



by Jeff Sauro



Customer Analytics For Dummies®

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Customer Analytics For Dummies®

Visit www.dummies.com/cheatsheet/customeranalytics to view this book's cheat sheet.

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Introduction

Welcome to *Customer Analytics For Dummies*. This is a book about using data to make better decisions about — and for — your customers. With this book, you find out valuable ways of quantifying your customers' journey, before, during, and after a product or service experience. You discover methods and metrics to improve a customer's experience with a product, service, and brand.

About This Book

You might already be familiar with some form of customer analytics through product development, marketing, sales, and customer services. But the heart of customer analytics is staying focused on the customer, which might be a new concept for you.

In *Customer Analytics For Dummies*, I discuss the finer points of customer analytics. Customer analytics involves gathering data about your customers at various stages of the buying experience, detecting patterns from that data, predicting actions your customers will take, and then making decisions about how to improve your business to attract more customers and keep the customers you already have.

I also include real-world examples from some of the dozens of organizations I've worked with, both big and small, to collect, analyze, and help improve the customer experience. These examples, which include actual data and the methods used, show you what you can accomplish through customer analytics.

You don't need to read this book cover to cover. You can if that appeals to you, but it's set up as a useful reference guide to dip into as you need. Stumped by a certain situation? Look in the table of contents or index, find the topic you need, and then flip to the page to resolve your problem.

Whether you're new to customer analytics or an experienced market analyst, you'll find something that will help you.

Foolish Assumptions

To get the most from this book, you need to be interested in using data to improve the customer experience. And I assume you are, since you are holding this book (for which your humble author thanks you, by the way!). I also assume you are comfortable with computers and working with numbers and data. And although it isn't necessary and I don't assume you have it, it would be helpful if you had access to a spreadsheet program, such as Microsoft Excel (and are familiar with how it functions). You should also have access to customer data, be able to collect customer data, or at least want to collect and analyze customer data. Of course, I provide tips throughout this book to help you get started. (I'd be foolish not to,

right?)

Icons Used in This Book

Throughout the book, you'll see these little graphic icons to identify useful paragraphs.



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



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



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



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

Beyond the Book

Customer Analytics For Dummies includes the following goodies online for easy download:

- ✓ **Cheat Sheet:** Here you'll find the necessary methods, metrics, and sample-size tables to help you collect and analyze customer analytics.

The cheat sheet for this book is at

www.dummies.com/cheatsheet/customeranalytics

- ✓ **Extras:** I provide a few extra articles, step lists, and case studies at

www.dummies.com/extras/customeranalytics

Where to Go from Here

Knowing your customers is a vital step in building your business. With this book,

you have all the information you need to get started on that journey. If you're completely new to customer analytics, I recommend starting with [Chapter 1](#). Otherwise, take a look at the table of contents and start with a topic that interests you.

Part I
**Getting Started with Customer
Analytics**



Visit www.dummies.com for great Dummies content online.

In this part ...

- ✓ Discover exactly what customer analytics is.
- ✓ Accurately measure with quantitative and qualitative data.
- ✓ Collect descriptive, behavioral, interaction, and attitudinal data from customers.
- ✓ Choose the right metrics, methods, and tools.
- ✓ Visit www.dummies.com for great Dummies content online.

Chapter 1

Introducing Customer Analytics

In This Chapter

- ▶ Discovering the benefits of customer analytics
 - ▶ Combining methods and metrics for customer insights
 - ▶ Sorting through big and small data
-

The purpose of business is to create and keep a customer. This statement was made by Peter Drucker, the acclaimed 20th-century management consultant. A simple statement that reveals in just a few words that the long-term viability of a company is not just about maximizing revenue and minimizing costs. Long-term viability is about understanding what it takes to attract customers by continuing to meet and exceed their physical and psychological needs.

Good customer management comes from good customer measurement. Metrics are numbers assigned to everything from website visitors, same-store sales, and profit margin to call-center wait times. Analytics are metrics plus the methods that drive meaningful decisions. You can think of metrics as “informational,” while analytics are “strategic.” So while not all metrics are analytics, all analytics come from metrics. You need metrics to get analytics.

Increasingly, decisions are made on numbers. If you know the numbers better, and can articulate what those numbers mean and how you can differentiate a product, organization, or brand, you can distinguish yourself from your competitors.

Defining Customer Analytics

Although it might not be called customer analytics, chances are, you’re already familiar with some form of customer analytics. The efforts and activities of product development, marketing, sales, and services are driven to anticipate and fulfill customer needs. That is, you can’t sell a product unless someone has a need for it.

Customer analytics is a new term and is broadly used, but it generally includes the following actions and activities:

- ✔ **Gathering data:** Pull together customer purchase records, transactional data, surveys, and observational data at all phases of a customer’s journey.
- ✔ **Using mathematical models to detect patterns:** There are many number crunching, statistical analysis, and advanced modeling techniques that help turn raw data into more meaningful chunks.
- ✔ **Finding the insight:** From the patterns of the data come insights into causes of

customer behavior.

- ✓ **Supporting decisions:** Understanding past behavior helps predict future customer behavior from data instead of relying on intuition.
- ✓ **Optimizing the customer experience:** Detect problems with features, purchases, and the product or service experience.
- ✓ **Mapping the customer journey:** From considering, purchasing, and engaging with products and services, mapping the touchpoints and pain points helps identify opportunities for improvement.

Customer analytics is different from many of the other metrics within an organization. The four critical ingredients of customer analytics are:

- ✓ **Customer focused:** The first word in customer analytics is customer. This means that the metrics collected need to come from customer actions or attitudes, or are derived in some way that's connected to customers.
- ✓ **At the individual customer level:** You need access to the lowest level of customer transaction data, not data rolled up at the product or company level.
- ✓ **Longitudinal:** Customer analytics involves looking at customer behavior over time.
- ✓ **Behavioral and attitudinal:** You need a mix of what customers do and what customers think. Although customer actions (purchasing, recommending) are ultimately what you care about, attitudes affect actions — so measuring and understanding customer attitudes helps to predict future behavior.

The benefits of customer analytics

The benefit of customer analytics is that better decisions are made with data, which leads to a number of tangible benefits:

- ✓ **Streamlined campaigns:** You can target your marketing efforts, thus reduce costs.
- ✓ **Competitive pricing:** You can price your products according to demand and by what customers expect.
- ✓ **Customization:** Customers can select from a combination of features or service that meets their needs.
- ✓ **Reduced waste:** Manage your inventory better by anticipating customer demands.
- ✓ **Faster delivery:** Knowing what products will sell when and where allows manufacturing efforts to anticipate demand and prevent a loss of sales.
- ✓ **Higher profitability:** More competitive prices, reduced costs, and higher sales are results of targeted marketing efforts.
- ✓ **Loyal customers:** Delivering the right features at the right price increases

customer satisfaction and leads to loyal customers, which are essential for long-term growth

In the following sections, I go more in-depth about the data you collect with customer analytics.

Multidisciplinary

The realm of customer analytics crosses departments, skills, and traditional roles. It's multidisciplinary and typically involves input from and output to:

- ✓ **Marketing:** This encompasses the messaging, advertising, and the customer demographics and segments.
- ✓ **Information Technology (IT):** The IT department usually has access to the databases of customer transactions and data.
- ✓ **Sales:** Front-line contact with customers, knowledge of pricing, revenue, transactions, and reasons for lost customers are included here.
- ✓ **Product development:** This includes product features, functions, and usability.

Multimetric

No single metric can define customer analytics. It requires a combination of both behavioral and attitudinal data. Some common ones include:

- ✓ **Revenue:** Simple enough, this is your top line and you're probably tracking this for your accountant already.
- ✓ **Transactions:** How many transactions are you completing in a given time frame? Digging deeper into the data, transactions become important for finding patterns.
- ✓ **Customer Lifetime Revenue:** The total top line revenue a customer generates over some "lifetime," which can be days, months or years (see Chapter [6](#)).
- ✓ **Future intent:** Will your existing customers buy from you again (see Chapter [11](#) and Chapter [12](#))?
- ✓ **Likelihood to recommend:** How likely will customers recommend your company and products (see Chapter [12](#))?
- ✓ **Product usage:** Which features are your customers actually using (see Chapters [10](#) and [13](#))?
- ✓ **Website visits:** Are potential customers finding your website and doing what you expect — finding information or buying a product (see Chapter [10](#))?
- ✓ **Return rates:** How many products are being returned due to dissatisfaction (see Chapter [11](#))?
- ✓ **Abandonment rates:** Did a customer start a transaction and then quit before completing (see Chapter [10](#))?

- ✓ **Conversion rates:** How many potential customers do you convert into actual customers (Chapter [10](#))?
- ✓ **Satisfaction:** Are customers satisfied with your product, company, and service (Chapter [9](#))?
- ✓ **Usability:** Do customers have problems using your products (see Chapter [15](#))?
- ✓ **Findability:** Can customers find the features they're looking for in your products, or find what they're looking for in your website? I discuss findability in Chapter [15](#).

Multimethod

No single method defines customer analytics. Some common methods, most of which are discussed throughout this book, include:

- ✓ **Surveys analysis:** This involves collecting, analyzing, and posing decision questions directly to your customers. Chapter [9](#) has more details on what to ask.
- ✓ **Customer segmentation:** Not all customers have the same backgrounds, goals, or buying patterns; grouping your customers into similar patterns helps identify opportunities for better marketing and product development. Chapter [4](#) has more details.
- ✓ **Customer journey mapping:** Understanding the process customers go through as they engage with a service uncovers pain points and opportunities for improvement (see Chapter [7](#)).
- ✓ **Transactional analysis:** This examines the purchase frequency, amount, and the type of products purchased together for patterns and predictions.
- ✓ **Factor analysis:** This statistical technique helps identify clusters of similar customers (see Chapter [4](#)) and similar response patterns from survey results (see Chapter [9](#)).
- ✓ **Cluster analysis:** Similar to factor analysis, this statistical technique groups customers together into clusters (see Chapter [4](#)) and identifies the best labels for customers to find items in website navigation (see Chapter [15](#)).
- ✓ **Regression analysis:** This statistical technique identifies the key variables that have the biggest impact on customer satisfaction (see Chapter [9](#)) and customer loyalty (see Chapter [12](#)).
- ✓ **Neural networks/machine learning:** Advanced software programs can adapt to patterns learned from data mining and better predict customer needs. This is covered in *Predictive Analytics For Dummies* by Anasse Bari, Mohamed Chaouchi, and Tommy Jung (Wiley).

Using customer analytics

Customer analytics are used across industries in both small and large organizations. Examples of customer analytics at work include:

- ✓ **Retail:** Targeted promotions based on past purchase for individual customers mean retailers anticipate needs and send coupons for things like home improvement or diapers.
- ✓ **Finance:** Credit card companies can understand when customers are more likely to cancel their account based on non-usage, as well as detect fraud based on unusual purchases.
- ✓ **Online:** An understanding of which designs, layouts, navigation structures, and even how the color of buttons affect customer purchases (called conversion rates) is used extensively across most Internet retailers.
- ✓ **Software:** Customers who need sales force automation software often also need accounting software and human resources software.

Professionals who *specialize* in customer analytics typically have a background that includes a mix of mathematical and software skills. These individuals typically go by titles such as:

- ✓ Data scientist
- ✓ Statistician
- ✓ Database analyst

Just as most organizations are already measuring customer analytics, most businesspersons also can use customer analytics. You don't need a PhD in statistics or even a specialization in math. All you need is some desire to better understand a customer and a willingness to answer business questions with data. Customer analytics is therefore also done by

- ✓ Business analysts
- ✓ Project managers
- ✓ Product developers
- ✓ Designers

Compiling Big and Small Data

Customer analytics is often associated with big data. *Big data* refers to extremely large datasets, often containing millions or billions of customer transactions or records. These large datasets are analyzed with sophisticated software to reveal patterns, trends, and associations. Big data allows you to detect very subtle trends and patterns that may have a large impact on revenue.

But customer analytics is also about small data. While not as trendy as big data, *small data* refers to finding insights with datasets that often contain less than 30 customers. With small data, you're limited to seeing larger patterns in attitudes.

While the field of customer analytics is still being defined and varies across

organizations and industries, it usually involves some combination of the following:

- ✓ **Past behavior:** Customer analytics is about using data from the past to predict future behavior. This is both a definition and a warning. What customers did in the past is no guarantee of what they will do in the future. If a certain type of customer purchased one type of product in the past, he is probably more likely to do so again in the future; however, there's no guarantee.
- ✓ **Predictive modeling:** Software programs are able to detect patterns in behavior, even subtle ones that are difficult for humans to detect with intuition or just inspecting data. For example, software can determine quickly that a certain segment of customers, such as higher-income mothers, are more likely to purchase certain products and aren't sensitive to changes in price.



A model is a description of a customer interaction, process, or behavior that can be used to predict future outcomes. For example, the sales price of a house can be estimated by its total square footage. In general, bigger houses sell for more than smaller homes in the same neighborhood.

This book focuses on the methods and metrics that help answer business questions and set the groundwork for predicting. There is a special branch of customer analytics that deals exclusively with making predictions with software. See the appendix for a primer on getting started with prediction.

- ✓ **What-if scenarios:** Customer analytics allows you to test “what-if” scenarios by looking at past customer data and estimating how future data may change based on manipulating things like product features, prices, messaging, or some combination of those elements.
- ✓ **Customer experience:** While customer analytics often involves the hard numbers of transactional data, sales, and profitability, it also involves understanding the customer's experience with a product or service.

Measuring the customer experience involves collecting metrics for the entire journey a customer has with a brand or organization — including awareness, purchasing, and long-term usage. This involves collecting a mix of metrics about behaviors and attitudes.

Customer analytics includes the metrics for the customer experience. It's as much about how the customer uses a product as it is about what goes into the product.