

INNOVATIVE HR ANALYTICS TO DRIVE BUSINESS RESULTS WITH HIGHER IMPACT

Mia Vanstraelen Director HR, IBM IBM Smarter Workforce February 25, 2016











How Is HR Adapting To These Shifts?

IMPLICATIONS FOR HR

IBM Human Resource Process Framework



Business Analytics

Predictive, prescriptive and cognitive analytics to optimize the workforce and differentiate the client experience



Cloud

Flexibility to create new capability with speed making rapid innovation possible



Social

Mobile

Personalize, interact, anticipate and respond, creating an irresistible experience



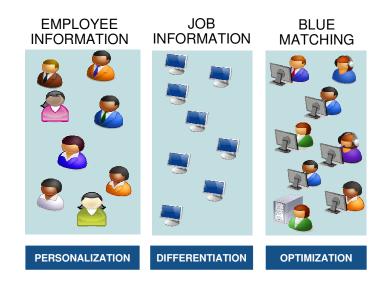
Analytics Driven Approach

Matches Employees to Open Job Requisitions Which Reduces Sourcing Costs and increases Employee Vitality

Employees were 50 times

more active in reviewing open hiring needs than prior to publishing Blue Matches

10.8% The cost to place an internal candidate is 1/10th the cost of placing an external candidate



BUSINESS PROBLEM:

IBM has thousands of open job postings at any given time – many of which are ideally suited for IBMers who have direct or adjacent skills and may be considering role changes.

Developed advanced analytic capabilities to compare employee profiles to open job requisitions and proactively send employees potential job matches based on 'fit' and career progression.

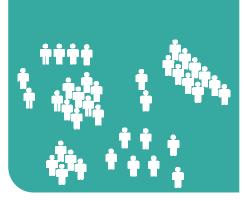




Can We See Attrition Risks & Reduce Unwanted Attrition At Work?

Attrition Which emp

Which employees are most likely to leave? What kind of actions, programs and investments will reduce attrition in the most effective way?

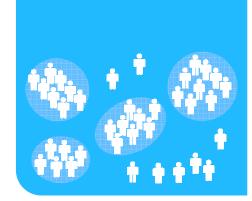


How likely is each person to leave, and why?

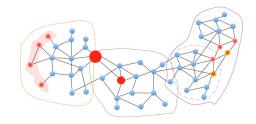
Employee Details			Attrition Risk	Attrition Risk Factors				
Employee Name 💌	Serial #	Band	Propensity to	Compensation	Churn	Velocity	Alignment	Sentiment
Jane Doe	8392	9	88%					
John Williams	9455	8	70%					
Mike Meyer	8924	8	63%					
Frank Wagner	9091	8	59%					
Jeffrey Evans	6024	8	21%					
Dieter Schmidt	3343	7	76%					
Jane Somers	3946	7	54%					
David Wilson	2237	6	30%					
Janet Wright	2286	5	21%					
			View all					

Attrition Hot Spots

Identify high-attrition clusters
Derive attrition "rules"
Estimate FUTURE attrition
Understand response to incentives

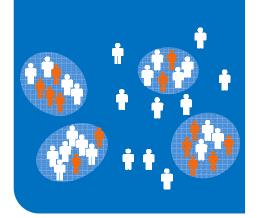


How well-connected are those employees most likely to leave?



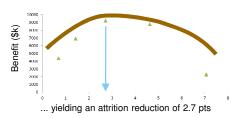
Retention Case Selection

Action Optimization—Identify retention cases and targeted actions to retain them



What actions will yield the best outcomes?

Cumulative Net Benefit is maximized at \$9M...



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IBM Compensation Model

Optimizes Investment Considering Labor Markets and Operating Models

Cumulative Longitudinal Results Through June 2015

\$397M Gross benefits

\$271M

Net benefits

214%

ROI







Annual compensation budget decisions miss skill-based and dynamic market conditions resulting in higher attrition and labor costs.

Provide targeted, rolling base pay uplift to employees with key skills and high propensity to leave (e.g., market, level, market conditions, type of work, performance, tenure) by mitigating attrition, driving benefits and ROI.





Identify Employees At Risk

Recommend Actions To Retain

1 Analyze historical patterns of high attrition Historical population

attrition

/oluntary

Identify employees with high propensity to leave

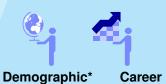
15%

Active population

Identify attrition drivers for every employee

\$1 1

Compensation Tenure



Velocity

Align workforce policies and manager actions to minimize attrition drivers

\$**j**

Zj

Compensation + \$4K/yr

Tenure
Mentor or Career
Discussion



Demographic* Work with local manager



Career Velocity Promotion

IBM models and tools are used to identify employee risk

Dashboards drive global delivery to HR leaders while managers receive an interactive email concentrating on their employees



Model is used to produce the PTL score and the attrition drivers



Employee risk and attrition drivers are calculated using advanced decision trees





HR leaders can find at-risk populations and their attrition drivers

Managers receive an interactive email which details their employees and allows them to leave feedback



Resource performance: evaluation, quota attainment, revenue signings, etc.

Resource attributes: demographics, job roles (incl. changes), experience, promotions, compensation (structure, relative & absolute value), travel time, etc.

Resource attrition dates & reasons

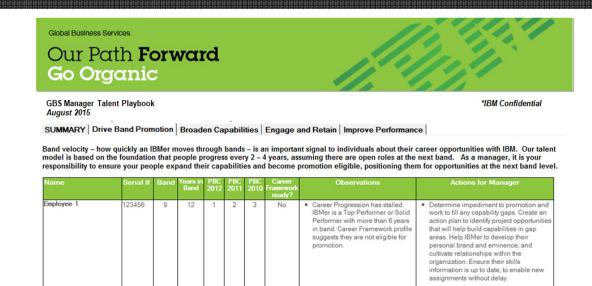


Vital Role of IBM Managers

Unique Responsibility to Engage and Develop Employees With Right Experiences and Capabilities

8,000+ Managers worldwide

Up to 25
Span of Control



BUSINESS PROBLEM: Managers are challenged to understand and execute global talent strategies given the range of data available and 'player coach' expectations

The Manager Talent Playbook gathers HR data for each employee from across the enterprise and, based on strategic decisions, provides observations and next-best-action recommendations to managers; includes observations and 'plays' regarding compensation, learning, promotions, retention and performance management and diversity.





Watson Personality Insights

IBM Watson™ Personality Insights service derives insights from social media, enterprise data, or other digital communications.

http://chh.mybluemix.net/analyze

The service uses linguistic analytics to infer personality and social characteristics, including Big Five, Needs, and Values, from text, from which employee preferences are derived to improve (e.g. learning experiences)



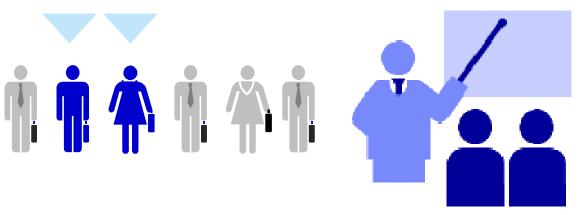


IBM Quantifies Business Impact of Training

Optimizes Path to Achieve Targeted Skills Mix Portfolio to Match Growing Demands

~\$830M

Estimated net benefit from 2015 to 2017 through targeted reskilling, taking productivity gain and training cost into account



BUSINESS PROBLEM:

As IBM business grows towards new markets such as Cloud, Analytics, Mobile, Social, Security (CAMSS) and Watson, the enterprise needs to align its workforce skill mix to market needs. The question is how much to invest in training and who to train and hire, maximizing profitability to the business

Using advanced analytics methodology, a dynamic model was developed to optimize business unit profit by considering trade offs between productivity, training time and training cost. Based upon mapping current skill profile to new markets (CAMSS) through sellers skill questionaire. Then for each seller, a target skill profile was determined. Optimization model was developed to maximize revenue benefits for the business unit considering target skill level and baseline. The outputs included both business aggregate and individual recommendations.





IBM Leveraged Analytics

Identified Talent For Hiring and Leadership Succession

10.8%

Increase in on-boarding yield in pilot business unit at IBM

Up to 52%

Increase in internal talent identification rate across 5 different sectors at leading India diversified conglomerate



BUSINESS PROBLEM: In recruiting efforts, external hires typically are paid more than internal transfers, take longer to ramp up, and have higher exit rate than internally promoted candidates. There is in general difficulty in finding internal candidates, publicizing jobs, and dealing with the difficult internal politics of lateral and upward moves. How to better find internal talents for given positions?

Predictive talent mobility leverages predictive analytics to compute technical match scores between open job positions and prospective employees within an organization. The solution entailed calculating a skill alignment score between candidate profile and job requirement, an interview clearing likelihood based on historical interview selection patterns, and attrition risks.





Integrating External & Internal Data

IBM Uses Social Analytics to Drive Employee Engagement & Preserve Its' Employer Brand Reputation

Employee Engagement

through enhanced corporate communications and programs

Employer Brand Reputation

through social listening and rare event detections



BUSINESS PROBLEM: Availability of IBM's social media footprint presents opportunity to enhance understanding on employee engagement and sentiment about IBM's programs, policies and services to improve organization performance. Gaining insight requires advanced analytics and ensuring privacy of using social data.

Ingested internal (i.e. IBM Social Pulse, MiniPulse) and external social media data with HR data through active and passive listening. Identified key trends in employee sentiments across geographies, job roles which led to:

- Better understanding of employee feedback; fine tuning and aligning internal and external messaging
 - Early identification of employee attrition based on social media engagement
 - Early identification of warning events (external social media)





Analytics

Predictive, Prescriptive & Cognitive: Applies Across Whole Workforce Domain



Attracting

Candidates

Set expectations of who will be successful in the job beyond a job description



Engagement

Provide clear view of portable/mobile skills to engage the engageable.



Hiring

Decisions
Smarter hiring decisions
based on capability to do
the job



Performance management

Provide job specific performance criteria for evaluation and contribution.



On boarding

Improve chance of success and retention with accelerated time to productivity



Development

Drive up learning as its easier to find content in your LMS



Managing

Support managers
development discussions with
tools to improve trust and
impact



Compensation planning

Understand the jobs you are matching beyond just the salary survey job title.



Making It Happen Needs a Plan - The First 100 Days



USE AND UNDERSTAND THE DATA YOU HAVE ACCESS TO
HAVE THE COURAGE TO MAKE HR A TRUE "ADDED VALUE" FUNCTION
MAKE HR CONTRIBUTE TO PROFIT, NOT JUST A COST CENTRE



Thank you!

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