

The Enterprise Guide to

The B2B Data Revolution

How innovations in data technology are leading enterprise companies to new customers, faster.

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What To Expect From This Book

This guide signals the end of the status quo.

We're talking about the end of guesswork. The end of friction between sales and marketing teams, and of underperforming intelligence platforms malnourished by low-quality data.

The end, most of all, of decisions based on incomplete or inaccurate business insights.

At ZoomInfo, we're focused on offering an alternative. Each month, our AI-driven B2B platform works on behalf of our customers to turn 1.8 billion unstructured text signals into structured machine indicators, leading to exceptionally well-performing go-to-market strategies that target prospects with laser precision. As a result, our enterprise customers can identify target accounts more easily and with greater success than their competition. That means more deals, faster.

Over the coming pages, we'll introduce the five core technologies at the heart of this platform, and we'll explain how they work together to answer some of the most urgent questions facing enterprise sales and marketing teams today.

- How can we find more qualified accounts in our total addressable market?
[Massive-scale web crawling and data extraction \(Page 9\)](#)
- How can our platform intelligently structure and interpret all of that B2B data?
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- How can we gain a deeper understanding of our potential customers and their relationships?
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- How can we extract meaningful, tailored insights from our B2B data?
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Read on to discover what ZoomInfo is doing to help your enterprise company take advantage of these innovations.



Introduction

When Alan Turing introduced his famous test in 1950, he presupposed a world in which the gap between machine and human intelligence had shrunk to almost nothing.

In some ways, we live in that world today. Our machines can operate cars, like Tesla's self-driving vehicles. They can mimic human intuition, like Google's DeepMind project. They can even cook our meals, like IBM's Chef Watson, capable of developing recipes and inventing new flavours.

But in the world of B2B sales and marketing, machine intelligence hasn't caught up with the demands of global business. The reason why? Bad data.

Tesla, Google, IBM: their machines are successful because they've been trained using clean, well-structured data. Could you say the same about your sales and marketing intelligence platform?

Probably not.

We've all gotten used to a low standard of data quality in B2B. Some companies address the problem with hands-on data cleansing, an expensive undertaking that ignores an important question: how can we improve the quality of B2B data at its source?

You're looking at the answer.

This guide will begin by examining three significant consequences of poor data quality, and will end with a radical proposition: the days of suffering those consequences are over. New innovations are transforming the way we integrate machine learning and data science into business. Over the next few pages, we'll show you how.



Chapter One

Your Data Is Ugly

Why your data strategy is ineffective

Bad Matching

What does bad matching look like?

Something incredible happened in a Dutch hospital in 1931: two babies, born the same day, went home with the wrong parents. Through hospital error, Agnes van Vegten and Lenie van Duyn had been switched at birth. Twenty years later, when the truth was discovered, a courtroom battle ensued as the affected families tried undo a terrible matching error.

When outdated matching guides our decisions rather than a robust system aimed at clear and measured action, the consequences can be severe.

Admittedly, poor matching in a sales and marketing scenario does not upend lives. But as in the case of babies switched at birth, it does have tremendous potential for negative outcomes. Traditional fuzzy matching errors can erode trust both within your organization and between your organization and its target customers. It's a serious problem. And it's chronic in most organizations today.

Why should you care?

When a company buys data from assorted vendors, answering even basic questions can be difficult. How many companies are in the database? What does this company do, or that one? How are they different from each other?

In the other words, the database can become junky, and fast. Mistakes—big ones—start to happen. Even if your database is full of leads who might make good customers, the consequences of fuzzy matching will quickly catch up with you. Because it doesn't matter how healthy or smart or cute or that baby is—if it's not your baby, bringing it home is a terrible mistake.

Many companies try to prevent these consequences by cleaning their data with a human workforce. But manual clean-up efforts are expensive, time-consuming, and rarely effective. To defend against the effects of bad matching, companies need to consider where their data comes from and what operations are in place at its source to ensure accurate matching.



The Consequences of Bad Matching

- Lost time chasing bad leads
- Misinformed sales calls
- Poor reputation with target accounts, leading to little or no engagement
- Strained relationships between sales and marketing
- Diminished ROI on marketing automation and CRM technologies

“

You don't seem to know much about my company. Please don't call again.”

Potential Customer

“

I can't trust our marketers. They send me down dead-ends with bad information.

Sales Rep



Coverage vs. Accuracy

What does the “coverage vs. accuracy” dilemma look like?

The rise of dating apps has led to a paradox for those seeking romantic relationships. It's easy to find thousands of potential partners, but harder to know which ones are the real deal. No one's fact-checking people's profile photos, or their age, or whether they really do love long walks on the beach. You get a lot of options, but not necessarily a lot of quality.

For many data buyers, the forced choice between data accuracy and breadth of coverage is a daily dilemma, and it has more at stake than a lonely heart.

Why should you care?

Traditional data vendors can only deliver on the promise of high accuracy by trading off coverage, or vice versa. You can buy a small but reasonably accurate list; likewise, a large but junky list. But a large list with high accuracy? That's difficult to come by.

Like bad matching, poor coverage hurts business outcomes by limiting your company's visibility into a target market.

Lack of Depth

What does a lack of depth look like?

Humans once believed the earth was flat, because the only available data was a long look at the horizon. Likewise, we used to think that handwashing was irrelevant to the spread of disease, and that tobacco offered health benefits.

These conclusions demonstrate the cost of shallow data. Better medical instrumentation and documentation ended our harmful ideas about health, while astronomical discoveries dealt with the whole “flat earth” thing. In other words, previous generations weren't dumber; they just lacked the data they needed for a deeper, more nuanced analysis of the world around them.

The same is true for B2B sales and marketing teams.

Why should you care?

Consider a company with a service priced for customers above a certain revenue benchmark. Although no one can access the private financial records of prospects, this company can build an accurate picture of their target market through well-informed inference. A prospect's location, the average level of education among its employees, the components of its current tech stack—these aggregate details will help to identify which companies align with their customer model, and which don't. That's why a depth of data matters. It helps tell a more complete story, unearth prospects, and increase pipeline.

But achieving such depth and sophistication of analysis can be difficult without a powerful boost from automated and sophisticated technology, which we'll focus on in the next section.



Chapter Two

The Way Forward

Five innovations about to transform how enterprises use B2B data

Massive-Scale Web Crawling and Data Extraction

What is it?

You've decided to become an astronaut.

One of the first things you'll need to do is gather every useful resource. You build yourself a library, stocked with textbooks on every subject related to space travel—astrophysics, engineering, math. You admire your new collection of books, knowing that it contains everything you need to succeed.

This, in principle, is what web crawling and data extraction is all about. Using specific criteria (“subjects related to space travel”), web crawling is about identifying relevant information (tracking down the books) while data extraction is about aggregating that information in one place (adding those books to your library).

New innovations for B2B sales and marketing

Web-crawling and extraction techniques have become much more sophisticated in recent years. They take place automatically, in the background of other operations, providing intelligently structured insights. And when deployed correctly by a sophisticated platform, these techniques are an important step in helping a company build its version of the astronaut's library.

But extracting data is only useful if you're able to interpret it. In other words, your textbook does you no good until you develop a fluency in the language of astrophysics—otherwise, the density of information will quickly eclipse your ability to keep up.

That's where Natural Language Processing is crucial.



B2B Natural Language Processing

What is it?

Natural Language Processing (NLP) comes into play when you read those textbooks in your library. You need to understand the language they're using—that is, the language of astrophysics, or aerospace engineering, or linear algebra. A basic glossary will help you at first. As you study over time, your fluency will improve until it becomes second nature.

In technological applications, NLP is the accepted norm. Just think of Siri. In order to understand everyday human language, Siri relies on a deep neural network that learns and grows more flexible over time. That's how the computer in your phone is able to understand human speech, regardless of accent or precise wording. You can ask "Is there rain coming?" or "Do I need an umbrella?" or even "What's it like outside?", and Siri knows it all amounts to the same thing: you want the weather forecast. That's NLP at work.

Whatever its application, NLP is essential to properly interpreting data—the data in a textbook, in a human voice, or, in the case of B2B, the data of the business world.

New innovations for B2B sales and marketing

Industry classification systems are incredibly nuanced. This creates a significant challenge for sales and marketing teams trying to target a particular type of customer concealed within a deluge of unsorted data. As just one example, the North American Industry Classification System (NAICS) has more than one thousand unique industry codes, identifying companies at a granular level (for example, it distinguishes "meat market" from "fish and seafood market").

Having a platform sophisticated enough to look at a company and correctly "read" and interpret its taxonomy—all on an automated basis—could mean the difference between a successful sales call and a lost opportunity.



Machines Trained by B2B Experts

What is it?

Now that you've built your library and learned the language of those textbooks, you need an expert to test your knowledge. In other words, it's exam time. That's what machine training is about: assessing how well the machine has learned what you need it to know.

Consider the self-driving car. On average, a human brain makes two hundred critical decisions per mile of driving, nearly all of them instant and intuitive. But machines don't have intuition. Each one of those decisions is based on precise training and testing, overseen by an expert. Like a professor in a college, that expert tests and re-tests the machine to ensure that it's smart enough to make appropriate judgments in unstable conditions.

In the B2B world, this human-in-the-loop training approach creates an environment of continuous learning and course-correction for machine intelligence, leading to more accurate results.

New innovations for B2B sales and marketing

For enterprises, speed and scale are critical. They need to find the right prospects, right now, over and over again.

That's where machines excel; they can work faster than the human mind, and on a much larger canvas. On the other hand, machines aren't skilled at open-ended or subjective tasks, like interpreting a prospect's purchase history. That's why a "hybrid mind," one that pairs machine learning with human expertise, is important for sales and marketing teams.

That hybrid mind ensures that machines deployed for B2B intelligence are operating correctly and offering an accurate point of view on target accounts. While the machine interprets millions of points of data, the human expert randomly tests that interpretation and re-trains the machine as needed. Is it miscategorizing a criminal law firm as a firm specializing in divorce law? Repeated over millions of data points, mistakes like this can escalate into catastrophe.

The intervention of B2B experts helps prevent these mistakes. The result is an intelligent machine, trained and re-trained and constantly improving, smart enough to guide a sales and marketing team with laser precision.



Company Graph

What is it?

On LinkedIn, you're at the centre of your own highly personalized, complex network, built from hundreds of intersecting professional connections. Each connection is contextualized, based on your movement through the world; you worked with this person, did business with that one, and so on. Repeated for every user on the platform, these highly personalized professional graphs tell a very complex, very nuanced, and very valuable story—so valuable that, in 2016, Microsoft paid \$26 billion to own it.

We're all used to this concept of large-scale social graphing. A company graph is the same concept applied to business data, and it offers significant advantages to sales and marketing teams.

New innovations for B2B sales and marketing

A company graph reveals a precise, personalized network of potential customers. The best of this graphing methodology draws from the world's most complete business database, ensuring that you aren't missing any potential leads in your market.

Company graphs become particularly useful in concert with machine learning, discussed next. Companies in your total addressable market are automatically classified based on a tailored set of criteria; if you're looking for potential customers in the transportation industry, for example, your personalized company graph can surface all relevant companies from its massive repository, and show you how they are related to one another. Through machine learning, this classification is constantly improving, providing your sales and marketing team with a clearer sight line into your total addressable market. As a result, they have the context they need to initiate meaningful contact with prospects.



Automated AI and Machine Learning

What is it?

Chances are, you engage with machine learning and AI every day. Your TV is a good example. When you tune into a movie on Netflix, Netflix tunes into you. It pays attention to your tastes in order to suggest content that you're likely to enjoy. In other words, it's a machine, and it's learning.

For this to work, Netflix relies on several complex elements, including data input and data modeling. The data input comes from you. When you watch a movie, you give Netflix information about your tastes. Netflix uses data modeling to understand and classify what you're watching. In this way, the machine can make intelligent recommendations based on your data. Those recommendations will improve over time; the more movies you watch, the more sophisticated the modeling. Better modeling leads to better recommendations, tailored to your preferences.

This cycle of constant improvement is as true in the B2B data world as it is in your television, but with one difference: in B2B, modeling is a slow and manual process. Imagine if each Netflix recommendation took months—and an army of human analysts—to appear.

This scenario, unthinkable in our consumer products, is accepted as commonplace in B2B. Until now.

New innovations for B2B sales and marketing

Here's a typical scenario: your company purchases data from a third-party vendor, then a data science team spends months building models. The data itself is inert; without the intervention of this team, it doesn't change. It's simply there, like jigsaw pieces, waiting for a human mind to piece it together.

Now imagine if the data was processed by an intelligent and automated platform. Just as Netflix trains itself based on your data input (the movies you watch), this platform trains itself based on your company's data input (the customers who have closed in the past, for example). Now you're no longer waiting months for a human team to build models; instead, the automated machine is deploying and running multiple intelligent models within weeks. The data is "alive," adapting and evolving based on your use case.

And just as Netflix pulls recommendations from millions of hours of content, the platform pulls leads from the most comprehensive and up-to-date B2B data repository available.

This means that the jigsaw puzzle isn't just complete; suddenly, it's three-dimensional, and you can manipulate it and adapt it into any shape you want. The result is much less time invested, with tailored and comprehensive results driven by data from outside your own internal (and therefore limited) database.



Chapter Three

Data-as-a-Service from ZoomInfo

The data revolution is here

Built for smarter sales and marketing

ZoomInfo is the only company in the B2B space using all five of these technical innovations to help enterprise companies see into their target market with exceptional precision.

Our Data as a Service (DaaS) offering multiplies the expertise of a dedicated B2B success team with the processing power of the world's best data platform.

Inside our technology

Our platform uses custom natural language processing algorithms and text mining techniques to uncover and structure millions of machine learning indicators, which in turn nourish deep learning models that predict basic firmographics such as revenue, employee size, and industry.

The data behind these insights is impeccable, in part because we employ a workforce of over 400 people who oversee our machine learning efforts and help the machine predict attributes with consistency and integrity.

As a result, our customers' data is backed by better matching, higher coverage and deeper insights, leading to precise targeting and GTM strategies that simply work. That means bigger deal sizes, more often.

- Our platform tracks over **165M+** company locations
- **> 140M+** Contacts with over **100M+** verified emails, **72M+** direct dials
- **> 1.6B+** records Updated Everyday



About ZoomInfo

ZoomInfo (NASDAQ: ZI) is a leader in modern go-to-market software, data, and intelligence for more than 20,000 companies worldwide. The ZoomInfo platform empowers business-to-business sales, marketing, and recruiting professionals to hit their number by pairing best-in-class technology with [unrivaled data coverage](#), accuracy, and depth of company and contact information. With [integrations](#) embedded into workflows and technology stacks, including the leading CRM, [Sales Engagement](#), Marketing Automation, and Talent Management applications, ZoomInfo drives more predictable, accelerated, and sustainable growth for its customers. ZoomInfo emphasizes [GDPR and CCPA compliance](#). In addition to creating the industry's first proactive notice program, the company is a registered data broker with the states of California and Vermont. Read about ZoomInfo's commitment to [compliance, privacy, and security](#). For more information about our leading go-to-market software, data, and intelligence, and how they help sales, marketing, and recruiting professionals, please visit www.zoominfo.com.

