

Crunchy  
questions for  
sticky issues  
Using analytics  
to outsmart  
competitors



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# Cut to the core of analytics excellence

Many business leaders already know the inherent value of analytics insights for improving operations and driving smarter decisions. But amid all that potential, companies continue struggling to build truly fact-based cultures. They talk a good game, but when you look deep inside their organizations, there's not much under the hood when it comes to analytics.

Sure, you'll find pockets of analytics innovation within some functions, but what you mostly see is an army of spreadsheets marching inexorably toward the edge of information overload.

Why is that? The benefits of analytics seem clear, and many executives can rattle off a list of potential gains. Cost isn't the issue. The best analytics investments are self-funding. And there's no lack of affordable technology.

So what's missing? Is there some secret sauce that leaders can cook up without boiling the entire ocean? You bet there is.

If you're interested in taking advantage of advanced analytics to produce business results in less than a hundred days, this book is for you. Just be prepared to peel away the hype to see analytics in all its grubby, geeky, potentially revolutionary glory.

**Beyond debate**

This book is grounded in some basics about business analytics that readers should already be familiar with.

- Analytics insights can fundamentally change how businesses operate and make decisions.
- Analytics can give you a new understanding of performance, risk, markets, and opportunities.
- Analytics takes more than tools.
- Good analytics talent is hard to find.
- Most organizations already have some analytics capabilities in place, even if they're underused and undervalued.

**About crunchy questions**

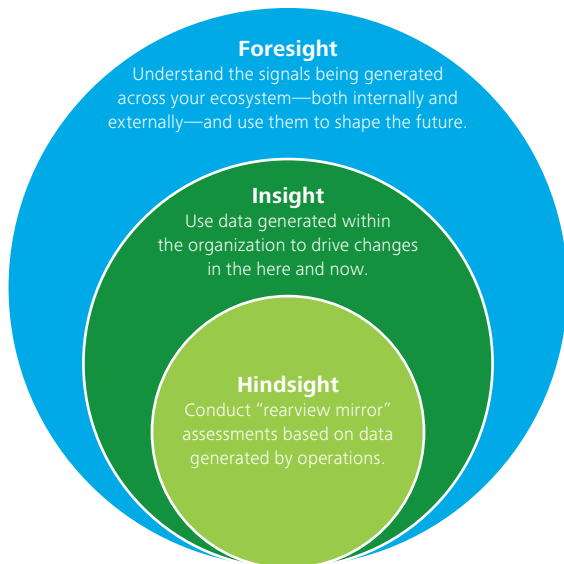
Crunchy questions are practical, detailed inquiries into tough business issues—roll-up-your-sleeves questions for people who don't have time to mess around with fluff. Crunchy questions are designed to lay the groundwork for action.

# Table of contents

The basics.....	3
You're already ready .....	5
Listen up.....	7
Start here .....	8
If it's not heart-of-the-business, it doesn't count .....	9
Good is good enough .....	11
Yes, you'll need rocket scientists.....	12
No adoption, no value.....	14
Do you already have the technology you need?.....	16
Let down your guard (a little).....	17
What are you waiting for? .....	18

## Up and out

Analytics has quickly shifted from a heavy reliance on operational data to a mix of current internal and external signals able to shape forward-looking business decisions at a moment's notice.





# The basics

Business analytics is the practice of using data to manage information and performance—and make more effective decisions. It can apply to almost any “sticky” business issue, but most organizations tend to focus on five main areas of decision making and operations: customer, supply chain, finance, workforce, and risk.

In each of these areas, business analytics can help direct strategy and operational improvements. To do that, it integrates capabilities in data management, statistics, change management, technology, automation, and governance into a powerful agent for making for better, faster decisions.

Sound familiar? It should. Because analytics isn’t exactly new. What has changed is the speed at which decisions need to be made. Plus, the world is more complex today—businesses have to consider the entire ecosystem in which they exist, including social, economic, environmental, and political currents that would have seemed outside their purview not so long ago. That puts business analytics in the center of the action today. Meanwhile, the variety and number of signals have changed. The same old approaches to analytics just aren’t up to the job.

At its highest use, business analytics can deliver uncommon insights and breakout value. It all starts with asking crunchy questions—and ends with getting answers you can trust.

## Crunchy questions for getting started

- Who's sponsoring this work?
- Who's in charge?
- Which five analytics projects are most likely to pay for themselves in the next 100 days?
- Which problems or opportunities are most worthy of investment?
- In what specific ways will analytics contribute to your growth strategy?
- Which partners will put skin in the game?
- Do you have the analytics talent you need in house, or will you need help?
- Which employees in R&D—or whatever group is key to success—are likely to leave in the next year?

# You're already ready

Just because analytics can represent a big opportunity for your organization doesn't mean you have to go big from the beginning.

A pilot is a perfectly acceptable start—maybe even preferable—and it's often the only way to gain momentum. That said, your pilot program will operate in a bright spotlight, with a lot of people watching to see if it's something worth taking on themselves. That makes it even more important to get your early efforts right.

Here's what you should be looking for from any analytics pilot:

- It should be important enough to matter, but focused enough to manage.
- You should be able to complete the work without building new infrastructure, making major investments, or kicking off a big technology project.
- Avoid unnecessarily complex initiatives that could have far-ranging aftershocks if they don't go smoothly.
- Work with a business owner who "gets it"—not necessarily the best or the worst.

No matter what type of analytics capabilities you want to implement, make sure they address the need to deliver analytics. Cloud. Social media. Mobility. Real-time alert systems. These can each create immediate opportunities on the front lines of the business. That's where the action is today.

## Crunchy questions for signal detection

### **Customers and social media**

- What's the buzz about your company online—and how could it impact sales forecasts?
- What are analysts saying about your organization? What about customers and online influencers?
- Who are the next 1,000 customers you'll lose—and why?
- Which trade promotion programs have the highest impact on profitability?
- What factors most influence customer loyalty? Why?
- How do factors such as politics and demographics affect the price your customers are willing to pay?
- Which factors have the most adverse effects on customer satisfaction?

### **Sustainability and supply chain**

- Which facilities are using more energy than they should?
- Which suppliers are at risk of going out of business?
- What is the impact of shipping costs on pricing?
- Which locations offer the best options for setting up your next distribution center?

### **Employees and risk**

- Which new-hire characteristics best reflect your organization's risk intelligence profile?
- Which are most likely to steal from you?
- Which employees have accessed internal systems without authorization? Who's monitoring them?
- Why do high-potential employees leave your company? What would cause them to stay?

# Listen up

If you're swamped with too much information now, you ain't seen nothing yet. Because when you get to the heart of business analytics, you'll find yourself wanting access to more and different kinds of information at every turn.

Advanced analytics involves detecting and analyzing signals being broadcast within and about your organization from your entire ecosystem, regardless of whether they originate internally or externally.

For many organizations, this isn't new. On some level, they've been listening for signals from their data for years, whether from financial reports or customer feedback forums. But many would admit that at best, they've been able to zero in on only a fraction of the signals being broadcast, as if they had a radio that was only able to tune to three stations.

At the same time, the number and types of signals have been multiplying. Organizations today exist as part of an extended ecosystem—one that's constantly generating a dizzying array of signals. Voice. Email. Social media. Video. Internal. External. Identifying the right signals in the midst of this growing cacophony of data can be vexing, even for companies that have strong information management capabilities.

# Start here

While there's no single answer to the question of where to start with analytics, these areas should be on the short list for any organization.

## Where to start

Customer analytics	Supply chain	Finance	Talent	Risk
Pricing and profitability	Supplier and procurement analysis	Financial performance management	Performance management	Regulation and compliance
Customer segmentation	Supply chain optimization	Advanced forecasting	Workforce alignment	Fraud and forensics
Brand and sentiment analysis	Product profitability	Governance, risk, and compliance	Compensation and benefits	Cyber risk
				Reputational risk

# If it's not heart-of-the-business, it doesn't count

One of the toughest analytics challenges business leaders grapple with is determining where to focus first. Does it make the most sense to start in a business domain where there are already some basic analytics capabilities in place, such as finance or risk? Or is it better to start fresh in some other area, where expectations are low and opportunities are considerable?

All domains are not created equal. Knowing where and when to focus is an art unto itself. So here's a hint: Start with the list on the facing page. Time after time, these areas have been demonstrated to be the most effective places to start.



## Crunchy data questions

### Compliance

- What types of compliance problems does your organization face most frequently?
- What excuses are our people using to justify their inability to answer questions?
- What decisions are being made without the right data in hand to do it?
- Are your data retention policies legal?
- What are the real costs of complying with certain regulations? What if you don't comply?
- Does your data quality support sound decision making, rather than just balancing cash accounts?
- How will you know when your data crosses the right quality threshold?
- Will better data really matter? And if it will, are you gathering it?
- You've heard that 80 percent of something is better than 100 percent of nothing. So is your data strategy actually generating something?

### Data quality

- Who's accountable in your organization for data quality?
- Do you have common customer and vendor IDs across the organization? If not, how many IDs exist for each?
- How many different terms do you have for "x"?
- If your business is striving for perfection, have you actually measured the difference in value between "good enough" and "100 percent"?
- Is there a way to package your data so it can be marketed as a revenue stream?
- What's the sell-to/buy-from profile for your top 10 business partners?
- How valuable is the data held by your contact center? Can it offer insights on cost reduction and revenue improvement opportunities?



# Good is good enough

Your organization's data will probably never be as clean and accurate as you want it to be. But that's no excuse for punting on analytics. There are plenty of ways to work with data that would otherwise be considered inadequate. Better to start with what you have today to achieve results now rather than wait yet another year in the hopes of achieving 100 percent.

When it comes to "big" data, there are bigger issues to address. For starters, there's organizational resistance. Many individual groups don't want to give up their data to a broader effort. Some are embarrassed about the quality of their data. Others are afraid of what it might reveal. No matter what the reason, resistance can present a big obstacle.

There's also the challenge of working with new types of data. Data from such sources as video, social media, phone conversations, and mobile platforms represents a big opportunity to glean new insights. And companies and systems that only look for data from traditional sources are doomed to miss out.

Make sure you're capturing the right data first. Then worry about cleaning it up.

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*If I waited for perfection, I would never write a word.*

—Margaret Atwood, novelist and poet

# Yes, you'll need rocket scientists

For many, the mere mention of analytics brings to mind a swirl of esoteric formulas and algorithms. But that's only half the story. If we've learned anything about analytics after all these years, it's that the formulas don't mean anything unless you have people with the required business skills to understand and apply them.

That's a big change from only a few years ago, when heavy-duty modeling carried the day. Today, analytics leaders need talented people who can understand the business skills and the models. That's a tall order.

Organizations need to know what type of analytics talent they need—and they have to be ready to fight for it. Because whether you're looking for geeks who understand your business or up-and-coming leaders who "get" analytics, there's not enough talent to go around.

If you're lucky, your organization may already have some of this talent in house. But you'll likely need more.

Getting the right talent in place is only a first step. You also have to make sure they keep learning and growing as business demands for analytics evolve. Otherwise, what should be an endless supply of smart questions will eventually smolder out, and you'll be back to square one.

Some companies rotate analytics talent in and out of different parts of the business. Others create a spoke-and-hub model for analytics, practically ensuring that no matter where talent is deployed, they operate as part of an extended community, constantly learning and growing. To varying degrees, most analytics leaders rely on a network of external analytics resources as well. No matter what tools and technologies you have in place, without the right people at the wheel, these investments will languish.



# No adoption, no value

One reason analytics is back on everyone's radar is that it's easier than ever before to extend analytics capabilities throughout the organization, pushing deep into the heart of the business. It's not about restricting analytics data to a core group of engineers with "analytics" in their titles. It's about feeding the right data to customer service reps when they're on the phone. It's about showing factory floor managers real-time data on efficiency. And a lot more.

But simply pushing new data and insights to different audiences in the organization doesn't mean they'll know what to do with them, no matter how elegantly presented they are. After all, your people are accustomed to looking at the same reports day after day. That changes with the shift to business analytics. And when you replace those familiar reporting tools with something new, uncertainty and anxiety can quickly enter the picture.

That's where training and change management come in. Leadership teams, communications planning, training sessions—all can have a big role to play in determining the success (or failure) of new analytics initiatives. The most effective analytics tools are intuitive and easy to use, making it easy to underestimate the amount of change management required. But they also have a big impact on underlying processes. So don't take adoption for granted.

## Crunchy questions on adoption

### Current state

- How many spreadsheets do you review every week? Are they accurate?
- How long does it take your top sales person to price an order for your best customer? Are you able to offer a real-time, custom incentive at that moment?
- How easily can you determine the reasons for poor performance? How quickly can you identify which plant, person, or product is responsible?
- Are you able to map the aftershocks of a bad experience in a disgruntled customer's social networks?
- Do you know which of your customers are influencers?

### Visualization

- How are you planning to ease the path to adoption on tablets and PDAs?
- How will you deliver analytics-based insights to make sure they're instantly understandable? What does that look like?
- Some people are visual learners, others learn from details. How are you communicating fact-based information to both kinds of team members?

# Do you already have the technology you need?

Almost every organization is already performing some analytics functions. Compensation and benefits is one area where analytics has probably been hard at work behind the scenes in your organization for years. In fact, when it comes to technology, you may already have most of the tools you need—at least enough to get started.

You should validate that assumption by conducting an inventory of the analytics technology you already have in place—including solutions that aren't currently used for analytics purposes, but could be. Today's commercially available tools are loaded with analytics capabilities. And open source solutions offer an inexpensive alternative or complementary approach.

At the same time, your analytics team should be identifying and assessing the data that could be used to fuel an early-phase analytics initiative. Don't worry too much about the quality of the data—there are ways to work around that. The key is knowing what you have and where the shortcomings are.

You may need more technology to round out your analytics capabilities. But to demonstrate the approach, getting started can be surprisingly easy to do.

# Let down your guard (a little)

Business units and external partners are often guilty of treating business analytics as either their secret weapon or Pandora's box. In both cases, business leaders are likely to act in a guarded fashion. When information is one of the most powerful assets an organization has, that shouldn't come as a surprise. There's always some risk involved in sharing.

This is the opposite of what should happen with analytics. The insights that an organization unlocks with analytics don't respect internal or external organizational boundaries. In fact, they can help break down boundaries that often shouldn't exist in the first place, opening the door to increased collaboration. But it can take a lot of organizational muscle-flexing to make it happen.

It helps to approach this kind of collaboration as a challenge of aligning incentives. For example, consider the many organizations involved in delivering a product to your biggest customer. That customer doesn't care about the interrelationships at work behind the scenes—who fabricates what part, who makes the shipments, and so on. Similarly, who owns which information is immaterial to the customer. When someone fails, the whole ecosystem is accountable.

In that context, robust information sharing begins to look like a requirement, not an option.

# What are you waiting for?

It's easy to find a reason not to get started on analytics. But if you're looking for excuses today, they're running out fast. The technology is there. The underlying math has been there for years. And there are more delivery options than you can keep track of. That's a good thing.

This is one of those all-too-rare moments in business when you have a clear choice—at least for the time being. You can sit on the sidelines and see what pans out. If that's the course you choose, consider how that approach worked out in the past with other big technology leaps.

Or you can start getting your hands dirty, figuring out what works and what doesn't, making your way where there isn't already a clear path. Eventually, there's a good chance you'll find yourself leading the pack with that approach.

Come to think of it, maybe there really isn't a choice. Ready to get your hands dirty?



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