

LEARNING MADE EASY



People Analytics

for
dummies[®]
A Wiley Brand



Learn how top companies
use people analytics

Analyze data to quantify
your investment in people

Use feedback to create a
winning people culture

Mike West

People analytics architect

People Analytics

for
dummies[®]
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by Mike West

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dummies[®]
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People Analytics For Dummies®

Published by: **John Wiley & Sons, Inc.**, 111 River Street, Hoboken, NJ 07030-5774, www.wiley.com

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Published simultaneously in Canada

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Library of Congress Control Number: 2019931481

ISBN: 978-1-119-43476-4; 978-1-119-43483-2 (ebk); 978-1-119-43479-5 (ebk)

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

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Introduction

You might already be familiar with how the power of data analytics has transformed the fields of marketing, sales, supply chain management, or finance. You may also be familiar with the idea that people are a company's greatest investment. Well, like peanut butter and chocolate eventually found their way into a delicious treat, these two ideas found their way together, too — the happy result is called *people analytics*.

Welcome to *People Analytics For Dummies*, a book written for people open to the idea that there need not be any contradiction between what makes companies great places to work and great at producing business results. People analytics is built on the premise that what makes companies great is people, and that what can make more companies great when it comes to people is data analysis. Not any kind of analysis — specifically, the analysis of people at work.

In this book, you'll find an introduction to the data, metrics, and analysis at the basis of this new field called people analytics. Because it's a new field, this may be the first time you're hearing anything at all about it or, like most of the people doing the work today, you're figuring it out as you go along. In any case, even if you're familiar with people analytics already, this book may introduce you to new ways of approaching your work and may also provide you with some tips on how best to explain to others exactly what you do. (It never hurts to be able to express clearly and succinctly to others the importance of the work you do.)

About This Book

This is a book about making important management decisions about people by using data analysis rather than whim or instinct. This is a book about getting great business results while at the same time creating a great place for people to work. This is a book about finding a way to be a great company that relies on continuous feedback and learning rather than a mediocre company that's satisfied with either doing it the way it's always been done or that tries to keep up by slavishly copying the competition. This book is the recipe for getting the highest possible individual, team, and company performance while also making employees happier!

In *People Analytics For Dummies*, I talk about the ways that analysis can connect human resources decisions to business strategy as well as offering an overview of some of the nuts-and-bolts of how to do the analysis. You'll find out about gathering data about your employees at different stages of their careers, detecting patterns from the data, making predictions, and measuring the consequences of the actions you take. You'll find out how to use data to continuously improve the methods you use to attract, activate, and retain talented people so that you can achieve higher levels of productivity.

When I can, I include real-world examples from companies I have worked with — big and small — so that you can learn from the real world how to collect and analyze data in ways that can help you make better business decisions across a wide variety of human resources management topics: recruiting, performance, rewards, learning and development, leadership, diversity, and attrition. These examples show you the broad variety of opportunities for a smart application of people analytics.

Whether you're an executive, a human resources professional, or an analyst, you'll find something in this book for you.

Foolish Assumptions

To get the most from this book, I assume that you

- » Have worked for, are working for, or want to be working for a company large enough that establishing better decisions about how you manage people can add value
- » Are willing to let data help you make decisions about how you identify, select, pay, develop, and manage people
- » Are willing to try something different than what you have done in the past or than what other companies are doing
- » Are comfortable reading about business strategy, systems, science, and statistics
- » Have access to some people data or at least want to collect and analyze people data
- » Are looking, of course, for an accessible source that keeps it as simple as possible and provides practical advice about how to get started in the real world, as opposed to what you might find in an academic textbook or scientific journal

Icons Used in This Book

Throughout this book, you'll see these little graphical icons to identify useful paragraphs:



TIP

The Tip icon marks tips and shortcuts that you can take to make a specific task easier.



REMEMBER

The Remember icon marks the information that's especially important to know. To siphon off the most important information in each chapter, just skim these paragraphs.



TECHNICAL
STUFF

The Technical Stuff icon marks information of a highly technical nature that you can safely skip over without harm.



WARNING

The Warning icon tells you to watch out! It marks important information that may save you headaches. Warning: Don't skip over these warnings!

How This Book is Organized

The book is arranged into five self-contained parts, each composed of several self-contained chapters. By *self-contained*, I mean that I do my best to tell you everything you need to know about a single topic inside each chapter. But I admit that more than a few times I had to put references to other parts of the book when it wasn't reasonably possible to cover in one chapter everything that's important to know.

The possibilities for adventure are truly endless, but start where you are right now. Whether you're an executive, HR professional, or analyst, you'll find something worth reading in *People Analytics For Dummies*.

Here is an overview:

Part 1: Getting Started with People Analytics

These early chapters serve as a primer on people analytics. In this part, you learn to walk before you run, but what you find here lays the foundation for all that

comes later. You'll see my definition of people analytics and find an introduction to its important concepts, applications, and options. You may be especially pleased at the nontechnical nature of the first part. Not much bit-bytes or psychobabble is necessary because, as you see in Part 1, people analytics is about business first, people second, analysis third, and systems last.

Part 2: Elevating Your Perspective

It is unfortunate that most people think of analytics as something that is necessarily abstract, complex, or foreign to what they do. In the beginning of Part 2, you get to see how simply counting people up in different ways and looking at the results can help you gain new perspectives on things you do all the time. The fact is, the methods of people analytics need not be abstract, complex, or foreign — they can just be empirically valid ways of better doing what you always do.

If you read the entire part, you'll have learned some basic methods to get more perspective on how people produce value for businesses (or don't), have gained insight into why results vary, and have seen how, with careful attention to the right level of detail, you can focus your efforts to get value out of analytics faster. The absence of a business value orientation leads analytics into dead ends and trivial pursuits.

Part 3: Quantifying the Employee Journey

In this part, I define a universal measurement framework for human resources centered around two different but related concepts: the *employee journey* and something I call the *triple-A framework*"

- » **Employee journey:** I call the stages employees go through from the day they become aware of the job opportunity to the day they eventually exit the company the *employee journey*. Taking this holistic, long-term point of view implied by this term helps you see patterns you would not otherwise have seen had you organized your analysis in any other way. Also, seeing the company through the eyes of employees can help you see the world in a totally new and different way. Sounds clichéd, but it's true.
- » **Triple-A framework:** The employee perspective is important, but for obvious reasons it has to be paired with the needs of the business as well. The triple-A framework provides the fundamental measurements and analysis for the three big people-related problems each company needs to solve if they hope to grow as a business: attracting talent, activating talent, and controlling the rate of talent exit (attrition).

The combination of the employee journey and the triple-A framework can unify otherwise disparate and competing efforts by providing a single, unified measurement framework that relates employee and company needs with data.

After an introduction to the employee journey in Chapter 8, you'll find more detail on the methods of measurement and analysis in each of the three A's that follow: attraction (Chapter 9), activation (Chapter 10), and attrition (Chapter 11).

Part 4: Improving Your Game Plan with Science and Statistics

Analytics are all about using data to increase certainty. This is rooted in, at a minimum, math and science, but the analysis of people builds on the knowledge of diverse methods and caveats developed from hundreds of years of research in psychology, sociology, social psychology, and behavioral economics. Most of the current writing on people analytics is either so high-level as to not include any mention of how-to specifics or is pretty difficult to read if you don't already have an extensive background in systems, behavioral science, or statistics. I can't do justice to anything that is typically taught in a 6- to-8-year PhD program for the aforementioned topics, but I have carefully selected a few versatile tools that can get you started on your journey and that you can keep using for a lifetime of contributions.

Part 5: The Part of Tens

If you have ever read another book in the *For Dummies* series, this part of the book is like seeing an old friend again — the friend might be wearing a different outfit, but you will recognize the person right away. The Part of Tens is a collection of interesting people analytics learnings, advice, and warnings broken out into ten easy-to-digest chunks. There are ten misconceptions, ten pitfalls, ten design principles and the like. These chapters crystalize some concepts you get a chance to read in the rest of the book, or a way to get right to the concepts that matter if you haven't.

Beyond the Book

It used to be that a book started on the first page and ended on the last — not any more. The digital revolution has not just changed the way we buy books, it has also changed the way we write and read books. I have created a plethora of online resources that go together with this book to assist you on your people analytics

journey. These items fit more readily on the World Wide Web than they do between the covers of the book (and in doing so saves a few trees in the process). Importantly, these resources can be updated, searched, shared, cut and paste from and downloaded as pdfs.

Two resources I am the most excited about sharing are the HR Metric Definitions Guide and a guide to great sample employee survey questions. At the current time, these are the most comprehensive mainstream sources for obtaining information in this format.

Extras: All *People Analytics For Dummies* online support resources are accessible for easy download at www.dummies.com/go/peopleanalyticsfd.

- » **HR Metric Definitions Guide:** Find hundreds of HR metric definitions following a standard convention, organized by topic (Appendix A).
- » **Great Employee Survey Questions:** Find hundreds of great employee survey questions that follow a standard convention, organized by topic (Appendix B).
- » **Job Analysis:** Get started with the crucial task of job analysis (Appendix C).
- » **Competency Analysis:** Learn how to measure competencies with competence (Appendix D).
- » **Ten Things to Set You On the Right Path When You Analyze Attraction:** Here's a great Part of Tens we just couldn't get fit in the book. (Appendix E).
- » **Ten Counterintuitive but Unifying People Analytics Design Principles:** And the fun never stops! Yet another Part of Tens for your reading pleasure! (Appendix F).

Cheat Sheet: If you are looking for the traditional *For Dummies* Cheat Sheet, visit www.dummies.com and type **People Analytics For Dummies Cheat Sheet** in the Search box.

People analytics is a vast domain containing a lot to learn — human resource management, behavioral science, technology systems and statistics, for starters. Unfortunately, one book cannot do justice to all of these topics, but fortunately that's why there is more than one book in this world (and people to help write them).

Aside from an introduction to something you may not have known much about before, what I aim to do in this book is cover that area of knowledge necessary for a successful application of people analytics not already covered by other books. I provide a unique (if not sometimes strange) point of view about what *really* matters, honed over many years of practical experiences in the field. What I have

to say often isn't what people thought they would find, but I have seen success and I have seen failure, and I stand by what I think is important enough to share in this format. If you are looking to obtain more depth in a specific technical domain, there are plenty of resources you can turn to in order to go deeper — not the least of which are other *For Dummies* books.

Other For Dummies books: You can use a number of related books to drill down into topics I could only briefly touch on in this book — for example, *Data Warehousing For Dummies* (by Thomas C. Hammergren), *Business Intelligence For Dummies* (by Swain Scheps), *SQL All-in-One For Dummies* (By Allen G. Taylor), *Python For Dummies* (by Stef and Aahz Maruch), *Predictive Analytics For Dummies* (by Anasse Bari, Mohamed Chaouchi, and Tommy Jung), *Data Science For Dummies* (by Lillian Pierson), *Business Statistics For Dummies* (by Alan Anderson), *R For Dummies* (by Andrie de Vries and Joris Meys), *Statistical Analysis with R For Dummies* (by Joseph Schmuller), *Social Psychology For Dummies* (by Daniel Richardson), *Excel Dashboards & Reports For Dummies* (by Michael Alexander), *Data Visualization For Dummies* (by Mico Yuk and Stephanie Diamond), *Tableau For Dummies* (by Molly Monsey and Paul Sochan), and *Agile Project Management For Dummies* (by Mark C. Layton and Steven J. Ostermiller), all published by Wiley. Any and all of these books can produce valuable knowledge, skills, and abilities that can be used to become a more effective leader, implementer, and consumer of people analytics.

Where to Go from Here

You don't need to read this book from cover to cover. You can, if that strategy appeals to you, but it's set up as a reference guide, so you can jump in wherever you need to. Looking for something in particular? Take a peek at the table of contents or index, find the section you need, and then flip to the page to resolve your problem.

1

Getting Started with People Analytics

IN THIS PART . . .

Discover exactly what people analytics is

Make the business case for a people analytics project and figure out where to begin (all at the same time!)

Understand the differences between an insight-oriented analytics project and an efficiency-oriented analytics project

Get acquainted with a matrix of current options for managing people analytics moving forward

- » People analytics, defined
- » Examining how some businesses already analyze people data
- » Starting your first people analytics project

Chapter **1**

Introducing People Analytics

A business consists of people who work on behalf of the company (employees) doing things for other people who don't work for the company (customers). Business decisions about people working for the company — who to hire, where to find them, what to pay them, what benefits to provide, whom to promote, and countless other decisions — have a substantial unseen impact on the company's capability to meet customer needs, bottom-line performance, and reputation.

Traditionally, the way the leaders of companies have made human resources-related decisions has been based on gut instinct, copying what other companies are doing, tradition, or compliance with government mandates.

Today, many business decisions are now being made with data. What customer segments to focus on, what product feature improvements to make, what projects to invest in, and where to put a new store are just a few of countless examples of important business decisions that are increasingly made with data. If you go into a board meeting or participate in an investor phone call, you will see that the most important parts of the discussion are all about a series of important numbers recorded in the balance sheet, what the company is seeing in other numbers that suggest actions that may impact the balance sheet, and whether or not previous actions that promised to impact the numbers in the balance sheet have actually

done so. The conversation may drift from abstract to tangible and back to abstract again, but numbers serve the purpose of keeping the conversation anchored to what is real and to drive accountability for real results.

Fortunately, now you can use data for human resources–related decisions, too. Thanks to the prevalence of human resource information systems, plus the wide-scale accessibility of modern data collection, analysis, and presentation tools, human resources–related decisions can be made with data just like countless other business decisions.

In this chapter, I define the term *people analytics* and talk about some of the ways that companies I’ve worked with have used a human resource approach informed by data to solve real-life business problems. Then I describe how you also can add people analytics to your arsenal — and increase your people data savvy, too.

Defining People Analytics

At a high level, *people analytics* consists simply of applying evidence to management decisions about people.

More specifically people analytics lives at the intersection of statistics, behavioral science, technology systems, and the people strategy.



REMEMBER

People strategy means making deliberate choices among differing options for how to manage a group of people.

Figure 1-1 illustrates how people analytics joins together these four broad concepts (statistics, science, systems, and strategy) to create something new that didn’t exist before.

Many forward-thinking companies are already realizing the benefits of evidence-based decision making in human resources. To identify what other people think people analytics is, I rounded up 100 job descriptions related to people analytics from job boards. To summarize, I created a word cloud from the words in those job descriptions; it appears in Figure 1-2.

If you’re not already familiar with word clouds, this is how they work: The more frequently a word appears in the text that you’re analyzing, the bigger and darker that word looks in the word cloud. You can tell from the figure that *data*, *analytics*, *human resources (HR)*, and *business* must be central concepts to people analytics.

FOUR S PEOPLE ANALYTICS FRAMEWORK

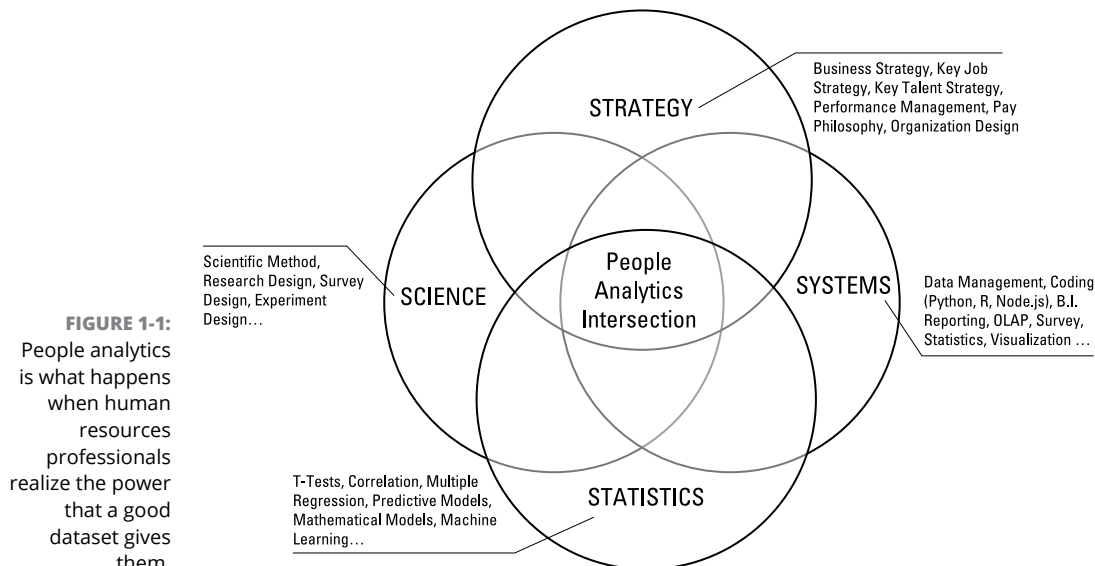


FIGURE 1-1: People analytics is what happens when human resources professionals realize the power that a good dataset gives them.

People Analytics Job Description Word Cloud



FIGURE 1-2: Creating a word cloud is a kind of data analysis to identify and visualize trends in vocabulary.

These 100 job descriptions are from Human Resources department that are ahead of the pack in using hard data and analysis as decision-making tools. The insights data is providing these companies gives them an advantage over companies that do not yet know how to do these things. A vast majority of companies do not yet have people analytics and most people do not even know what people analytics is. That being the case, you, by learning about people analytics, will be in a great position to differentiate yourself among your peers (and your company among its competitors).

Solving business problems by asking questions

Like all business analysis disciplines, people analytics offers businesses ways to answer questions that:

- » Produce new insight
- » Solve problems
- » Evaluate the effectiveness of solutions and improve going forward

Produce new insight

Donald Rumsfeld once said, “*There are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns — the ones we don’t know we don’t know.*” Donald Rumsfeld can get his words a little twisted up, but to finish his point for him: the most perilous things in this world for you are the things you should know but don’t know you should know. One of the great contributions people analytics can make to you is to reveal some of the perilous things you don’t know and don’t even know you should know but in fact should know.

This unknown unknowns’ problem can be epitomized by an experience I had with a large pharmaceutical company. This company was very successful. It had an over hundred-year history of scientific achievement and business success. This company was a leader and financial powerhouse in its industry, if not all industries. They were a great company and they knew it.

With a smart, scientifically-oriented management team, the company tried to measure nearly everything. As a result, it was among some of the first companies to apply rigor to human resources with data. This is how I got started in the field of people analytics before we even called it people analytics. After working at this company, I went on to do this work at other companies, but work in the people analytics field was few and far between back in the early days.

One of the earliest data-oriented human resource activities at this great pharmaceutical company was to participate in a common employee survey conducted across many companies, facilitated by a consulting firm that would provide confidentiality to everyone involved. This survey allowed the company to compare itself as an employer against a selection of the highest-performing companies across all industries across roughly 50 aspects of the employee experience using roughly 100 survey items. A few examples of the categories of employee experience the survey measured were: employee opinion about the company’s prospects for future success, leadership, managers, pay, benefits, opportunities for learning