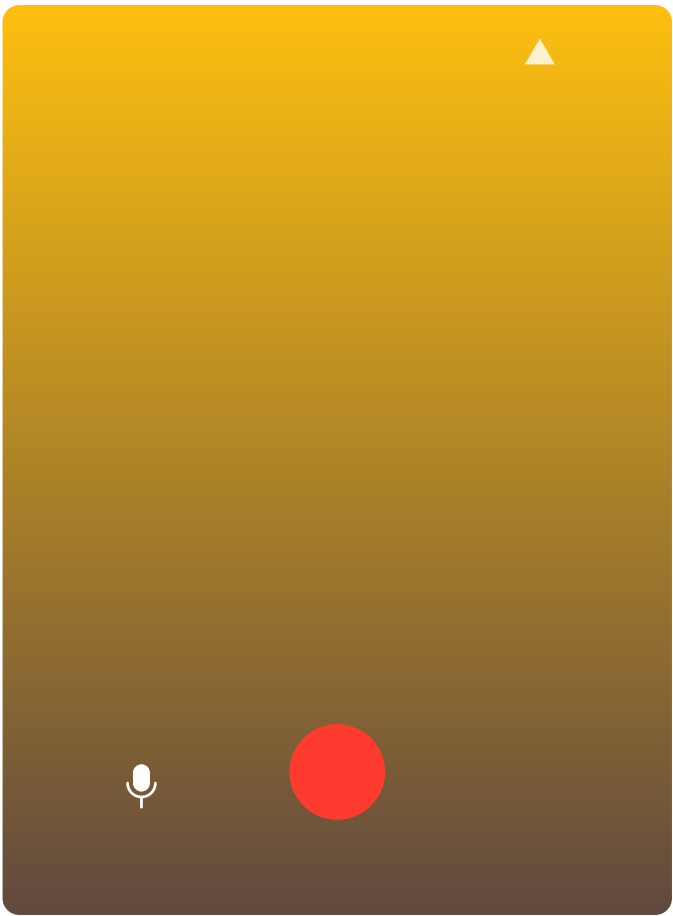
3 Business Emails Candidate About the Shortlist



4 Candidate Takes Initial Skill Assessment



5 Candidate Emails Résumé



6 Employer Schedules Video Interview





# PERFORMANCE MANAGEMENT, E-LEARNING AND MOOCS

Employees now hold more power than they ever did, with great ability to seek and apply for new jobs as and when they see fit via the digital world. At the cusp of this new development, organizations have had to shift gears, taking performance and learning management systems that have existed for decades up a notch.

Annual evaluations and appraisal programs simply failed the new generation, most of whom expected a lot more than a steady pay check. With Millennials, especially, there was an increase in demand for opportunities to learn, mentor guidance, recognition, development, a 360-Degree Feedback and more.



**“Annual Performance reviews is one of seven deadly diseases; it nourishes short-term performance, annihilates long-term planning, builds fear, demolishes teamwork, nourishes rivalry and politics.”**

WILLIAM EDWARDS DEMING,  
American Engineer, Statistician, Professor,  
Author, Lecturer and Management Consultant.

Sounds like an important person is all for the digital age. Well, new performance management tools allow for regular assessments, transparency in goal-setting, and an overall conversation about performance as opposed to a zero-sum dispute about appraisals and compensation.



## CASE IN POINT: ADOBE

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Multinational software company, Adobe, is sometimes known for the way it overturned its performance management system. With a global workforce of 11,000 employees, performance evaluations at Adobe clocked about 80,000 managerial hours – a process of exhaustion and demotivation at the very least.

After several unsuccessful attempts to overhaul the entire system, Adobe finally managed to incorporate a simpler method, i.e. either employee or manager could request a check-in every three months.

Before the actual meeting, a group of employees provided feedback on the reviewee's performance. While this led to tough discussions with a struggling employee on his or her performance issues, it also opened a channel for quick elimination of wasteful activities.

The new system led to a **30% drop in voluntary attrition** and helped create a culture of teamwork and creativity.

**11000**

EMPLOYEES

**80000**

MANAGERIAL HOURS FOR  
PERFORMANCE EVALUATION

But these are rare cases, indeed. In fact, only a small number of companies admit to having a performance process that drives any level of value. In a 2014 study by Deloitte, over half of the survey respondents **(58%)** believed that their current performance processes fails to drive employee engagement and high performance.

**“70% of 32,000 employees across 26 markets want their organization to understand employees to the same degree that employees are expected to understand customers.”**

GLOBAL WORKFORCE STUDY,  
Towers Watson, 2014

## MOVING ON TO E-LEARNING

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As an increasing number of factors make it to a millennial employee's list of what constitutes a good workplace, employers have turned to technology that focuses on providing internal talent mobility, career growth and learning opportunities.

Online assessments, feedback portals, e-learning, MOOCs, are among technologies that have facilitated the creation of talent strategies. This helps HR review employee performance, provide rolling feedback, access to new roles, custom learning programs and more.



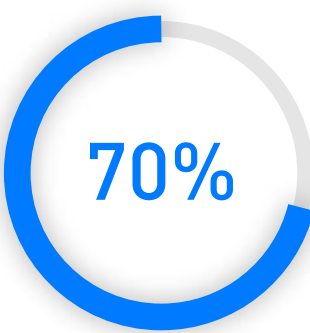
# WE CERTAINLY DID NOT FORGET MOOCS

Another trend making giant strides in the realm of corporate learning and education is Massive Open Online Courses, or MOOCs. This combines the best of subject-specific knowledge with assessments, evaluation, certification. Additionally, they also come with the access, flexibility and cost-effectiveness required of a modern learning platform today.

## How does this affect the two separate teams?

**Employees:** The chance to make an informed choice, upgrade their knowledge and skills to become more relevant to his or her business.

**Employers:** The chance to possess a skilled workforce, and to be seen as a company that cares about employee development.



In a recent Future Workplace Survey, completed by **195** corporate learning and HR professionals, **70%** of the respondents noticed opportunities to integrate MOOCs into their own company’s learning programs.

# CASE IN POINT: TIN CAN API

Tin Can API, an eLearning software, set new standards for the way learning behaviour is recorded and integrated within existing learning management systems.

With the capability to track learning plans, goals, games, audio-visual content, eLearning on mobile applications and more, Tin Can API is weaving a fabric of change in how learning merges with performance data.

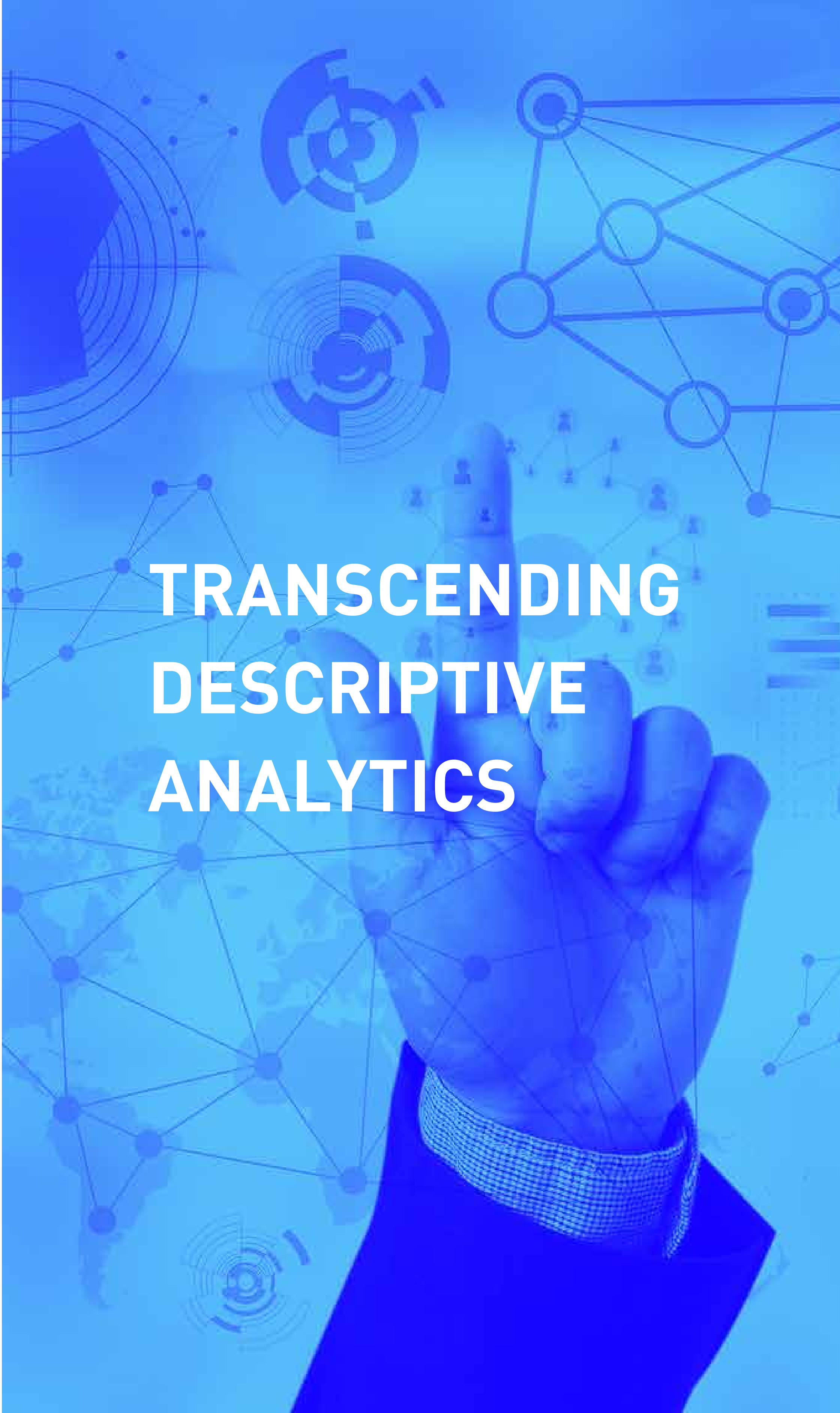
The result is an ability for organizations to interact in entirely new ways with learning modules for employees.



“The global learning management industry is estimated to be worth \$2.5 Billion.

JOSH BERSIN,  
Principal and Founder,  
Bersin by Deloitte





# TRANSCENDING DESCRIPTIVE ANALYTICS

With newer ways of assessment science creeping into the organizational ecosystem, eLearning and performance management continue to create data subsets for businesses far and wide. There is now a mountain of HR data that businesses sit on, with little to no idea on how to utilize them.

When harnessed to Big Data, these talent analytics reign with the potential to revolutionize how organizations hire, fire, promote, retain and more. While raw or unprocessed data by itself represents little value, it remains a farmland for powerful insights. It is these insights that determine a data's worth to Human Resources.

So far, organizations have concerned themselves with data that is merely descriptive, but within the realm of reporting and predictive analytics, the same data transforms into something far more relevant, critical even.

**Descriptive Data is what summarizes a finished occurrence. Simply put, think number of job applicants to specific jobs, percentage of hires that remained after the first six months, etc.**

Through the utility of statistical tools, predictive analytics uses large data sets to recommend courses of action, revealing the likely outcome of each decision.

## **YOU WANT HARD PROOF?**

In a 2013 study by The Economist Intelligence Unit, global executives ranked predictive analytics third on a list of technologies they would prioritize on in the following three years, behind mobile and cloud services.





BRAD PITT & JONAH HILL IN MONEYBALL (2011)

## HOW DOES BIG DATA & TALENT ANALYTICS APPLY TO HUMAN RESOURCES?

Well, let's break it down into parts.

- **Sourcing Candidates.** Predictive Analytics could reveal in advance where best to place your online recruitment marketing campaign for optimal performance and cost.
- **In Hiring.** Identification, qualification and prediction of future performance of a candidate before the hiring decision. In simpler words, if you had to choose between two candidates of equal qualification, talent analytics could help identify the one more likely to succeed, and his or her time to maturity for success.
- **Engagement & Retention.** By measuring factors that drive engagement, satisfaction and motivation, predictive analytics could effectively transpire into a retention strategy. Who is going to leave, when and why? How can we make them stay? Is it worth it?
- **Learning & Development.** The gap in development, a method to close them, and the learning needs for teams in the future.
- **Succession Planning.** To identify people to be groomed for leadership positions. Additionally, what gaps can be predicted in the coming years to identify leaders more swiftly?

### YOU WANT PROOF IN POPULAR CULTURE?

Well, let's take the popular 2011 movie, Money Ball, which chronicled a true story about the resurgence of a losing baseball team – Oakland Athletics – managed by GM, Billy Beane. Here, Beane used predictive analytics to identify players low on popularity, but with specific abilities to turn a lean budget into a scientifically balanced team.

Oakland Athletics went on to power through a win streak seen never before in American League history. The record stands till date.

**Now that we have proof, it's time to ask a big question.**

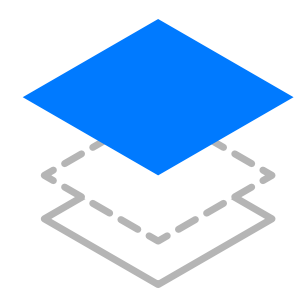


## THE BIG KAHUNA EXAMPLE

Tracing back to 2011, when People Analytics wasn't the buzzword it is today, Google representatives at the O'Reilly Strata offered key insights into its innovative data-driven HR strategy.

All people decisions at Google today are based on data and analytics, including policies such as the famous 20% Time, free food, unlimited sick leaves and more. This represents a dream to most employees, but where even a remote idea of similar implementation puts several businesses worldwide into despair.

Not many realize the data-crunching behind the making of such policies at Google. The fastest growing company in the world today has an entire team dedicated to People Analytics, applying the same rigor to the people side as to the engineering side.



### UNIFICATION & INTEGRATION WITH OTHER SYSTEMS

One of the biggest transformations visibly apparent in HR functions is in the way it collaborates and incorporates from other professions. An independent unit at its time of origin, HR now partners with several teams to understand their workforce requirements.

There now exists a balanced perspective between what works and what does not in changing human behaviour. While HR professionals bring with them their expertise on psychological and social instincts, teams within marketing and sales – to name a few – provide answers to other factors around the same, namely incentives, motivation and more.

Innovation and new ideas in HR technology are at an all-time high today, with new companies breaking into the market – each with their own unique solution to a specific HR task.

However, the winning businesses of the future in HR tech are likely to remain those of visionary nature. Would it not be ideal to think past the individual HR function and integrate systems as all-inclusive platforms for both the organization and the employee?

This is one reason for the rising adoption of the SaaS (Software as a Service) model in HR Tech, which allows for easy upgradation and system transitions internally, or even outside the organization.

As the workplace undergoes radical change in the way employees interact and communicate, companies will look to more vendors with an ability to offer a complete user experience – design interface and modern functionality, rather than features alone.





# CLOSING THREADS AND SO THE TALE ENDS

Big Data, assessments, mobile, video, eLearning and more, HR technology is certainly at the cusp of some unique and exciting developments. However, there also remains a need to prove ROI against basic HR practices of attracting, retaining and engaging talent. And more importantly, information will continue to be the most valuable asset to a business.

But, with the onset of such a change, HR personnel would require to learn in the face of a quagmire of big data, redefine their roles to better grasp analytics and minimize errors. After all, mistakes in critical people matters could hurt a business.

Of course, we must admit that despite a prophetic increment in accuracy with regards to predictive analytics, it is no guarantee of actual outcomes. An assumption based on the wrong interpretation of data could lead to an erroneous distribution of resources without scope of improvement in the future.

Nevertheless, never deter from exploring newer processes. In fact, studies have shown that organizations having adopted technology in their HR processes consistently outperform those that have not.

Even as technology continues to get more sophisticated, the focus on an easy-to-use, integrated interface will grow. As HR continues to evolve to meet these changing pressures in business, so will HR technology alter to provide solutions for the same.

## **WHY SHY AWAY FROM AN ATTEMPT TO MAKE THINGS SIMPLER AND MORE MANAGEABLE, PROVIDING AN IMPETUS FOR THE NEXT CYCLE OF CHANGE?**

Thank you for having travelled this journey with us. We also genuinely hope to have added to your vast knowledge on the field. As we always say, the information is now in your hands; do with it as you see fit.

Godspeed.





## What is Mettl?

Mettl is a SaaS based assessment platform that enables organizations to create customized assessments for use across the entire employee lifecycle, beginning with pre-hiring screening and candidate skills assessment, training and development programs for employees/students, certification exams, contests and more.

**TAKE A FREE TRIAL**



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