



INDIAN INSTITUTE OF MANAGEMENT CALCUTTA



HR ANALYTICS FOR EFFECTIVE MANAGEMENT OF HUMAN RESOURCES



**Programme Directors: Prof. Amit Dhiman &
Prof. Vimal Kumar M.**



Programme Dates: September 23 - 27, 2024



Programme Venue: MDC, IIM Calcutta

INTRODUCTION

There is an increasing trend among organizations towards data-driven decision-making, with the assistance of novel analytical techniques. Human Resources Management is no exception to this, and 'HR analytics' encompasses all those data-driven decision-making about people issues in an organization. The increasing use of information technology in organizations generates a massive amount of data about people, processes, business, and context. This should, ideally, enable a detailed analysis of HR policies, practices, and procedures of the organization and help ascertain whether they align with the organizational strategy and purpose.

The areas covered under HR analytics include but are not restricted to, descriptive analysis (for example, analyzing the attrition data to derive insights about retention strategies), predictive analysis (for example, analyzing performance data to predict the future performance of a newcomer), and prescriptive analysis. This programme intends to provide a glimpse of the scope and implications of HR analytics towards assessing, designing, and transforming HR systems and processes based on substantial evidence and data, thus enhancing the alignment between HR operations and strategy.



KEY OBJECTIVES

- Introduce participants to use cases of descriptive analytics, prescriptive analytics, predictive analytics, and optimization in the domain of HRM.
- Demonstrate through hands-on experience the application of HR analytics to critical HR problems in people planning, recruitment, and selection, compensation and rewards, performance appraisals, employee-voice, and diversity management.
- Expose participants to selective and relevant applications of analytics drawing from data science/ statistics, psychometrics, qualitative text analytics, and IT.
- Sensitize participants to the scope and limitations of HR analytics.



APPROACH AND PEDAGOGY

The approach to discussing these topics is essentially multi-disciplinary, bringing together the core human resource management knowledge and experience, a basic understanding of relevant data science, and developments in information technology. Specifically, the approach to analytics will involve basic and established statistical methods, psychometric methods, modern big data analytics, data scrapping, machine learning methods, and qualitative text analytics. The use cases of fundamental approaches of data - descriptive analysis, prescriptive analysis, predictive analysis, and explanation will be covered. Further, the topics are discussed from the user's perspective, focusing on application and minimizing time spent on underlying theories.

The pedagogy will involve hands-on exercises using various analytical methods to analyze data, including qualitative data, using analytical software. The content would also include necessary inputs on statistics of analytical methods used. Pedagogy would involve the use of real-life cases and examples. The pedagogical approach will try to touch upon the following essential aspects of problem-solving through analytics:

- Understanding the Context
- HR Problem Definition (Asking the right question)
- Translating HR Problem into Analytics Problem
- Hypothesizing
- Collecting Relevant Data
- EDA and data cleaning
- Modeling (including Descriptive and Predictive Analytical methods)
- Evaluating including (Robustness, Reliability and Validity)
- Communicating
- Interventions

The faculty typically will be drawn from Human Resource Management, Statistics, Data Science, and Information Systems disciplines at IIM Calcutta.



PROGRAMME CONTENTS (INDICATIVE)

- HRM system, HR policy making, and fit analysis
- HR Analytics – Approach
- HR diagnostics – predictive attrition analytics, feedback mechanisms including survey analytics, analyzing gaps between policy and implementation.
- People planning analytics – Demand and Supply functions, succession planning, HR stock and flow problem.
- Recruitment and selection data analytics – predictive analytics and cost optimization of selection methods.
- Training analytics – assessing training effectiveness. Reliability and validity concerns in HR analytics.
- Employee performance data analytics – predicting hi-pots, normalization (bell curve) concerns, diagnosing causes of success or failures.
- Analytics to understand compensation decisions in organizations
- Diversity Management Analytics
- Employee voice analytics - text analytics
- Ethical issues in HR analytics



WHO MAY ATTEND

The programme will be helpful for both HR managers and non-HR managers who aim to understand the application of analytics to HRM problems. While experience is not a constraint to attending the programme, the participants who have spent a minimum of 4-5 years in the industry, not necessarily in HRM roles, will benefit more from the programme.



PROGRAMME DIRECTORS

Prof. Amit Dhiman has been a faculty in the Human Resource Management Group at the Indian Institute of Management Calcutta since 2008. He has a Ph. D. in Human Resource Management and Industrial Relations area from the Indian Institute of Management Ahmedabad. He also holds a Master's degree in Human Resource Management & IR and a BE degree in Mechanical Engineering. He has worked for more than seven years in the industry in various operational and corporate roles in Human Resource Management, Organizational Development, and IR functions. Amit has research interests in Strategic Human Resource Management, Performance Management, accountability in decision-making, HRM in services, including the IT industry, and Organizational Commitment. In the above areas and others, he has publications in acclaimed international journals such as the International Journal of Human Resource Management, Personnel Review, and Journal of Business Ethics, and national journals such as Vikalpa, IIMB review, and presentations at prestigious international conferences like the Academy of Management. He has taught courses on Performance Management, Talent Management, Strategic Human Resource Management, and Human Resource Management in Services since 2008 at IIMC. He has training and experience in quantitative and qualitative data analysis approaches. He has attended highly valued training for faculty at Harvard Business School and has taught in international programmes. He has conducted Management Development Programmes or taught courses for organizations like Akzo Nobel, ONGC, NTPC, GRSE, Hero Housing Finance Ltd, Vodafone, NESTLE, TATA steel, Indian Oil Corporation, SAIL, CBSE/ICSE Board School Principals, among others. He has also consulted organizations in private and public sectors, NGOs, schools, and public institutions such as High Courts.

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Prof. Vimal Kumar M. is a faculty of Information Systems and Analytics at the Indian Institute of Management Calcutta. He holds a doctoral degree in Information Systems and Analytics from the Indian Institute of Management Tiruchirappalli. Prior to his Ph.D., he served in various industries implementing Information Technology for telecom and infrastructure companies and Public Sector Banks. His research interests include societal development through information technology, social inclusion, fairness, and privacy concerns of artificial intelligence (AI), and platform technologies. He has also presented his research work at premier international conferences like PACIS, AMCIS, and ICIS Doctoral Colloquium. His research work has been published in various reputed journals such as Information & Management, Information Systems Frontiers, Computers in Human Behaviour, AIS Transactions on Human-Computer Interactions, and Economic & Political Weekly. At IIM Calcutta, he teaches Core Management Information Systems, Data Mining and Business Analytics, and Technology Startup courses.

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PROGRAMME DETAILS

- Programme Commencement:** 9:00 AM on September 23, 2024
- Programme Conclusion:** 2:00 PM on September 27, 2024
- Accommodation:** For Residential participants, on single occupancy
 - **Check-in:** September 22, 2024 (6:00 PM onward)
 - **Check-out:** September 27, 2024 (2:00 PM)



PROGRAMME FEES

- Residential (R):** ₹ 1,25,000/- plus taxes and surcharges as applicable.
- Non-Residential (NR):** ₹ 1,15,000/- plus taxes and surcharges as applicable.

We would strongly encourage candidates to enroll as Residential participants, as the experience of an MDP is optimized in a full-immersion mode.

Discount on Programme fees:

A discount of 10% on the Programme fees can be availed by an organization if it nominates at least 4 participants for a particular MDP.



TERMS & CONDITIONS

- Participants would have to make their own travel arrangements.
- Accommodation at IIM Calcutta will be provided till 2:00 PM on the last day of the Programme. Participants who may wish to stay beyond this time will have to check with the CMDP Office for room availability, and associated charges. IIM Calcutta does not provide any family accommodation.
- Cancellation Policy: In case you/your nominated candidate(s) does(do) not attend the programme, 40% of the programme fees will be retained, as per policy.
- Executive Education Alumni: With effect from April 01, 2017, participants of IIM Calcutta's 'Open' MDPs who attend 20 days of learning through two or more Open MDPs will be eligible to apply for 'Executive Education Alumni of IIM Calcutta' status.

HOW TO APPLY

- You can apply/nominate your personnel by clicking on the "Apply Now" link corresponding to the particular MDP, as appearing on our online calendar available at: <https://iimcal.ac.in/mdp/mdp-calendar>
- Once the candidature(s) is (are) approved, the sponsoring authority or participant (in case of self-nomination) will be intimated over email along with a Proforma Invoice seeking programme fees in advance.
- Programme fees can be remitted online through Electronic Fund Transfer (NEFT/RTGS).
- Upon remitting the fees online, kindly intimate CMDP office with the UTRNo./relevant transaction details through email, so that we can connect your remittance to your nomination(s). Please note that confirmation of participation is subject to receipt of Programme fees by CMDP Office before commencement of the MDP.

IIM CALCUTTA'S ACCREDITATIONS AND RANKINGS

- Triple accreditations by AACSB (Association to Advance Collegiate Schools of Business), AMBA (Association of MBAs) & EQUIS.
- IIM Calcutta is the only B school in India to be a member of CEMS, a global alliance of leading business schools, multinational companies and NGOs
- IIM Calcutta's MBA programme has been ranked 60th and MBA-Ex programme 76th in Financial Times Global rankings, 2023. In Domestic rankings, the Institute has secured 1st position in both BT-MDRA and Fortune India Best B-School Survey 2023



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For all other details on administrative matters please refer to the 'Guidelines for Participants' on our website or e-mail to program_mdp@iimcal.ac.in