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FOREWORD BY DR. JAC FITZ-ENZ

PEOPLE ANALYTICS IN THE ERA OF BIG DATA

CHANGING THE WAY YOU ATTRACT,
ACQUIRE, DEVELOP, AND RETAIN TALENT

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People Analytics in the Era of Big Data

*Changing the Way You Attract, Acquire,
Develop, and Retain Talent*

**Jean Paul Isson
Jesse S. Harriott**

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I dedicate this book to my daughters, Roxane and Sofia, who have been my inspiration for so many things I do. Daddy was not available as usual to play with you and hopes when you read this book you will be proud of your patience. A special thanks to my wife, Marjolaine, for her love and support taking care of our little Sofia to give me more time to write.

—JP Isson

This book is dedicated to all the unsung analytical heroes, working tirelessly to uncover new insights, predict future business trends, and drive business impact. Keep pushing forward and never give up.

—Jesse Harriott

Foreword

People Analytics in the Era of Big Data does a great job of melding analytic processes and methods with the mass of data that is growing exponentially every day. Future success in talent management will be largely dependent on an organization's ability to mine that database. The days of scanning job boards, college recruiting trips, open houses, and advertising are obsolete. Organizations' main problem is twofold. One, there is no competitive advantage in applying these recruitment processes. Everyone can and does use them, and the results are similar rather than unique. Two, these methods are all behind the competitive curve. Nothing within them speaks to the special demands of the future because they do not uncover and express true future talent demands. At best, they are simply common tools.

The good news is, as the authors so clearly explain, that diving into the Big Data ocean with predictive analytics fishing gear virtually ensures that you will catch exactly what you're fishing for. First, think about the talent pool. In truth, there is no shortage of qualified people for any one company. The talent ocean has not been overfished for the needs of your company. The problem is that there are many boats fishing. You need a world-class talent acquisition system. This is where predictive analytics comes to the rescue.

There is a shortage of twenty-first-century talent acquisition strategies. Recruitment doesn't start in the employment section of the human resources department. Employment methods, by whatever label is in vogue, are simply functional tools. Everything starts with the organization's purpose, goals, and strategic plans. It has been clear for decades that issues of organizational purpose are often not fully addressed. Statements that the goal is to increase market share by x percent next year are accepted as purpose statements. Not true. They are nothing more than wishes. Management must first be absolutely clear regarding the purpose of the organization expressed in terms of its role in society. Books have been written about this, yet seldom is there a deep dive into purpose.

Once purpose is clear, then data and analytics can be brought to bear in forming a strategy. One more time, Big Data is the talent ocean. Analytics is the fishing gear. Analytics helps management find the school of fish that it seeks to fulfill its unique purpose.

Analytics comes in three levels: descriptive, predictive, and prescriptive. *Descriptive* speaks to what has happened up to the present. *Predictive* reveals what must be done to achieve future goals. *Prescriptive* tells how to do it. When a patient tells a doctor that he has sinus congestion, that is descriptive. The doctor applies her knowledge to determine what type of treatment will alleviate or cure the condition. That is predictive. The paper that the patient takes to the pharmacy explains how the treatment is to be administered. That is the prescription.

This book provides all three analytics: the description of the talent market and its shortcomings (Big Data), what types of analytics tools are available and are under development that should be used to reveal where the talent is, and finally how to use predictive analytics to solve the talent needs of the organization.

The basis of this book stems from real-world examples from the authors' years of talent acquisition experience. They provide easy to understand processes for drawing competitive information out of Big Data and turning it into applicable knowledge. In short, this book is both a compelling argument and a framework for the reader on which to build a talent management strategy and work plan.

Dr. Jac Fitz-enz, CEO, Human Capital Source

Preface

Talent is top of mind again as leaders struggle with how to capitalize on the opportunities of a changing postrecession economy while at the same time keeping workers happy and engaged. Even though many parts of the global economy are still struggling, there continues to be a talent shortage and many companies still struggle to hire and hold key talent. At the same time, younger workers continue to enter the workforce while older workers retire. These younger workers have a different expectation for the pace of feedback, career development, promotion, and what it means to be an employee. Also, the world of work has changed, with social media providing new ways to connect, engage, and find candidates. This enables candidates to promote their skills, while at the same time leaving a gold mine of talent data to be harnessed as a competitive edge for hiring managers.

At the same time, executives are putting pressure on their human resources (HR) departments to produce fact-based insights and strategies for critical talent issues such as: Do we have the right talent mix to achieve our objectives? Can we predict who are going to be the best leaders for the future? What development should we give these potential leaders? How engaged are our top performers in our key business strategies? Do we know which talents are at risk of leaving? What are we doing to keep them?

Workforce dynamics have always been complex during business cycle changes. However, what's different in this economic cycle is that human capital executives and hiring managers now have Big Data analytics to leverage in attracting, acquiring, and advancing the right talent through the organization. The amount of available data on your employees and business processes is exploding, and Big Data is now everywhere, including the workplace. Real-time information on employee engagement, actions, sentiment, productivity, location, quality, and aspirations is everywhere, making it possible to tie talent to business outcomes in ways that were almost impossible before.

The implications are significant because talent management in many businesses has traditionally revolved around interpersonal relationships or decision making based on educated experience, rather than deep analysis. Advanced People Analytics provides a unique opportunity for human capital professionals and hiring managers to position themselves as fact-based strategic partners of senior executives, using analytically proven techniques to recruit and retain those top employees who drive superior value in companies.

People Analytics is a new domain for most HR departments. However, with the application of new techniques and new thinking to talent management, the field of People Analytics is becoming more mainstream. Leading companies are increasingly leveraging sophisticated methods to analyze employee and business data to enhance their competitive edge. The old approaches of gut feel and “that’s worked in the past” are no longer enough.

We wrote this book to be different from the other available books on People Analytics, and we are glad you have chosen to read it. The focus of this book is on practical approaches that can help a business leader create value from and make the most of the organization’s analytical assets. Also, unlike other books, we outline how to inject data analytics at every stage of the talent management process, from talent acquisition through retention. Furthermore, we have included real-world examples of what other companies are doing, both what’s working and what’s not working.

This book will help you think about People Analytics across your organization, evaluate whether you are doing People Analytics well, and provide you with frameworks to take your efforts to the next level, creating business value for your organization in the process. This is not a technical book; it is written to be relevant to someone with no analytical experience as well as to the person with a great deal of analytical experience.

The focus of this book is on effective People Analytics and how companies can create business value from their Big Data assets. By effective People Analytics, we mean analytics that start with a strategic human capital business goal or question, integrate disparate data sources together, create a prediction for the future, and lead to

business actions with measurable results. We provide numerous People Analytics examples throughout the book with an eye toward those real-world examples that will be of interest to a business leader as well as practicing analytical professionals.

To support different workforce analytics covered here, this book will also provide you with interviews and frontline stories from leading People Analytics organizations, including: Accenture, Adobe, AOL, Best Buy, Black Hills, Bloomberg, Bullhorn, CareerXroads, CGB Enterprise, CVS Aviation, Deloitte, Dow Chemical, Facebook, FedEx, General Electric, General Motors, Goldcorp, Google, Harrah Entertainment, Hewlett-Packard, hiQ Labs, Johnson & Johnson, Lockheed Martin, Microsoft, Monster, Omnitrac, Pfizer, SAS Institute, Société de Transport de Montréal, Sprint, Starbucks Limited Brands, Transcom, The Container Store, Wells Fargo, Workplace Safety and Insurance Board, and Xerox.

Big Data continues to be touted as the next wave of technology and analytics innovation. From our perspective, the next wave of innovation is not just about Big Data, but more about how companies leverage Big Data analytics to take action and optimize their business. Having data is not enough; it needs to be leveraged effectively to drive and optimize business action that is coordinated at all levels of the organization. As it relates to People Analytics, Big Data is critical to providing real-time insights to businesses regarding how to maximize the value of the talent for the organization as well as maximize the organization's value for the talent it intends to retain and develop. Throughout the book, we review our Seven Pillars of People Analytics Success in the context of Big Data, providing examples for each pillar to help illustrate the key concepts to effective People Analytics.

This book is written where each chapter builds on the preceding one, but each chapter can be read by itself as well. You will get more out of the book if you read it from beginning to end, but if you are interested in quickly learning about employee engagement analytics, for example, you can jump right to that chapter. Regardless, we encourage you to start with Chapters 1 through 3, which provide the foundation for the book as well as outline one of our key frameworks, the Seven Pillars of People Analytics Success. Throughout the course of this book, we explore each pillar of the People Analytics

framework, offering insights on how to successfully leverage analytics for every pillar, and we provide frontline stories from companies that have successfully leveraged the framework to improve business outcomes. We will also share best practices and takeaways at the end of each chapter.

We are confident that if you follow the principles contained in this book you will develop high-impact People Analytics and generate business value from the Big Data and little data available to your organization. Some of the practices we outline are not easy to accomplish, but whether you are in a large company or a small one, you can apply your vision of People Analytics and create business value from your data.

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We engaged hundreds of business leaders to help in the writing of this book. Whether through interviews, formal contributions, or informal collaboration, we are indebted to many for helping to complete the book. We would especially like to thank Kim Lascelles, who not only reviewed our previous book but was very helpful to review the first proposal of this book, as well as most chapters of the manuscript. Despite his busy schedule, his support and feedback were invaluable. Kim, you are definitely a key pillar of the writing of our book.

A special acknowledgment goes to Melissa Fernand, who has done a terrific job reviewing every chapter of this book, including case studies. Melissa's review helped a lot to make the book easier to understand for all readers. Despite having a full-time job, she was instrumental in providing fast-turnaround reviews and insightful feedback. Melissa's input was critical in making this book relevant and insightful for our readers. Thanks, Melissa, for being *the* reviewer of this book; your assistance was invaluable to us.

Writing a book on People Analytics would not be possible without the input of other professionals: industry leaders and experts and, more important, the contributions of hundreds of people and companies who were generous enough to participate in our research for this book and share their People Analytics journeys. You will see many of their contributions throughout the book in the form of great insights in their quotes and concrete examples of how they make People Analytics work. They gave us some of their precious time for interviews (despite time zone differences), provided case studies, and even contributed writing for some chapters in the book. So we would like to thank all of you because your contributions helped to provide readers with frontline stories and also actionable insights that they can quickly leverage in their organizations. The list is endless, as we engaged hundreds of companies. Just to name a few, we would like to thank:

Foreword to the Book

- Dr. Jac Fitz-enz: The father of human capital strategic analysis and measurement, he published the first human resources (HR) metrics in 1978 and introduced benchmarking to HR in 1985. In 2007, he was cited as one of the top five “HR Management Gurus” by *HR World*, and the Society for Human Resource Management chose him as one of the 50 persons who in the past 50 years has “significantly changed what HR does and how it does it.” Dr. Fitz-enz has published 13 books and over 400 articles.

Contributions to Chapters

- Pasha Roberts, Chief Scientist at Talent Analytics, Corp., for his contribution to the Employee Lifetime Value and Cost Modeling chapter.
- Amel Arab, Senior Manager at Deloitte Consulting, LLP, for her contribution to the Employee Retention chapter.
- John Houston, Deloitte Partner at Deloitte Consulting, LLP, for his contribution to the Employee Retention chapter.

Interviews and Case Studies

- Jeanne Harris (**Accenture**), Global Managing Director of Information Technology at the Accenture Institute for High Performance. Jeanne is the coauthor with Tom Davenport of the well-known book *Competing on Analytics*, as well as the *Harvard Business Review* article “Competing on Talent Analytics.” Jeanne was the first person JP interviewed for this book, and provided insights that helped to reshape some of the content of the book.
- Michael Housman (**hiQ Labs**), Workforce Scientist in Residence, and former Chief Data Analytics Officer at Evolv. Thanks, Michael, for your time and great insights.
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- Nathalie Carrenard (**L’Oreal**), Talent Acquisition Manager.

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- Ian O’Keefe (**Google**), People Analytics Leader.

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About the Authors

Jean Paul Isson is Global Vice President for Predictive Analytics and Business Intelligence at Monster Worldwide, Inc., where he has built his global predictive analytics team from the ground up and successfully conceived and implemented global customer scoring, customer segmentation, predictive modeling, and web mining applications and talent analytics solutions across North America, Europe, and the Asia-Pacific region. Prior to joining Monster, Mr. Isson led the global customer behavior modeling team at Rogers Wireless, implementing churn models and pioneering customer lifetime value segmentation to optimize services, marketing, and sales activities.

Mr. Isson is a worldwide expert and an evangelist in Big Data and advanced business analytics. He is an internationally acclaimed speaker and a thought leader who specializes in helping organizations create business value from their Big Data or little data. Mathematician and statistician by training (he holds a master's degree in mathematics and statistics), he loves helping executives to apply data science to business questions to tell the data story, and was named among the 180 leading data science, Big Data, and analytics bloggers in the world by Data Science Central.

Mr. Isson is frequently invited to be the keynote speaker at executive events on advanced analytics, human capital management, human resources analytics, and innovation in the United States, Canada, the United Kingdom, Germany, France, Denmark, the Netherlands, Poland, the Czech Republic, Australia, and China. He has more than 22 years of experience in advanced business analytics, focusing on predictive analytics, workforce analytics, behavior modeling, market segmentation, and sales coverage optimization. He teaches classes for the Executive Certificate in Advanced Business Analytics at Concordia University. He has delivered business analytics workshops at executive programs in the United States, Canada, Europe, Asia, and Australia.

He is the author (with Jesse Harriott) of *Win with Advanced Business Analytics* (John Wiley & Sons, 2012), a reference business analytics