

FROM INTUITION TO INSIGHT: THE EVOLUTION OF HR ANALYTICS IN THE INDIAN CORPORATE LANDSCAPE

¹Ms. Arpita Das, ² Dr. Mainak Chakraborty

¹Assistant Professor, ²Associate Professor

¹Department of Business Administration Studies

¹Supreme Knowledge Foundation Group of Institutions, West Bengal, India. E-mail: das84arpita@gmail.com

Abstract: For decades, Human Resources in Indian organizations worked in a contradiction, where they were tasked with managing what was most important to the nation – the human resources yet treated more like a tradition, hierarchy and managerial intuition than a systematic evidence. The promise of HR Analytics, or “People Analytics,” was to solve this paradox and to make HR shift from an administrative function to a strategic partner that can impact business results. This article explores the unique path of HR Analytics in the Indian context and its departure from the dominant narratives from the West. It believes there is a tipping point now as the Indian organizations appear to be lagging behind when it comes to advanced analytics, the economy's digital transformation, the formalization of workers, and the growing realization of how talent can serve as a competitive edge for companies. This paper presents a culturally adapted maturity model for Indian enterprises, which takes into account the underlying cultural issues like the prevalence of hierarchical organizations, the multiple layers of regulation, and the shifting dynamics of the employer-worker relationship. We show the impact this has had and the special challenges to be faced through a detailed case study of a prominent India-based IT services provider and their implementation of a comprehensive analytics programme. The paper concludes that the future of HR Analytics in India is not simply about adopting best practices from around the world, but in building local system of HR Analytics that respects the socio-cultural landscape of the country and utilizes data as a tool for organizational excellence, equity, and sustainable growth.

KeyWords - HR Analytics, People Analytics, Strategic HRM, Indian IT Sector, Talent Management, Algorithmic Bias, Data Privacy, Labour Law Compliance, Gig Economy and Workforce Planning.

1. Introduction

In the last 30 years, the Indian corporate environment has undergone a tremendous change. The Indian economy and technology have undergone a rapid transformation from the protectionist days of the Licence Raj to the liberalisation era of the 1990s and more recently, the digital era of the 21st century. Indian businesses have had to adjust to the changing economic and technological landscape from the days of the Licence Raj to the 1990s liberalisation era and, more recently, the digital age of the 21st century. The headliner of this transformation is the management of human resources. India, having a demographic dividend and a large pool of educated professionals, has always considered human resource as the most important asset of the nation. However, the role of managing this asset – Human Resources – has traditionally been one that is intuitive, based on precedent and administrative processes, and not one that has been data-driven.

The global shift towards HR Analytics (also known as People Analytics) was supposed to turn that around. It was the promise of moving the evidence-informed management out to the people function from subjective “hunches” to testable “hypotheses” (Fitz-enz, 2009). In the West, companies such as Google, Microsoft, and IBM have shown how data can be used to improve from the acquisition of talent to leadership development and thus make HR a real strategic partner (Davenport, Harris & Shapiro, 2010). What they achieved triggered a worldwide industry of HR technology vendors, and a trend of corporate adoption.

The journey of HR Analytics in India, on the other hand, has been unique. Multinational companies (MNCs) entering into India introduced best practices from around the world, but Indian businesses, ranging from family-owned conglomerates to high-growth technology start-ups, have taken a more complicated route, with their

own cultural dynamics. HR Analytics adoption in India has been uneven with a unique set of challenges and opportunities. This involves the legacy of hierarchical organization, dynamic and intricate regulatory frameworks involving data protection and labour regulations, the emphasis on relationship and trust in the culture and the vast and varied nature of the Indian workforce.

This paper suggests that HR Analytics in India is now in a phase of maturity, following a time of prudent experimentation. There are several factors that are conspiring to make this change. With the rapid digitisation of an Indian economy, and the push for digitalisation by the Government of India (GoI) such as the Digital India, huge amounts of people related data have been created. The formalization of the workforce as a result of the Goods and Services Tax (GST), Employee Provident Fund Organisation (EPFO), etc., is making it easier to track and analyse employment trends. Further, the scarcity of skilled workforce, especially in the technology and services sector, is compelling companies to take a more sophisticated approach towards their talent management plans (NASSCOM, 2023).

But there are obstacles to this trip. Context of power distance and deferral to authority may make it challenging to take up data-driven insights that are contrary to the norms. HR departments are now facing new responsibilities and challenges due to the growing focus on data privacy, particularly in the context of the upcoming introduction of the Digital Personal Data Protection Act (DPDP Act). Additionally, biases exist in algorithmic systems, a problem known at an international level and also prevalent in India, such as caste and regional identity as well as gender biases (Bhattacharyya, 2022).

This article discusses HR Analytics in detail and focuses specifically on India. It will act as a map for practitioners, policy makers and academics keen to gain insight and develop the field in the Indian context. We will start with setting the evolution of HR Analytics in the Indian context, in terms of History and Culture. Then, we will suggest a maturity model that is contextualized to the Indian realities of the organisations. The essence of the paper will focus on the strategic opportunities that analytics provides for this new era, as well as the critical ethical and regulatory questions that need to be addressed and how this applies to the legal and social context in India. The case of one of the leading IT service companies in India will be used to showcase the practical implementation of these concepts. We will wrap up with a discussion on the future of HR Analytics in India and how the success of the analytics will rely less on the complexity and sophistication of the algorithms and more on the strategic insight and cultural acumen of the managers who use them.

2. Literature Review and Conceptual Framework: An Indian Contextualization

Studies and articles about HR Analytics have increased dramatically in both academia and practice, but many are limited in scope to the Western context. To understand the application and potential of HR Analytics in India, it is necessary to develop a conceptual framework that is sensitive to India's socio-economic and cultural context.

2.1: HR Analytics in Indian Contextualization

The fundamental concept of HR Analytics - identifying, measuring, analyzing and communicating people-related data to enhance workforce performance (Marler & Boudreau, 2017) - applies in India, but there is a broader interpretation of the concept. HR Analytics in India should also include a broader variety of data sources, such as data on contract labor, gig workers and supply-chain partners, which are more common in India than in many economies in the West. In addition it should take into consideration the informal sector shadow as many Indian organisations work in a hybrid formal-informal area.

2.2 The evolution of HRIS and HR Technology in India

HR Information Systems (HRIS) adoption took a long time to catch up in India, if not a decade or more. HR in the 1990s and the early 2000s was more of an administrative role, mainly involved in processing payroll, attendance and compliance. The first wave of HRIS implementation was to improve efficiency and get compliance with regulatory bodies, especially following the introduction of EPFO and standardized reporting. These systems, however, were mostly transactional in nature, and did not yield great analytical benefit.

The turning point came in the latter part of the 2000s and early 2010s when the IT and ITeS (IT-enabled services) sectors emerged. As highly competitive industries for talent, these started to implement more advanced talent management systems. They began to bring recruitment, performance management and learning together and combine them in one platform. This momentum has been further boosted by the emergence of Indian HR technology start-ups like Darwinbox, ZingHR and Keka, which provide cloud-based, mobile-first HR solutions that are designed for Indian businesses - with support for multiple languages, complex statutory compliance, and more.

COVID-19 was a tremendous catalyst. Organizations were forced to embrace digital tools to track, monitor and engage employees when the adoption of remote and hybrid work models occurred abruptly. When the work world

shifted to remote and hybrid working, organizations had to implement digital solutions to engage and monitor employee performance. It provided a rich source of new data, including data on collaboration within Microsoft Teams, sentiment data from pulse surveys, and more.

2.3 Theoretical Foundation through Indian Lens

While the principles of HR Analytics are applicable, the context within which they are applied must be contextualized in consideration of cultural and institutional context in India.

1. The Resource Based View (RBV) and the Indian Talent Pool: Barney's (1991) RBV suggests that competitive advantage can be gained from some unique and inimitable resources. The scope of talent pool is so vast and diverse in India that it can be a source of competitive advantage. But the problem is getting this potential to fruition. HR Analytics can assist Indian firms to identify and cultivate "hidden gems" from their huge workforce. In the IT industry, for example, analytics could be applied to determine which engineers have the potential to become more client-facing, thus offering a value proposition.

2. Human Capital Theory and Skill Gap – Human Capital Theory (Becker, 1964) considers investment in employees an economic decision. A worry for a long time has been the "skill gap" in India. Many of the graduates are not seen as employable by industry. HR Analytics can assist organizations and policy makers in identifying skill gaps, measure the impact of training interventions, and create better training and retraining strategies that meet industry needs.

3. Dynamic Capabilities and the VUCA Environment – The Indian business environment is very volatile, very uncertain, very complex and very ambiguous (VUCA). Regulatory, technological and geopolitical change is the norm. HR Analytics is a dynamic capability (Teece, 2007), which helps organizations sense and respond to these changes. For instance, an analytics-driven textile company in Tirupur can foresee customer demand for a new product or service and pre-emptively upskill their employees to deliver new product lines.

4. Evidence-Based Management and Challenge to Hierarchy – evidence-based management (Rousseau, 2006) is perhaps the most culturally challenging aspect of HR Analytics in India. Indian companies, especially in the family business and public sector, tend to have strong hierarchical organizations with decision making authority based on seniority and experience. It's not always easy to defy the "boss's intuition" with data, and that can be socially and politically sensitive. Implementation of HR Analytics in India, therefore, is likely to be more effective when it is mandated from top to bottom, with the senior leaders who champion the use of data providing a positive example for their colleagues.

2.4 Ways to implement a Contextualized Analytics Maturity Model for India

A four-stage maturity model (Descriptive, Diagnostic, Predictive, Prescriptive) is helpful, but needs to be tailored for the Indian context. We propose a contextualized model, adding an additional critical stage – Compliance Analytics.

Stage 0: Compliance Analytics: "Are we following the rules?"

It is a step that is fundamental and frequently legally required, especially in India's context of regulations. It includes the enforcement of the various provisions of the labour laws, the Code on Wages, the Code on Social Security and the provisions of the Factories Act with the help of data. This is done by monitoring compliance of the minimum wage laws, overtime regulations and statutory bonus requirements. Many organizations are at a stage in India where they want to shift from ad-hoc compliance towards a data-driven, proactive compliance posture; and are in a "catch-up" mode.

Stage 1: Descriptive Analytics: What happened?

Used in a similar manner to the global model, but frequently with a greater emphasis on operational variables such as attendance, attrition and productivity. Many organizations in India are large enough that simple description is enough to provide a great deal of information. For instance, a manufacturer may discover that one shift or plant has a higher turnover rate than it has in other areas.

Stage 2: Diagnostic Analytics: "Why did it happen?"

The first phase is when Indian organisations begin to go beyond reporting to root cause analysis. For instance, they might find that lower opportunities for advancement is the reason for the higher turnover rate, and this could be a significant issue in India where working life is hierarchical.

Stage 3: Predictive Analytics – "What will happen?"

This stage is a fledgling one in India and is on the rise, especially in the IT and BFSI (Banking, Financial Services, and Insurance) industries. A typical application is flight risk prediction models that forecast which employees will resign. The difficulty with this, is that high-quality integrated data is not always available, especially in non-IT roles.

Stage 4: Prescriptive Analytics: "What should we do?"

This is the highest level and is only available to a few trailblazing organisations. It includes modelling various scenarios and suggesting the best interventions with algorithms. For instance, a prescriptive model could suggest the optimal team makeup for getting the right work done efficiently without risking burn-out.

This is a context-based model that helps Indian companies realize that getting to advanced analytics is not a straightforward path. Many will have to get comfortable with Compliance and Descriptive Analytics before they can delve deeper into other methods.

3. A new strategic HR Analytics Framework for India: The '3-P' Model with an Indian Ethos

The maturity model provides an idea of what an organization can achieve but the "3-P" Model - predict, prevent, propel - proposes a purpose for analytics. Such a model needs to be imbibed with Indian values like social responsibility, family like employer-employee relationship and a long term perspective in the context of India.

Predict (Forecast): Making predictions about talent needs and risks. This includes:

- **Skills Forecasting:** It is important to be able to forecast skills needs, given the fast-changing technologies, especially in the IT and manufacturing industries. For example, forecasting the demand for EV engineers in the car industry or data privacy experts in the tech sector.

Talent Pool Mapping: Map the talents within the organization, but also in the wider ecosystem, such as the Gig workforce and the Informal sector, using data.

Prevent (Proactively Manage): This is related to the identification and mitigation of problems before they happen. In India, the prevention should include:

In India's competitive talent market, where poaching is widespread, attrition prevention is vital and flight-risk models play a crucial role.

Compliance & Risk Prevention is one of the key motivators that drive many organizations in India. A key aspect of this role is determining patterns to flag a potential wage violation or safety risk through the use of analytics.

"Silent" Attrition Prevention: "Silent Quitting" in the Post Pandemic World. In India, it could be taking the form of a subtle disengagement which may be visible as a reduction in involvement in learning activities and/or internal communications.

Brain drain: Avoiding talent loss, especially in the public sector and PSUs, to the private sector. Analytics can be used to gain insight into what is causing this brain drain, and can inform intervention design.

Propel (Drive Strategic Growth): The most transformative element. It is about leveraging data to unleash people's potential and spark innovations. This in India has certain dimensions:

Gender and caste diversity are coming under growing pressure as an expectation of Indian organisations on Diversity, Equity and Inclusion (DEI) Propulsion. Analytics can go beyond representation measurement to actively optimizing the talent lifecycle for equity. For instance, to identify and eliminate any bias that disadvantages candidates from a certain background by analysing recruitment data. The challenge of promoting 'regional diversity' is also unique in India where language and culture may be a barrier.

- **Succession Planning in a Family-Business Context:** As many Indian conglomerates are family-owned, it is crucial to develop a succession plan in this context. Internal talent identification and development to fill leadership positions can be achieved through analytics, thus, helping to professionalize succession planning.

Performance enablement for a young workforce: In a young, ambitious workforce, it is important to go beyond performance appraisal to performance enablement. Data can offer on-the-spot feedback and personalized development plans, and this is very appealing to millennials and Gen Z.

Workforce Management Philosophy: The "Vasudhaiva Kutumbakam" (The World is One Family) This philosophy of ancient Indians is becoming relevant in the context of workforce management. The "Propel" arm of the model can be extended to allow for a family-friendly and supportive work environment with the use of data to foster employee health and a happy work-life balance. For instance, collaboration data that can help identify teams vulnerable to burn out.

4. Ethical and Regulatory Imperative: Managing biases, privacy and the Indian legal context.

HR Analytics presents ethical dilemmas that are applicable across the board, but in India it is a socio-cultural and legal landscape as well. The inadequacy to resolve these issues may result in legal liability as well as an unprecedented level of trust erosion, which in many Indian organizations is akin to a familial relationship.

4.1 Algorithmic bias and cultural contexts

Algorithmic bias is likely to be more serious in India because of the diversity in its social fabric. Algorithms that are trained on the past may perpetuate caste, religion, gender, regional identity biases.

The aim of affirmative action policy (reservations for SCs, STs and OBCs) in India is to correct the historical injustice. But if the data used to train an algorithm is biased, so can be the algorithm.

Gender bias in a patriarchy – Only a small proportion of the workforce is women and the ones who work in the workforce are subjected to a ‘glass ceiling’ effect. Such an algorithm, based on past experience, could underestimate or recommend the less challenging positions for women applicants.

- linguistic bias: India is a linguistically diverse nation with huge linguistic diversity. An algorithm may be biased, even if it is not intentionally designed to be, by favouring candidates from a specific area or who have a specific language.

With an Indian lens on Mitigation Strategies:

1. Make proactive data audit, explicit and deliberate efforts to audit data for bias on caste, gender and region. This is difficult, as there is no systematic information on caste in private sector HRIS (for fear of litigation) but it is necessary.

2. Human in the Loop is non-negotiable: In Indian context, where social and cultural nuances are complex, algorithmic outputs should always be reviewed by a human manager or a human resource person.

3. Adopt the concept of ‘Constitutionality’ Check: Through a principle of ‘constitutionality’ in organizational ethics boards, the AI algorithms should not infringe any fundamental rights as prescribed by the Indian Constitution.

4. Localized Model Validation: Test models against selected groups of employees to prevent an adverse impact on any specific group.

4.2 Data Privacy: The Digital Personal Data Protection Act (DPDP Act)

The Digital Personal Data Protection Act (DPDP Act), 2023, marks a turning point in HR Analytics in India. It is the first comprehensive data protection law in India.

For HR, there are some key provisions to be aware of:

- Lawful Consent: The employers are required to obtain the “free, specific, informed and unambiguous consent” of their employees to process their personal data.

Purpose Limitation: Data may only be used for the purpose that consent was given for.

- Notice: Must give employees a clear “notice” on data collected, why collected, and rights.

- Right to access: All employees are entitled to have access to their personal data.- Right to correct: All employees have the right to correct their personal data.

Employers are “Data Fiduciaries” and thus have the obligation to protect employee data.

HR Analytics has implications:

The DPDP Act has a paradigm shift in the employer/employee relationship when it comes to data. It's no longer acceptable to gather data without permission.

Transparency is Mandatory: Organisations need to be transparent with what data they are gathering for analytics.

The “right to be forgotten” - HR leaders need to put systems in place that respect/grant such a request.

4.3 Labours Law Compliance as an Analytics Driver

The labour law regime in India, which has been complex and recently streamlined into four Labour Codes (the Code on Wages, the Code on Industrial Relations, the Code on Social Security and the Code on Occupational Safety, Health & Working Conditions), is imposing a heavy compliance burden on employers. HR Analytics can be a very useful instrument in proactive compliance management.

The use of sophisticated analytical tools is needed to ensure the compliance of the minimum wage which varies by state and industry.

Overtime Tracking: Monitoring employee overtime schedules to ensure adherence to overtime regulations and prevent employee burnout.

Contract Labour Compliance: The compliance of the contract workers in the right way and in accordance with the law.

4.4 The Psychological Contract: Trust and the ‘Sanskar’ (Values)

In India, the employer-employee relationship may seem like a long-term commitment that is characterized by a quasi-familial relationship, with a psychological contract of loyalty and mutual care. This is an idea deeply entrenched in Indian culture that holds that there are reciprocal duties and obligations between people.

The addition of intrusive HR Analytics can have a significant impact on this trust. If the employee believes that his/her emails have been read or his/her location is being tracked, he/she may feel betrayed. As one Indian HR leader has told me, "Don't use 'tala' (a lock) as the data, use a ‘mangal sutra’ (a sacred thread). Data should not be a means of surveillance and control, but a way to nurture and protect employees. This is what is referred to as “Sanskar” or values-based analytics. Creating a culture of trust in analytics is about:

- Employee Representation: Including employees' representatives and unions in analytics conversations.
- Well-being focus: Seeing analytics as a means to better employee well-being and career development.
- Ethical Leadership: Senior leaders demonstrating ethical data use.

5. Case Study: Project "Khoj" (The Search) at TechMahindra Solutions

To elaborate the concepts and issues covered in this paper, a detailed case study of TechMahindra Solutions (TMS), a fictional but representative leading Indian IT services company with more than 50,000 employees is presented. The case study is based on a large HR Analytics project called "Khoj" which was undertaken in 2024 to solve a key problem: The high turnover of project managers who have 5-8 years of experience (the "middle layer"), who are essential for carrying out projects and maintaining relationships with customers.

5.1 "Mid-Level Manager" Exodus.

Like most Indian IT companies, TechMahindra was in a very tough situation. The rate of which its project managers were departing was alarming at 18% a year, the backbone of its project delivery. They were costly to replace and when they left, the projects were often delayed and clients' trust was lost. The issue was said to be a result of high levels of burnout, the lack of a clear career path (the 'promotion pause') and the temptation of work from startups and other firms seeking to lure them away. There was some insight from the traditional exit interviews, but these tended to be sanitized and not get to the bottom of the issues.

5.2 Stage 1: Descriptive Analytics (The "What" in the Indian Context)

The "Khoj" team comprising members of the internal HR team, data scientists and consultants, started with the development of Integrated Data Platform, which was a key step. They compiled the information from:

- HRIS: Employee information such as their age, tenure, salary, promotion history etc.

Talent Management: Performance ratings, 360 degree feedback (a relatively new idea for some in the company).

- Project Management Systems – (JIRA etc.) – Project Success Rate, Client Feedback, Hours worked.

For this analysis, they reviewed anonymous data about team collaboration, including the frequency of messages sent and received, as well as collaboration activity, for signs of burnout or disengagement.

The first "Khoj" dashboard gave a very interesting glimpse:

The biggest level of attrition by tenure of employment was seen with those who have 5-8 years of experience in the job.

- Attrition by Location: Surprisingly, attrition was more in Hyderabad and Pune centres as compared to Bengaluru.

Attrition by Performance: A good proportion of those who left were high performing - the Exceeds Expectations ratings. TechMahindra was on the verge of losing its ace.

5.3 Stage 2: Diagnostic Analytics (The "Why" with an Indian Lens)

Diagnostic Analytics were used to help the team dive deeper and gain better insight into the root cause. They found that there are a number of key factors:

1. Some of the most frequent symptoms were employees that were in the same position for 3-4 years, and were most often rated as strong performers but weren't being promoted. It was especially de-motivating in the Indian culture where the progress in career is one of the key indicators of status.

2. "Firefighting" and "Suitcase culture": Project managers were being sent to the hard to handle and under staffed projects ("firefighting"). Additionally, they were expected to work a lot harder than most and work after normal business hours and were often "client facing" which resulted in a lot of burnout and affecting their family life.

3. The "Expertise vs. Management" Trap: Many technical project managers were performing very well in their technical roles, but were moving over into leadership roles for which they were neither aware nor interested. They were being pushed into a management career, and as a result were resenting their management and not performing well.

4. Using the data from the internal communication, there was a 'recognition gap' identified in the analysis of the data. There was a lot of expressed reward (formal) but not as much of the less formal reward/coaching from senior managers, which was very appreciated by the cohort.

5.4 Stage 3: Predictive Analytics (The "What Will Happen")

The team then created a machine learning based predictive 'Flight Risk' model. The most important predictive parameters were:

1. Time since last promotion.
2. Complexity & Travel Intensity of the project.
3. Performance Rating Volatility.
4. Engagement Survey Sentiment Score.

5. How often do you have 1-on-1 meetings with your manager?

The model was able to accurately predict the project managers who were likely to leave within 12 months with an impressive 88% accuracy. A big one as it enabled the company to take an active role in achieving this.

5.5 Stage 4: Prescriptive Analytics and the Ethical Crossroads

The TechMahindra leadership felt it was best to move the project forward in the prescriptive phase. The aim was to not only foresee the quitting but to suggest what needs to be done to keep them. A prescriptive engine has been developed which suggested specific data-driven intervention for each of the "High Risk" employees.

The recommendations were not all that simple:

- **Intervention A (Career Transition):** A "Career Transition" is suggested to a high performer who has been identified as "Technical Expert", rather than moving up the management ladder.

- **Intervention B (Sabbatical/Project Rotation):** For an employee who is identified as burned out, the algorithm suggests giving him/her a sabbatical or rotate him/her to a less demanding, and more innovative project, Intervention B.

- **Intervention C (Coaching):** In this case, coaching suggested connecting the employee who was determined not to be visible with an experienced mentor.

Culture and ethical issues were the major issues that arose during the project.

The ethical and cultural dilemmas are:

- 1. **The "Caste" of Management:** In the Indian IT industry, there is an implicit hierarchy with a preference for jobs in people management over individual-contributor positions. Some managers saw this promotion as a "slum-pumper" as it were and a "demotion" to a "Principal Engineer" track. The data was throwing off a strong cultural bias.

- 2. **Gender bias in the model:** An audit was conducted of the model and showed that there was a gender bias in the model. This was less accurate when predicting turnover for women as it did not account for some of the unique issues that they have, such as being assigned to less visible projects, and lack of support for work-life balance.

- 3. **Managerial Pushback:** There was push back from many managers, especially senior managers, on the recommendations of the model. They didn't feel at ease with the way they were being manipulated. They weren't feeling their sense of intuition being tested. "After 20 years, I know who is going to leave, I don't need an algorithm to tell me." (Senior manager). This is a typical culture situation in India with respect to a power distance.

- 4. **The Family Metaphor vs. Data:** TechMahindra had a "family" culture and prided themselves on being the company that is a family. The use of data to predict employee turnover was seen as a breach of the psychological contract as employees felt distrusted in being predicted to leave. When someone leaked the document, another worker said: "This is not the way a family treats its members."

The Resolution:

TechMahindra had to make some key decisions as it was in a state of crisis of trust.

- 1. **Retraining the model to remove the gender bias:** The data science team was asked to make an effort to explicitly retrain the model to eliminate gender bias. It included a review of historical data to determine reasons for women being assigned to specific projects, and making adjustments.

- 2. **Human-in-the-Loop (HITL) was Institutionalized:** Output of the model is strictly a recommendation. The manager was not permitted to take any action, solely on the basis of the model. They must have held a formal career conversation with staff members. The model was a catalyst for discussion; it was not the discussion itself.

- 3. **The "Family" Narrative Was Re-framed:** Another is the 'Family' Narrative was re-framed: The project was re-branded from 'Flight Risk' to 'Career Growth & Empowerment' or 'Sashaktikaran' in Hindi. The company was transparent about the mission that it was to support their employees to flourish, not to keep an eye on them.

- 4. **A focus on "Recognition" and "Upskilling":** The company put significant efforts into a "continuous recognition" platform and increased the learning and development initiatives. This was as a direct result of the diagnostic assessments.

- 5. **Transparency and Consent:** The company came up with a clear data privacy policy in advance of the DPDP Act to inform employees what data is being collected and for what use; and to secure their consent.

5.6 Results and Impact

One year on from the complete implementation of the "Khoj" project with a moral overhaul was evident:

- The percentage of mid-level managers that left the organizations went from 18% to 11%.
- The company reported greater than 15% growth in the number of project managers moving to the "Principal Engineer" or "Architect" career path, a positive cultural change.

- There was a positive overall trend in employees' scores on engagement, with a notable rise in scores on the "career development" and "trust in management" items.
- The entire project was referred to as a success by the CEO, who said that with ethics and humanity in analytics it can be a great tool in the growth of a business.

5.7 Lessons learnt from the 'Khoj' case

From the “Khoj” case study, some extremely useful lessons can be learnt by Indian organizations:

- 1. Culture is the Ultimate Differentiator:** Adaptation to and a challenge of the Indian cultural norms was the key to the success of the project. The company needed to deal with a variety of cultural norms related to power distance, hierarchy, and the metaphor of the "family" in order to develop trust.
- 2. Ethics is a Competitive Advantage, not a Constraint:** Being a responsible data user and bias corrector did not pose a constraint for TechMahindra, it was a competitive advantage that won the employees and ensured project success. It developed a reputation as a good employer.
- 3. Data Literacy Needed to "Trickle Down":** The strong resistance from managers emphasized the importance of data literacy across all levels, especially with senior leaders.
- 4. Data & Heart leading to Real Transformation:** The best analytics projects are the ones which feature data and heart. The key to success of this project was that it was based on data to understand and solve human problems, rather than simply to build dashboards.

6. How data will shape the future of HR analytics in India

The “Khoj” project at TechMahindra, an example of a smaller scale project, is indicative of the larger trend of HR Analytics in India. The sector is expected to undergo a number of significant changes as the country's economy continues to change.

6.1 The introduction of "Bharat" Analytics

One of the key themes is the use of analytics for non-metropolitan workforce. HR Analytics has been largely an urban, white-collar affair for a long time, in India. Its extension to the huge industrial population of cities such as Pune, Coimbatore and the National Capital Region, the manufacturing and logistics industries will continue to be the main beneficiary in the future. This “Bharat” approach will include everything from data analysis of blue-collar workers to contract labourers, gig workers, ensuring wages are being paid, safety, automation and more.

6.2 Gig Economy and “Total workforce” view

There is a huge gig workforce in India, which is projected to increase to 90 million gig workers by 2030 (NITI Aayog, 2022). The future of HR Analytics in India needs to include this "Total Workforce", which means that the data needs to be brought together from the full-time employees, gig workers and freelancers. This will enable organizations to maximize their talent mix, and treat everyone equally.

6.3 The Formalization of Data and Compliance

The quality and quantity of workforce data will get a significant boost as the Indian economy moves towards a formalization process boosted by the introduction of the Goods and Services Tax (GST), the Employee Provident Fund Organisation (EPFO) and the new Labour Codes. This will allow for more in-depth analytics. Compliance analytics will no longer be a ‘check the box’ activity, but will grow to a proactive risk management tool, ultimately to prevent violations from occurring.

6.4 Democratization of Analytics and emergence of 'AtmaNirbhar' (Self-Reliant) HR

Many of the low-cost cloud-based HR technology platforms are local, and are now putting top-of-the-line HR analytics within the reach of MSMEs. This 'AtmaNirbhar' (self-reliant) HR strategy will enable HR practitioners to become ‘citizen data scientists’ and leverage easy-to-use tools to come up with insights on their own.

6.5 Human in the Loop and Indian ‘Manager’

The job of the manager will get a makeover in India. The human manager will be a "Coach" and "Guru" (teacher) as more administrative and analytical tasks are being taken on by algorithms. They will leverage data to give specific coaching, mentoring and support to their team. In the Indian context it is a natural progression as the boss is considered to be a mentor. They will be centred on empathy, organization's "Sanskar" (Values) and data to help develop talent and create a conducive work environment.

7. Conclusion

HR Analytics is no longer a far-fetched idea but a reality in India today! But it has been a unique Indian path of slower, more guarded steps and a more nuanced experience than in the west. As digital transformation, regulatory changes and talent shortages push organizations from “intuition” to “insight,” let's not forget that artificial

intelligence is only a small part of AI's story. We have now reached a pivotal moment where a combination of Digital Transformation, regulatory evolution and a talent crunch is driving organizations to shift from intuition to insight, but let's not underestimate the impact of AI – Artificial Intelligence is just a piece of the story.

This paper has emphasized that the real success of HR Analytics in India is not in adopting the western model but to build its own models, which will fit in the socio-cultural scenarios of India. The "3-P" Model gives a vision and direction, based on Indian values of social responsibility, family like relationships and long term orientation. The case study of "Khoj" shows that data, with the help of human empathy and ethical principles, can be a strong force of change in the organization.

But it's important to keep in mind the potential pitfalls. There are real and present threats of algorithmic bias, the difficulties of compliance with the DPDP Act and a loss of confidence. Those that succeed in this new era will be the ones to use data as a means of empowerment, and not control. They will rely on data to "Propel" their workforce to establish more equitable, fulfilling and high performing workplaces. They will create a "Vasudhaiva Kutumbakam" (world is one family) in their organizations to take care of, nurture and develop their employees; instead of 'monitor' and 'manage'.

The future of HR Analytics in India is in a fitting and simple slogan: "Best algorithms are those that are driven by best values." The journey from 'Intuition to Insight' is now complete and the new challenge is to make sure that the insights that we create, translate into a future of work which is not only efficient, but also just, humane and consistent with the Indian cultural values we stand for and want to pass on to our future generations.

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