EARLY LAST YEAR, I REMEMBER SITTING in an editorial meeting outlining magazine topics for the upcoming issues. The one we were most excited about: data and AI.

It’s something we get a lot of interest in from our readers. So much data is being created today (in fact, more data was created in the last two years than in all of human history), but how do we turn that data into knowledge, into intelligence that we can use to shape and drive our decisions?

And there are so many uses for that data when it comes to product teams, from deciding what to build and seeing how customers use what we build to deciding whom to market to and what marketing works the most effectively. All of this can be unlocked if we harness the power of data. This is what makes this topic not merely an interest, but an imperative, for today’s product teams and business leaders.

So we got to work on the issue. And in a near–perfect example of kismet, last fall Pragmatic Institute had the opportunity to join with a company that specializes in data: The Data Incubator.

This partnership gave us an even better perspective as we put together the magazine. We were able to call on real data scientists—people well versed in data who have experienced its power firsthand—to contribute their insights to this issue.

That is why we’re so excited to present this new issue to you. But this is only the first of many pieces of ‘news’ we’re excited about. We’re also rolling out a new company name and logo, a new masthead for the magazine and some great new data science courses for business leaders and for practitioners.

I hope you enjoy this issue, and we look forward to sharing more insights on product management, product marketing and data science in the coming months and year.

Rebecca Kalogeris
Editorial Director
editor@pragmaticmarketing.com

P.S. Want to learn more about our new name, courses and partners? Check out pragmaticinstitute.com
Ninety percent of all the world’s data was generated in the last two years.

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It might seem a bit extreme, but it’s a fair question.

Every day there seems to be another AI tool available to make our jobs easier, or to do our jobs for us. It seems like only a matter of time before there will be machines and programs running everything product managers and product marketers do.

Still, while these AI programs do make work easier for product managers and marketers, it seems unlikely that they’ll take over the roles completely. At least not any time soon.

AI and machine learning have grown leaps and bounds in the last few decades. Think early expert systems that emulated the decision-making ability of a human using if-then logic to solve problems. They were often used in customer support areas:

- Is the device turned on? If not, turn it on. Did that work? If not, then …
- Does it have an IP address? If not, go to the network preferences and click on “Renew IP address.” Did that work? If not, then …
- And so on.

These systems ultimately failed commercially because buyers didn’t want the systems—they wanted the experts. Perhaps the creators should have done a little more market research. But they showed the capabilities of AI and machine learning in handling some of the more complex and expansive parts of business.

Think about your Amazon account. You make a purchase and, based on your purchase and similar purchases from other buyers, the site offers you recommendations for additional items. Amazon’s AI might not be perfect, but it does help increase the number of sales that a company makes from these recommendations. It would be significantly more difficult and exponentially more time-consuming to have live humans curating and recommending additional purchases. It would be impossible for the average human to even make sense of the amount of data Amazon’s AIs process in a matter of seconds.

So where do product management and product marketing fall into this new world? Exactly where they should be. AI is great at analyzing data and even fixing problems, but we still need a real human who understands human needs to identify the problems to be solved and the data to be analyzed. Procedures and data are only part of the solution—the part AI and machine learning can help us with. But as long as we’re still selling to humans, we’ll need humans to lead the way.

In the years to come, AI, machine learning and recommendation engines will guide customers through their journey. These tools will help product management determine which features can be removed and which must be added, based on intense market data. They’ll give product marketing insights into which problems and solutions to emphasize. But they’ll never do all the work that product managers and product marketers do on a daily basis. They can handle the science. Product management and marketing is still a craft.

Machines help us collect, understand and use data. But we’ll still need human judgment to balance needs and resources. We’ll always need human experts to understand personas and their problems. So yes, for now and for some time to come, we still need product managers and product marketers.
SCOTLAND’S CAPITAL CITY, located close to the North Sea, offers a spectacular blend of the old and the new. Its brilliant views, historic buildings and lively nightlife have made it one of the top destinations in Europe. From the heart of Old Town—a UNESCO Heritage Site—to the top of Edinburgh Castle, there’s something for everyone in Edinburgh.

**EXCITING Edinburgh**

**Museum of Edinburgh**  
edinburghmuseums.org.uk/venue/museum-edinburgh  
This bright-yellow 16th-century house showcases some of the best, weirdest and most interesting aspects of Edinburgh’s history—including the city’s most famous dog, Greyfriars Bobby, who watched over his owner’s grave for 14 years.

**Afternoon Tea at Colonnades at the Signet Library**  
thesignetlibrary.co.uk/colonnades  
Named “Edinburgh’s finest afternoon tea,” Colonnades at the Signet Library offers a delicious selection of treats and teas in a beautifully restored library in the heart of Edinburgh.

**Try Traditional Haggis and Whisky at Whiski Rooms**  
whiskirooms.co.uk  
You can’t come to Edinburgh and not try some haggis and a glass of scotch whisky—and Whiski Rooms just might be the best place for both. Make sure you check out their whisky tasting room.

**Mary King’s Close**  
realmarykingsclose.com  
Take a guided tour of Mary King’s Close—a series of hidden streets and secret spaces from the 17th century in the center of Edinburgh’s Old Town—and learn about the 400 years of history that happened there.

**The Water of Leith in Dean Village**  
introducingedinburgh.com/dean-village  
Founded more than 800 years ago, the quaint and peaceful Dean Village is a great place to relax. Take a break from the hustle and bustle of the city by walking along the Water of Leith, Edinburgh’s main river.

**Indulge at the Leith Chop House**  
chophousesteak.co.uk  
Located in the beautiful village of Leith, the Chop House offers an open-flame charcoal-grilled dining experience outside the city center in a former cork warehouse. Bring your appetite!

**Palace of Holyroodhouse**  
rct.uk/visit/palace-of-holyroodhouse  
From Mary, Queen of Scots to Bonnie Prince Charlie and beyond, royals have been connected to the Palace of Holyroodhouse for centuries. It’s still Queen Elizabeth II’s official Edinburgh residence.

**Edinburgh Castle**  
edinburghcastle.scot  
Located atop of a hill in the middle of town, Edinburgh Castle offers spectacular views of the city below along with a unique taste of history.

**Hop On/Hop Off Tour Bus**  
edinburghtour.com/edinburgh-tour  
What’s the best way to see Edinburgh Castle, Palace of Holyroodhouse, St. Cuthbert’s Church, Scottish Parliament, and more? With a pass on the Hop On/Hop Off tour bus with stops throughout the city.

**Tower Restaurant**  
tower-restaurant.com  
There’s no better way to end a day exploring the city than by eating a delicious meal with an amazing panoramic view of central Edinburgh at the Tower Restaurant.
THE MOST IMPACTFUL MARKETING TECHNOLOGY platforms make use of AI and ML algorithms to bring more efficiency, analyze large data sets and automate many of the processes that used to be done manually. Here’s a look at how AI and ML will influence the marketing landscape.

43% of millennials would consider paying a premium for a hybrid human-bot customer service channel.

30% of companies worldwide will be using AI in at least one of their sales processes by 2020.

Businesses with data-insights-driven teams will grab $1.2 trillion from their peers without that culture by 2020.

A1 will create $14 trillion of additional revenue and profitability will rise by 38% by 2035.

Of businesses worry that delaying AI implementation will leave them vulnerable to new, disruptive startups.

Netflix saved $1 billion in lost revenue in 2017 by using ML to make personalized recommendations.

Amazon leveraged automation to reduce ‘click to ship’ time by 225% or down to 15 minutes.

All statistics are referenced from Anand Thaker’s article, 9 Surprising Statistics in Marketing Artificial Intelligence Trends, originally published on MarTechAdvisor.com.
Q: How do you sunset a product?

A: That’s a great question, and a tough one. Unfortunately, there isn’t a set of rules or a clear-cut process you can follow every time you want to end-of-life or sunset a product. Because every product, company and customer base is different, it can be difficult to give a single answer to this question.

When you start thinking about sunsetting a product, you have to consider the impact on your customers and clients. Are they going to rejoice that something better is coming to replace the product they’ve been using forever? Or are they going to throw up roadblocks to keep you from completely removing the product?

You need to consider a lot of questions before deciding the best way to sunset your product. Understanding the impact to your customers and the bottom line is the best place to start. If you have a small product that you’re ready to end-of-life, and it either won’t have an impact on your business or its replacement will have a better impact on your business and customers, then the risk is low and you can move forward. If you have a larger product (as in large revenue or one that a large number of clients use on a regular basis), you’re going to have to be more strategic about how you move forward.

The lower the risk, the faster you can move with sunsetting your product. The higher the risk, the more cautious you have to be in your sunset planning.

For example, if you’re a software company that provides a product to large organizations that install it on all of their computers, you will probably get pushback when your customers suddenly have to replace all of that software on all their computers. Think of when Microsoft tried to sunset Windows XP. Sure, the newer version was better, but because so many customers had XP and it was deeply embedded into their organizations, Microsoft ended up extending the life of the product because of customer pushback.

Communicating with your customers and vendors is the next part of the end-of-life process. As soon as you’ve made the decision to move forward sunsetting a product (whether you’re replacing it or not), make sure your customers know so they can plan for the change. Providing them with information, options and an understanding of what’s changing will help smooth the transition. Based on the feedback you get early on from your customers and vendors, you may have an early opportunity to extend your support of the sunsetting product, which will help ease them through the transition.

When sunsetting a product, consider the risk to your business and customers. If there’s an acceptable risk, then you can begin sunsetting your product. If the risk is higher, you will want to sunset in stages to mitigate business risk. And always make sure you’re communicating with your customers and vendors.
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DATA IS REVOLUTIONIZING THE WORLD. IBM estimates that the world is producing 2.5 exabytes of data each day. That’s enough hard disks to cover more than six NFL football fields when laid out flat. Gartner estimates that we will be spending $232 billion on data from 2011 to 2016. According to Statista, that’s the total Amazon ($136B) and Target ($79B) combined. And McKinsey estimates there’s a talent shortage of 1.5 million data-savvy product and business managers. That’s larger than the population of San Diego.

Companies are taking advantage of the data revolution, combining big data, machine learning (ML) and artificial intelligence (AI) to find predictive and valuable patterns in their data to lead them to new products and services that people haven’t even dreamt of before. In a world where data defines so many products, data literacy is increasingly necessary for product managers.

DATA PRODUCTS ARE EVERYWHERE
In today’s data-rich world, our applications are becoming increasingly data-driven. Everything from executive business decisions to automated product recommendations have data at their heart. And we see them everywhere. Products like Alexa and Siri are leveraging AI to understand our voice commands and communicate (semi)-intelligently with users. Netflix uses its vast trove of user preferences and ML recommendation engines to provide personalized recommendations for TV shows based on what users with similar tastes and preferences like.

Facebook uses similar technology to populate its addictive newsfeed with stories from your friends that keep you hooked. Amazon employs its wealth of commercial data to offer product recommendations and targeted discounts for goods it knows you’ll want. Google uses all the data it’s harvesting from webpages, search histories and user surfing behavior to find everything from menus for local...
restaurants to scores for historical sports games.

And it’s not just digital-born companies based in Silicon Valley that are leveraging data. We’ve worked with many non-digital-born companies that are learning about the value of their data.

- Banks use their data to better price loans. Their strategies go beyond traditional FICO scores and credit histories to using more sophisticated ML techniques and novel data sources.
- Insurance companies leverage telematics data to identify dangerous-driver behavior when offering auto insurance and data from wearables or gym membership attendance records to understand exercise habits when offering life or health insurance.
- Pharma companies comb through electronic medical records to identify potentially lucrative off-label uses of their drugs.
- Telecom companies are merging store, call center, website, email and mobile data to improve digital confinement—identifying unclear digital interfaces or communications that drive users toward costly call-center or on-site interactions.

This is not just a passing fad. At its heart, the data revolution comes from three macroeconomic trends that show no signs of slowing:

1. The relentless drop in the cost of computation. This is not confined to processing (Moore’s law); it also applies to memory, hard disk and network bandwidth. This means that data is becoming increasingly cheaper to store, transfer and process, making the analysis of data feasible.
2. As technology becomes more ubiquitous, more and more data is being captured. We are collecting data when people surf the internet not only on their computers, but also on their mobiles, tablets and wearables. And with the growth of the industrial Internet of Things (IOT), we will be collecting data not just from humans, but also from machinery all over the world.
3. As more companies are embracing data and AI to be smarter and more personalized, consumers are beginning to demand it as table stakes. Data and AI are becoming competitive issues.

INCORPORATING DATA INTO PRODUCTS
Data has fundamentally altered the way product managers need to think about their products. When we consider how
measure success, new types of data to incorporate into decision-making and the strategic direction of the industry.

A CHANGE IN MINDSET AROUND DATA
Much of today’s data gold comes from what was previously “data exhaust,” collected data that’s a byproduct of other business processes. For example, programmers used to maintain web logs. These logs were kept around for a few days and not well-structured—their original purpose was primarily for programmers to comb through to debug customer complaints of bad interactions so they could find mistakes in their code. Ingenious product managers began to realize that these logs were a potential gold mine of data about their customers, telling them things such as:

- What pages are people visiting and in what order?
- Are they using the product as we intended or clicking around in new or unexpected ways?
- Can we use this data to improve our site layout, or even build a recommendation engine to personalize pages for customers?

These trailblazers began leveraging data for their products, turning what was previously considered trash into one of the most critical competitive advantages a company can have. Correctly identifying and harvesting value from data is at the heart of how product managers drive value using data.

This mindset shift isn’t happening only in Silicon Valley. Traditional legacy industries are following suit. The pharmaceutical industry is an excellent case in point. As an industry with long-established business practices and complex government regulation, it would seem like an unlikely place to find innovative approaches to data. And yet, we’ve worked with a number of pharma giants that are tackling this challenge. Traditionally, data and analytics in pharma have been geared toward passing multiple rounds of FDA clinical trials. The problem was clear: demonstrate the safety and efficacy of your treatment with long-established business practices and complex industry is an excellent case in point. As an industry following suit. The pharmaceutical

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This data wasn’t cheap to collect—the cost can run into the billions of dollars. And once the data was collected, the analysis was relatively easy. The pharmaceutical companies who are leaders in data have flipped the paradigm on its head. They’re combing through their data exhaust and those of other medical services sniffing for cheap data that might be valuable. The questions they’re posing aren’t always clear or well directed. Instead, data scientists and product managers need to understand how to leverage data science techniques to answer valuable business questions based on the data they can find.

This new way of thinking requires a massive mindset shift. Rather than seeking data to answer their questions, they’re looking for the questions to pose of their data. And the analysis is much more creative. Instead of applying the same cut-and-dried analysis prescribed by the FDA for purpose–collected data, they’re exploring novel data sources and looking for the right questions to pose that can lead to valuable products and services.

DATA-LITERATE PRODUCT MANAGERS
For product managers, this mindset shift means there’s a new set of skills to master as they become better versed in data science, machine learning and artificial intelligence. As data starts to play a fundamental role in the product, product managers face an increasing need to become data literate.

- Do you understand the difference between structured, semi–structured and unstructured data?
- How are today’s data analytics different from their forebears?
- How do product leaders go about cataloging their own data and thinking creatively about building products of their own?
- Once product leaders understand what data they have, how do they envision potential products they can deliver to quickly establish traction in a pilot and then iterate?
- And once pilots have confirmed value, how do they think about productionizing a product to make it robust?
- How do business leaders scale the impact of data across an entire organization?

No product manager would ever try to manage a mobile product without having used a smartphone. Similarly, no product manager should manage a data–driven product without understanding the fundamentals of data.

About the Author
Michael Li is the founder of The Data Incubator (now part of Pragmatic Institute), a data science training and placement firm. As a data scientist, he has worked at NASA, Foursquare and Andreessen Horowitz. Michael is a regular contributor to VentureBeat, The Next Web and Harvard Business Review. He earned a master’s degree from Cambridge and a Ph.D. from Princeton.
The worst part of marketing, as any marketer can tell you, is that there is never a “slow” time. Whether you’re a marketing assistant or a CMO, if you don’t have enough to do, you are the only one to blame. Lack of money and resources aren’t a roadblock, as long as you have time, skills and imagination. And data. Did I mention data?

A half dozen years ago, data mining was the big marketing buzzword. In marketing classes, you’d hear the example of Target outing a pregnant teenager because, based on her purchase data, the company had deduced that the girl was pregnant before she had even told her parents. A 2012 article in Forbes about the incident explained that Target had to learn how to use its newfound knowledge in a way that didn’t creep out its buyers by making them feel like they were being spied on or that Target had somehow become omniscient.

Leveraging Machine Learning
Which brings us to the marketing buzzword for 2018: artificial intelligence, or AI. AI and its fraternal twin, machine learning (ML), seem to be everywhere these days, and marketing is no exception. (However, I personally believe there are probably fewer marketers successfully using AI than those worrying that they should be.)

As a marketer working for a technology company, I can relate. Our company has abundant data about our customers that should enable us to market more intelligently to them. However, the potential of this can be overwhelming. Where do we start?

At my company, MatrixCare, our data integration experts are already busy incorporating tools like AI and machine learning into our next-generation marketing platform. MatrixCare serves the long-term, post–acute-care market (think assisted living, skilled-nursing facilities and the like). In addition to the industry’s most popular electronic healthcare records (EHR) platform for post-acute-care, we also sell marketing and referral management software to help professionals in those businesses increase their occupancy.

As the healthcare industry continues to consolidate into large, regional networks and value-based care is implemented to curb costs, this market has become highly competitive. Our software allows operators of these facilities to
pull data on which hospitals are referring seniors to their own facilities, as well as to those of their competitors. Then, using ML, it examines historical outcomes data from the facilities themselves to help predict what types of referrals would be the best fit for their services. Armed with this information, the marketing team can tailor messaging to hospitals to target the types of patient referrals that will be most likely to experience positive care outcomes, which are also those that are most profitable for the organization. This is a unique competitive advantage for MatrixCare and its customers, and provides a win-win-win-win for all involved—the hospital, the long-term care facility, the senior patient and, of course, MatrixCare.

### 3 WAYS TO MAKE AI WORK FOR YOU

Although my company understands how to use AI to help marketers in our industry, as a marketer of our software, I still struggle with how to apply AI to my own efforts. So, I turned to a local expert, Scott Litman, founder and managing partner at Minneapolis-based Equals 3, LLC, to provide some insight. Equals 3 was built on the concept of showing marketers how to leverage data in creative ways for a competitive advantage, so I asked Litman to share some observations. When it comes to AI, he explains, there are three areas that seem to be gaining the most traction among marketers:

1. **Scalable Personalization**

In the battle to capture the consumer’s attention, AI is the weapon of choice. While Pragmatic Institute considers buyer personas to be the foundation of a successful marketing program and teaches marketers the principles of building personas as part of its certification curriculum, many marketers still struggle to implement the practice. Why? It’s simple: time. Although the Pragmatic methodology is sound, it requires time to meet with customers and do win/loss evaluations. With many marketing staffs running lean, time is a precious commodity. Litman notes that the MarTech Industry Council reported that 60 percent of B2B marketers were asking for a more accurate understanding of the buyer persona.

“AI can help deliver that,” Litman explains. “Marketers can take full advantage of today’s data-rich era, including social-media footprints, client surveys and emails from customers to sales and service to analyze their audiences. Our technology can now analyze immense sets of data constantly in flux and draw detailed audience profiles explaining personality, needs and values. With the help of AI, marketers can understand how different messages resonate with specific personalities,” he adds. “That’s knowledge that can advance personalization at the scale needed to drive action and, ultimately, boost revenue.”

2. **Automating Common Workflows**

Whether responding to an RFP or reporting ROI to justify marketing expenditures, many marketers spend huge amounts of time sifting through tools and data to find and compile the information they need. For more complicated
data sets, the marketing professional often has to rely on a technical expert who may not sit in their department or rely on vendors or agencies to provide the needed information. Litman says a common frustration he hears from customers is that these inefficient processes waste time and resources. Often, by the time the information is gathered, there is little time left to strategically analyze the information or make informed decisions based on the results.

In fact, according to *Harvard Business Review*, marketing analysts spend a majority of their time (80 percent) battling with data preparation, rather than analyzing it. By leveraging AI to accomplish a key principle of product development—automating routine workflows—marketers can dig themselves out from under mountains of data and regain lost productivity.

“One of the biggest advantages of AI is how it can automate the most time-consuming tasks, greatly reducing the amount of manual work and giving more room for in-depth analytics and strategic planning,” says Litman. “In today’s world of machine learning, solutions are available where workflows can be automated around custom business processes and workflow needs. Complex reporting from multiple data sources or recurring reports are available instantly with the most updated figures—turning what used to take hours or days, into minutes. By automating these repetitive tasks, marketers gain a boost in productivity and are able to use their experience and intuition to strengthen the strategic components of reports vs. compiling data.”

3. Marketing Research (No Surprises Here!)
Brand marketers make their best decisions using a foundation of research—plus their own insights. Yet Dun & Bradstreet and Forrester Research found only 50 percent of B2B marketing and sales decisions are made based on data. “Despite the vast amount of data available and firms’ commitment to data priorities, the opportunity to use data for marketing and sales decisions remains largely untapped,” Litman says. Why? He surmises it’s because compiling research is often a painstaking, time-consuming process with data sources coming from so many different places.

“The information is spread across too many systems, and there usually isn’t a consistent format,” he explains. “Plus, many organizations silo data based on organizational structure or job function. This means that, functionally, there is a slim handful of people with the necessary access and experience to use some of the most valuable data sources.” This is where companies like Litman’s business, Equals 3, can really make a difference, he adds. “With AI, you can end up with a single knowledge management portal for research across first-party and third-party data. Systems like Lucy (the Equal 3 solution) can read and understand a variety of data formats and comb through more data in a minute than an entire marketing team could sift through in a year—unlocking, democratizing and making it instantly accessible to those who need it.”

So, there’s the future of marketing, folks: an organization where any team member can immediately access information from across the entirety of the enterprise, as well as publicly available or subscription data, to make quicker, more informed decisions. And it’s available today to those who embrace it. This is the vision my company is realizing in the health care technology space because we know it’s the only way our customers will outperform their peers. Like any new technology, there’s a learning curve involved for those wanting to leverage AI, but it’s exciting to see that companies like Equals 3 are there to help make the vision a reality for forward-thinking marketers.

ABOUT THE AUTHOR
Mary Beth Mohn is vice president of marketing communications at MatrixCare. She is focused on marketing strategy, growth and market leadership. Mary Beth has more than 20 years of marketing experience, most recently leading the global strategic marketing function for Pearson VUE. She has presented at a number of conferences on topics including stakeholder communications, social media and marketing.
IN THE HBO SERIES SILICON VALLEY, one of the characters wants to develop an artificially intelligent application to identify food photos taken with your smartphone. To get started, the developer created a more modest application called Not Hotdog. His AI product could only tell if a food was not a hot dog.

He created the application the way that most AI products are developed. With access to huge numbers of pictures of hot dogs on the internet, they used machine learning—inputting data into a machine and allowing it to look for matching patterns.

In this case, the developers fed hundreds of thousands of pictures of hot dogs into the machine. The machine would turn the images into binary patterns and “learn” what it means to be a hot dog.

The more pictures of hot dogs it sees, the smarter it gets at identifying something new. That means it will still be able to make the identification even if it sees something it hasn’t seen before—like a Chicago-style hot dog or the vile Cincinnati hot dog. In this sense, it’s learning.

In machine learning (ML) language, this is a standard supervised ML data-classification problem. It’s supervised because the developer started with a “training set” of thousands of images that the developer “labeled” as containing hot dogs. It was a classification problem because the developer was trying to classify two groups of images: one group that contained hot dogs and one that did not.

In the end, the investors in the application weren’t impressed. They wanted a product that could identify all foods. All they got was something that could show you when something was not a hot dog.

These investors didn’t recognize that creating an application like that would have taken years of effort with huge amounts of data. The developer had to begin somewhere, so Not Hotdog was a good place to start. But it seemed silly and useless to the investors, so they passed.

THE NOT HOTDOG RULE
The developer was still able to turn around and sell it to Instagram for several million dollars. It turned out to be a more accurate way to detect if men were posting the wrong kind of selfies.

There’s a lesson here for AI product managers and marketing specialists. It’s not just about learning AI technology and the terms. Instead, you have to change the way you think about delivering products. Think of it as the Not Hotdog Rule.

The Not Hotdog Rule is that the road to interesting AI products is often paved with the stepping stones of silly or useless products.

There was no way the Not Hotdog developer knew that this would be the fate of his ML product. What he created was silly and useless, but in the end, it evolved into something extremely valuable. There was no way he could see this as a stepping stone to Instagram. It was only visible once he got further down the path. The Not Hotdog Rule isn’t just limited to fictional examples.

Consider:

• The Google Brain project was focused on identifying cats from millions of photos on the internet. In a sense, it was an AI “not cats” product.
• The DeepMind project started by having a deep neural network teach itself how to play decades-old Atari 2600 games.

• Researchers at Microsoft taught an ML neural network how to identify humor in New Yorker cartoons.

Each of these AI “products” would send shivers down the spine of even the most open-minded product manager. Yet top AI companies like Microsoft and Google invest millions into their development.

They do this because they recognize that innovation isn’t a straight line. That developing products with ML is more like science than manufacturing. That sometimes the most brilliant ideas are built on a mountain of silly or useless stepping stones. You need a lot of “not products” on the way to discovery.

These ideas have the potential to become a step to something more valuable. The challenge with this type of discovery is that you don’t see all the stepping stones until you’re further down the path. If you look at every step as a “product,” you’re going to miss out on the discoveries you need to develop something really valuable.

Manufacturing still heavily influences most product management. There’s a lot of emphasis on planning, requirements, forecasting and lifecycle management. This type of mindset makes it really difficult to develop these AI products. It assumes that each block stacks on top of the other in a linear and predictable way. Machine learning products don’t usually follow this straight line, though.

I once worked for a credit card–processing organization that was using ML to come up with targeted promotions. The model was not much of an improvement at delivering promotions. But the team discovered that it was excellent at predicting when a customer might have trouble paying his bill. They used this model to develop a completely new product that helped credit card companies take proactive steps to make sure customers were spending wisely.

If the company had focused solely on its objective of delivering promotions, it would have missed the opportunity to develop a new product. In a sense, the promotions were a stepping stone to this new product. But the path to this new product only became visible when they looked backward at the previous steps. Their “not” product ended up being much more valuable as a way to identify distressed customers.

A SCIENTIFIC-METHOD MINDSET
While this mindset is uncommon in most organizations, it’s not that unusual in scientific fields. In many scientific fields, you might have discoveries that aren’t apparently valuable that become part of a larger breakthrough. This is all part of the scientific method.

The scientific method starts with a question, typically called a hypothesis. Then you have to use empirical evidence to try to prove (or disprove) the hypothesis. That’s why you see scientists running several small experiments. They might use the results from these experiments to create evidence for or against their hypothesis. Or they might use the results to ask an entirely different question.
In the past two decades, software developers have embraced this mindset when delivering products. One of the most popular is the scrum framework. It encourages your team to inspect and adapt and work on short-term goals instead of long-term objectives. You don’t want your team focused on long-term objectives at the expense of short-term discoveries.

Machine learning products push this challenge even further. That’s why, like scrum, it makes sense to rethink some of the key roles and processes that you use to deliver products.

Organizations can get a lot of value from working in smaller teams that embrace a more scientific mindset. I’ve tried a few different approaches, but what I found is that having small teams with well-defined roles leads to the best discoveries.

The ideal team has three people:

- **A data analyst** to crunch the data and use machine learning tools to turn out reports and compelling visualizations
- **A knowledge explorer** to come up with interesting questions. They can help the team come up with small products that might not have immediate value, but could lead to further discovery
- **A product manager** who communicates these discoveries to the rest of the organization and solicits feedback

This team could work like an engine of discovery, churning out smaller “not” products so that your organization has enough stepping stones to create paths to something more valuable.

**STUMBLING UPON IDEAS**

Establishing the team is only the first step. The real challenge is allowing them to explore your data in a way that might deliver small, useless products, to let them make their own Not Hotdogs.

That might seem counterintuitive. Most organizations strive to exceed their customers’ expectations. They come up with products that have clear objectives and then work to deliver those objectives. That approach works well if you are delivering running shoes or home appliances. But when you start working with AI products, this mindset starts to get in the way.

The reality is that your small teams will learn a lot more about your data and your customers if you remove these objectives and expectations. They will get a sense of what AI tools work the best with your data. They will use machine learning to stumble upon insights and meander into valuable products.

You won’t be able to plan out your prototypes because, in a sense, you need to build your prototypes to figure out what it is you need to build a valuable product. With enough Not Hotdogs, you’ll increase the chances that you can build on them or combine them in new and unpredictable ways.

To get real value from your AI products, you have to let go of the idea that everything your team produces should be valuable. To paraphrase Jedi Master Yoda, you have to “unlearn what you have learned” about product management. If you focus on your objectives, you might miss out on your best discoveries.

So don’t think of artificial intelligence and machine learning as new types of technology to use in your products. Instead, rethink your mindset around what it means to deliver products. Let the teams find the Not Hotdogs in your organization. In the end, it might be what you’re not looking for that ends up being the next big thing.

**ABOUT THE AUTHOR**

Doug Rose teaches courses at the University of Chicago and is the author of *Artificial Intelligence for Business and Data Science: Create Teams That Ask the Right Questions and Deliver Real Value*. A frequent author on LinkedIn Learning, he consults and trains for clients including Genentech, Cox Automotive, Cardlytics and Paychex. You can subscribe to his free weekly e-newsletter at http://doug.ai/signup.
RESULTS-BASED LEADERS RELY ON HAVING the right information at the right time in order to support operational decision-making. That’s why decision-makers consider business intelligence their top technology priority. They recognize the instrumental role data plays in creating value and see information as the lifeblood of the organization. They then use actionable insights to confidently and consistently lead by delivering results that count.

The business intelligence (BI) and data science industries have spent the last couple decades making data access easier, analytic capability more comprehensive and platforms more scalable. Yet, despite pouring billions of dollars into BI initiatives, executives often come up empty-handed when they reach for the information they need to make well-informed decisions. Executives fail to fully capitalize on BI’s promise of turning actionable insights into real business value when BI efforts aren’t planned or executed effectively. These problems are further compounded as companies move to adopt more sophisticated data science and AI. To achieve the results that leaders are looking for, organizations must create a coherent BI strategy that aligns data collection and analytics with the general business strategy.

Our experience shows that by focusing on four actionable steps, or imperatives, we can empower business leaders to adequately address planning and execution challenges to build a decision-support competency that works.

STEP 1: UNIFY
What we believe influences how we behave, and unifying your organization begins with aligning many unique and often divergent perspectives across different business divisions on business intelligence and analytics. Senior leaders across an organization must collaborate efficiently for BI to be successful.

All too often, requests for information from the business go unanswered, as different siloed departments trip over themselves to coordinate interdepartmental cooperation. Technical nuances around data and data wrangling are often misunderstood and miscommunicated because practitioners routinely fail to understand key business requirements. Business leaders need to look for data science candidates with keen technical, analytic and business acumen to unify their BI efforts between technical and non-technical parts of the business.

Business intelligence is a business initiative, not a tech project. It’s an ongoing effort across an entire organization to improve its decision-making ability to create and maximize value. There is no finish line. Adopting this attitude across every business division in your organization is a prerequisite for effective collaboration and a necessity for creating the kind of cross-functional alignment needed for BI success.

STEP 2: SIMPLIFY
Complexity is wreaking havoc on businesses and making it increasingly difficult for decision-makers to create value. Analytics works best when the process of moving from great idea to actionable insight is fast, focused and uncomplicated.

To simplify your BI efforts, start by building key alliances with critical stakeholders in different lines
of business within your organization. Now more than ever, CEOs rely on CIOs and CDOs to drive an organization’s value-creation agenda, and that makes effective collaboration between business and IT absolutely critical to BI success. The days of an ivory-towered BI detached from real business operations are over. It is vital that business leaders work overtime to bridge the all-too-common communication, trust and understanding gaps.

Then, secure executive buy-in and the financial resources you need for your efforts by building your capability one incremental step at a time and demonstrating real value every step of the way. When building your BI capability, always start with the existing technology you already have. Most organizations have already made significant investments in tools and infrastructure and have built important intellectual capital that only comes with experience and time. Prove that it can’t or won’t work before requesting additional funds for new technology.

Finally, when it comes to providing decision-makers with the information they need to do their jobs, minimizing time-to-results is critical. This means striking the right balance between governing and enabling the business to perform without hindering innovation and creativity.

**STEP 3: AMPLIFY**

Skeptics and naysayers exist in every organization. They prefer the status quo, resist change, and make comments like, “We’ve been down this road before,” and “I’ll believe it when I see it.” At best, they’re stubborn demanders of proof willing to believe only when presented with concrete results. At worst, they’re obstructionists—preventing BI initiatives from realizing their full potential.

As BI evolves from traditional reporting and descriptive analytics toward data science and AI, many practitioners fear that new capabilities will make their skill sets obsolete. Fighting new initiatives is, perhaps, a natural preservation instinct. The prevalence of naysayers may also be symptomatic of cultural biases in the institution. Deloitte refers to it as the “inertia of good intentions”—personal behavior created by institutional routines, obligations and pressures that actually hold many back (unsuspectingly) from delivering the kind of value their organizations need. Left unattended, the culture of most organizations can marginalize BI initiatives to the point of limited and unacceptable return.

You can avoid the negative impact of skeptics and naysayers as well as a culture of mistrust by establishing organizational awareness and building excitement around BI, analytics and data science initiatives. To amplify means to evangelize.

For instance, large enterprises often create a Data Science Competency Center or AI Center of Excellence, which helps lead the effort to modernize analytics. These evangelists define the data science and AI practices for the firm and are responsible for elevating the general analytical skill level of the entire organization. Fortune 500 Data Science Centers of Excellence are hosting in-depth trainings in data and AI to help bridge the skills gap between the advanced data science practitioners of their organizations and the typical rank-and-file analysts.

**STEP 4: QUALIFY**

Business intelligence is a journey—a process of continuous improvement meant to adapt and evolve so that business leaders can give intelligent responses to an ever-changing and dynamic business environment. After all, what decision-makers need to monitor and evaluate the business today will change tomorrow. The only way for a business to keep pace is for its reporting and analytics capabilities to keep pace as well.

Today, few firms qualify success properly. They don’t proactively monitor and measure BI performance against end-user expectations and real business outcomes, so they can’t effectively evolve.

Ensure that you focus adequate attention on active monitoring, evaluation and adjustment of your organization’s BI capabilities so they’re always aligned with the business’ needs and always responsive to stakeholder expectations.

As companies are looking toward growing their BI, analytics and data science departments, management is demanding results. All too often, analytics projects fall short because leaders fail to understand the key elements of a successful analytics strategy while creating one. In order to plan and execute successful BI efforts, leaders in this area must adopt these imperatives. By focusing your organization’s BI initiative around simplifying, unifying, amplifying and qualifying business intelligence within the whole organization, you’ll be able to make smarter business decisions, deliver successful results and keep your firm ahead of the competition.

**About the Authors**

Greg Steffine leads the Business Intelligence & Analytics Competency Center for KeyBank, one of the nation’s largest bank-based financial services companies. He is the author of the award-winning book Hyper: Changing the Way You Think About, Plan, and Execute Business Intelligence for Real Results, Real Fast! Greg’s new book on self-service analytics, Think Fast!, was just released.

Michael Li is the founder of The Data Incubator (now part of Pragmatic Institute), a data science training and placement firm. As a data scientist, he has worked at NASA, Foursquare and Andreessen Horowitz. He is a regular contributor to VentureBeat, The Next Web, and Harvard Business Review. Michael earned a master’s degree from Cambridge and a Ph.D. from Princeton.
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In the business world, if there’s a simple way to do things, there’s also likely a software application that will complicate it. Are you reporting expenses? Enter each line item one by one, categorize and tag it, provide justification and other context, submit it for approval, sign the receipt, scan it and email it to accounting with the expense report number in the subject line. Oh, you forgot to also write the expense report number on the actual receipt before sending it? Well, scan it again and issue a correction. Sound familiar? Good thing you’re not being paid to do your actual job.

This is a prime example of software-as-a-barrier (SaaB), a term coined by Matt Wallach, co-founder and president of Veeva Systems. SaaB is a phenomenon wherein technology goes from an enabler of the business to an obstacle. It complicates ordinary business functions and impedes users’ productivity.

“SaaB makes routine business tasks and
processes more difficult because of technology that doesn’t work well ... It complicates, rather than simplifies,” Wallach says. “When software doesn’t work as intended, the business rejects it and people don’t use it.”

And if users are unable to reject it—if they are wholly dependent on SaaB for core business processes—the company inevitably suffers from productivity loss and lower employee morale, not to mention plenty of hallway cynicism. Not exactly a winning combination.

**Getting Technology Out of the Way**

It’s easy to dismiss SaaB as rooted in heavy IT-footprint legacy systems. But that’s not necessarily the case. When new software is introduced to the organization, business users tend to roll their eyes and groan at yet another system that will encumber them. Experience has taught them that the system may have been designed with their goals in mind, but no thought has been given to the user experience. Chances are that during the product search, the buying group prioritized price and other vendor requirements over user experience.

But the goal of business users is not to use software to get the job done. Their goal is to get the job done, period. Software is simply an enabler for them. If they can get the job done effectively without software, they will. This important point is often lost on product teams.

As a product leader, your goal should be to build software that is so simple and intuitive that users don’t even think about it as they do their jobs. Consider your Amazon shopping experience. If you need a new item, you simply pull up the app on your phone, search for the item you want, click the “Buy now with 1-Click” button and voilà, it arrives in two days. If you already know what you’re looking for, the entire process takes seconds. If you don’t know what you’re looking for, your effort is dedicated to the actual task at hand—the act of shopping—rather than fumbling through the process. You never actually think about the fact that you’re using a sophisticated software app. The technology completely fades into the background, where it belongs.

This is not to suggest that all corporate software can or even should be as simple as the Amazon experience. Business tasks are typically much more complex than online consumer shopping. But there is a reason so many company processes are still tracked and managed using spreadsheets: They’re easy to use. After more than a decade of smartphone usage, business users have become accustomed to more intuitive consumer experiences. Now, they’re asking, “Why on earth are we still putting up with bad software at work?” They want, even demand, an Amazon-like experience where they never even have to think about the technology or the process.

**Getting to Software-as-an-Enabler**

Whether we realize it or not, we’ve entered the era of software-as-an-enabler. Examples of software that has moved past SaaB includes Workday for HR, Spoonfed for catering management, Slack for collaboration and, at least in my view, Veeva for, well, everything it has touched so far. And there are plenty more. What do leading business software systems have in common?

1. **Ride the Cloud 🌈**

   The most innovative and beloved software companies built in the past decade have all been cloud-based. That’s not a coincidence. Not only can they benefit from more nimble software development, they can also leverage cross- and even trans-industry experiences. I am admittedly biased, but unless we consider niche applications, I can’t foresee many examples of custom, on-premises software that will be better than their commercial cloud-based competitors in the coming decade. Perhaps more than anyone, Salesforce pioneered the shift to the cloud. There is a reason major legacy software companies like Oracle are completely reorienting their strategy and following suit.

2. **Remove Friction 🛠️**

   SaaB is essentially another word for friction. HubSpot has grown from nothing into a $400 million machine in just over a decade by building products that remove friction for its users. The top thing HubSpot’s customers say they love about the company is simplicity. It’s been so successful for them that CEO Bill Halligan is expanding the company’s focus on lowering friction from the product interface to the entire customer experience. “Friction is the enemy,” he says. “Our entire customer experience has to be 10 times lower than the competition’s.”
All the strategy in the world will not help you if your organization does not wholeheartedly embrace a culture of user-centricity.

3 Build a User-Centric Mindset
As the saying goes, culture eats strategy for lunch. For product leaders, this means that all the strategy in the world will not help you if your organization does not wholeheartedly embrace a culture of user-centricity. Too frequently, process gets in the way. You’ll need to hone your team to lead with the customer in mind. This requires getting your product managers out into the field on a consistent basis to really feel the pain of users’ daily business chores. You’ll find that they’re often encumbered by internal processes that your software doesn’t address. Or perhaps worse, their pain is actually amplified by your solution. Without such insights, it’s difficult to build any customer empathy or to design user-centric products. All of this should seem obvious, but it is quite surprising how little some product teams really understand the customer perspective.

4 KISS: Keep It Simple, Stupid
Simplicity is at the heart of user-centric design. Think back to the Amazon experience. I’m not talking about just the user interface. The entire process is designed to enable the user to accomplish his or her goal of making a purchase: Search is simplified, the highest-rated options are easily identifiable without even reading the reviews, and a simple one-click button allows you to complete your purchase with no need to enter any detailed information. Even shipping is an integrated part of the buying experience that requires virtually no action. Of course, tracking is also automatically done for you, and product returns are a snap. Sound vaguely familiar? It’s exactly what HubSpot is trying to do in the B2B world!

5 Focus on Rapid Design Iterations
Another best practice: Start with the minimum viable product (MVP) and focus on fast iterations to build out the product. Delivering a complex and comprehensive product with full functionality on day one not only delays your launch, but also increases the likelihood of bugs and failures—all of which lead to poor product adoption. Instead, let your customers get their hands on the bare minimum and then guide you on what’s next.

6 Configure, Don’t Customize
I’m a big believer that configurable beats customizable, though not all customers agree. They love the idea of custom solutions built specifically for them. The problem with custom systems is that they were built for one customer with one specific need at one specific point in time. They do not have the ability to adapt to changing markets. As a result, they become rapidly outdated and stale, have difficulty connecting to and maintaining integrations with ever-changing external systems, experience a general lack of innovation and are extremely costly to upgrade when the time does come. All of this leads to vastly higher ownership costs over time and frustrated business users. Most successful B2B software companies today offer configurable solutions that are easily updated on a regular schedule instead of custom SaaB-type offerings.

7 Balance Innovation and Core Development
Another commonality among market-leading companies is that they rigidly employ a strategy that balances future innovation with current product development. Google, for example, spends about 70 percent of its time building out its core products, 20 percent on innovation and 10 percent on what is over the horizon for the next five to 15 years. That 10 percent is dedicated to creativity and imagination, and it’s critically important to the long-term success of the company. Other companies follow a 40-40-20 approach, but there is no one winning ratio. Each organization follows its own path. However, they all understand the need to continue to evolve their product as their customers and markets change, while also dedicating appropriate effort to ensure that the software works as promised. Too much focus on innovation means that users can’t do their job today, while constantly being mired in today’s issues means users won’t be able to do their job tomorrow.

8 Get Intelligent
The rise of artificial intelligence (AI) has given customers hope that repetitive tasks such as back-office operations (or employee expense management) will be entirely automated, opening employee time for higher-value
work. But more important than realizing productivity gains, AI systems solve a myriad of problems, such as helping financial analysts calibrate portfolios, alerting loss-prevention teams to possible fraud, helping recruiters identify qualified candidates, recommending new ways for sales and marketing to interact with their customers and countless more value-add ways of doing jobs better. To stay competitive, product teams should think about how AI can help remove friction from their users’ experience.

Connect Customers to an Ecosystem

Your customers will love you if your system connects them with a broad ecosystem of partners and other peers. An open API connected to a wider industry-cloud empowers them to substantially expand their capabilities. And that is exactly what many of these software companies are enabling. Moreover, they know that their customers don’t want to be in the business of maintaining integrations; they just want systems that work. So, they remove the SaaB and take ownership of connecting customers to the broader business ecosystem—and it pays vast dividends for them.

Develop Your User Community

In the same spirit, a well-connected network of business peers offers customers a significant incentive to use your system and builds a substantial competitive advantage for you. People may replace software, but they are far less likely to leave peer communities. As an added bonus, communities often serve as strong promoters of your brand, provide invaluable feedback and are a fantastic source for new hires or, for that matter, your own future career opportunities. For product leaders, it’s best to work with your marketing, support and services counterparts to build your community. Winning software companies like HubSpot, SoFi and others actively cultivate strong networking communities, and so should you.

Moving Beyond SaaB

Product teams today have a unique opportunity to overcome the legacy of software-as-a-barrier. Expensify has done it for expense management and Okta for secure and simple identity management. Many other companies are also reinventing what it means to offer business software. They have developed a formula for success that hinges on the cloud, simplicity, user-centric design and more. By learning from their experiences, product leaders can reimagine what it means to be a B2B software company.

Abdul Rastagar is currently an employee of Veeva Systems. However, the views and advice expressed in this article are his own and are not endorsed by Matt Wallach or Veeva.

About the Author

Abdul Rastagar is a B2B marketer, fierce customer advocate, digital and future enthusiast, and an all-around curious guy. When not expounding about all things marketing, he can usually be found outside climbing trees with his kids. Connect with Abdul at linkedin.com/in/rastagar.
FOR MANY BUSINESSES, THE LAUNCH PROCESS hasn’t changed as they’ve implemented agile or gone to the cloud. It still looks something like this: Overhead and activity dictate arbitrary milestones and dates that center on delivering content and features, which, of course, the market will embrace and users will adopt. It’s the old, “The product is done; it’s time to launch.” No one asks if the business is ready, the channel is enabled or if the market even cares about the release.

Releases Aren’t Launches
As organizations improve execution and delivery within their engineering and build processes, the sheer volume of features and content delivered increases accordingly. But constant delivery of new stuff doesn’t necessarily mean you’ve created something significant enough to be launched as a “market event.”

Market events need to make your product more competitive, deliver increased satisfaction and improve profitability. A launch needs meaningful,
measurable goals that deliver incremental benefit to the key buyer and user stakeholders. If it doesn’t meet this standard for a market event, you have yourself a release, not a launch—plain and simple.

When a Release Becomes a Launch
Teams involved in high-frequency development environments often get stuck in the repetitive and rigid go-to-market activities that they’ve always done. A launch job comes in, they run the playbook and voilà, another successful launch, right? But if no one stops to think whether this will be of value to anyone, or if the right amount of noise is being made for the right release, customers will perceive everything as being of the same value. Whoops.

Too bad that major market event looks just like the security update you released last month. Or worse, your customers stopped listening long ago because they’re sick of your level of engagement.

Here’s the secret: Even though you’ve finished a feature, you don’t need to tell anyone. Put the solutions in production and give yourself the opportunity to observe usage, engage users who organically adopted the feature and interview them to validate messaging. Maybe even recruit some users to aid in creating awareness when you do go to launch. This is sometimes referred to as canary testing. You put a set of production-viable code in place for a subset of your users—or even your whole user base—and wait and observe the results.

Finalizing the Launch Window
As the team works to deploy releases and finalize iteration plans to deliver on the overall promise of the release plan tied to your roadmap, cross-functional engagement and readiness plans should begin.

In other words: If the product has significant capability that the market will embrace, and you have market validation of the message and problems, only then can you set a launch date with stakeholders, both in the market and in the business, with confidence and credibility.

Release vs. Launch
As an organization’s ability to execute on release plans continues to improve and accelerate, it is increasingly important to differentiate between a release and a launch.

A release is a viable set of content and features that the market uses. But a launch—with its full set of activities, organizational impact and market noise—needs to be more. It must be used only when there is a collection of features and capabilities that can increase awareness, strengthen or extend positioning, and create momentum in the channels and market that will help the business achieve its goals.

About the Author
Jon Gatrell had more than a decade of experience in product management, marketing, sales and corporate development in B2B and B2C software in the health care, manufacturing, government, secure data and transportation industries before he joined Pragmatic Institute. Jon held vice president of product management and marketing positions at Inovis and, most recently, at Stonebranch. He also lectured at Eastern Michigan University. Jon has contributed articles to Convince and Convert and The Pragmatic. Reach Jon at jgatrell@pragmaticmarketing.com.
How to Turn Sales Content Into Sales Results

BY JAKE BRALEY

When you’re a product marketer, sales reps are among your most important allies. They are key drivers of revenue, and they are an important source of information on positioning, messaging and buyer needs. Plus, for most product marketers, sales success determines your success. If they don’t hit their revenue targets, neither do you.

A large part of a product marketer’s job is to translate product specs into buyer and market value, which turns them into subject-matter experts on how to sell a company’s products and services. Because of this, they also play a major role in enabling sellers to succeed. But there’s an age-old problem that every product marketer has faced, and it often determines whether a go-to-market plan succeeds or fails. That problem: how to turn sales content into sales results.

Who’s Creating Content?
Sellers often misunderstand the role of product marketing. Sales reps commonly confuse “product marketer” with “content creation robot”—a role they expect to be available at all times to create bespoke content for fast-approaching sales meetings that will likely get used once and never again.

If you haven’t received a request like this yet, you likely will. Sales teams don’t mean to be difficult—they just have a lot on their plates. When marketing throws content over the wall to sales, it’s unrealistic to expect sellers to have the time to guess the goals, target audience, key messaging and ideal delivery times. With the pressure on reps to hit revenue numbers, they just don’t have the time to do extra legwork.

The traditional answer to this problem has been for sales and marketing teams to collaborate and create the infamous sales playbook. Yes, that playbook—the one that is more “book” than “play.” It is that monolithic sales resource that requires hours of blood, sweat and tears and multiple stakeholder meetings to get out the door. And, when it does, it inevitably lands with a resounding “thud.” Even if the sales playbook does get used by sellers, it’s typically outdated the minute it’s published. In today’s fast-moving market with faster-moving buyers, that approach no longer works.

4 Best Practices to Follow
So, what is the key to bringing content, training and guidance together in a modern form that gets used, automatically updates, and provides insights and feedback on performance? Enter the modern sales playbook.

Create yours by following these four best practices.

About the Author
Jake Braly is vice president of marketing at Highspot, orchestrating the marketing vision and strategy for the Highspot sales enablement platform. Before Highspot, Jake led product marketing and go-to-market strategy for Apptio’s top-grossing products through its successful IPO. He has also held various positions at K2 Software, Microsoft, IBM, and multiple startup and early-stage ventures.
Contextualize Your Modern Playbook

Modern buyers come to sales interactions more prepared than ever before. In fact, nearly 70 percent of sales reps report they are experiencing more complex sales processes. Like sellers, modern playbooks need to evolve with the changing sales environment to stay ahead.

Product marketers can prepare reps to succeed by sharing the deep customer knowledge they possess. With customer feedback research, frequently asked questions, buyer personas, and positioning or messaging statements that convert prospects to buyers, product marketers can create and provide sales content that is relevant to sellers’ specific needs for each specific situation.

In this age of the connected customer, the buyer’s journey has taken priority over the old-school, rigid sales cycle. The idea of “one-size-fits-all” sales content will not work anymore. The more informed the seller is, the better they can adapt and tailor their approach to successfully engage modern buyers.

Adapt to the Buyer’s Process

Because the modern buyer comes prepared with research and expectations, the sales process must align with the buying process. All of the work that goes into getting a product launch ready can also help the sales team adapt to buyers’ needs. Product marketers, with their knowledge of the customer and market, can predict what moves prospects might make and questions they might ask. Few people know what buyers want more than the product marketer; nobody has more insight into what prospects need.

When product marketers weave this intel into sales content, they can help reps close deals. Transferring this knowledge into adaptable sales content and an easily accessible playbook helps reps move prospects farther along the sales pipeline. When product and content marketers work together, they can provide the sales team with clear, repeatable plays that align closely with the buyer’s needs and expectations.

Only Keep What’s Working

A sales playbook needs to provide reps with the most necessary information. No seller wants to sift through pages and pages of extra material every time a new question comes up. To optimize sales content, the playbook should maintain only the best content.

Product marketing teams can help make sure that this happens. Using their data and insight, they can regularly revise the plays to make sure they meet each prospect’s current needs. Like content, customers are not “one-size-fits-all,” so the best way to optimize sales content is to make sure it’s relevant, useful and effective.

Marketers also can keep track by following the patterns of the strongest salespeople. By looking at what content they use and how they use it, you’ll find repeatable behavior that you can analyze and turn into plays.

The Missing Ingredient

All of this may sound great, but it can only work when sales and marketing teams stay on the same page—and we all know that can be difficult. In addition to the staggering rates of unused content, sales reps have reported they spend 40 percent of their time searching for or creating content. Where is the disconnect happening? Why are content teams spending time (and the company’s money) to create materials that won’t be used? And why are reps creating more content instead of partnering with the teams that do this?

Companies hurting from lack of alignment need sales enablement. No other tool brings all of the necessary teams together like sales enablement does. With this resource, content marketers can easily access product data and research to give reps the relevant and contextualized content they need. In addition, content and product marketing teams can access and analyze sales data to see what content works and what doesn’t, allowing them to update or even remove pieces of content when needed.

With sales enablement, product marketers can deliver content with context through an accessible modern sales playbook. All of this will help save time, optimize sales content and increase revenue.
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HERE’S GOT TO BE A BETTER WAY.” Several years ago, we heard those words from a client who worked for a major enterprise technology company. He was clearly frustrated. As one of his expensive products ($200K+) was being unloaded from a truck at a major convention center, it had accidentally tipped over, crashed to the ground and been seriously damaged, making it useless for that week’s event.

“I don’t understand why we’re lugging these expensive products around to tradeshows when they’re too complex to demonstrate anyway,” he said.

He was right. His company had superb products, but when it came to tradeshows and conferences, these products were not easy to demonstrate. They were complex enterprise products that were not readily implementable in a tradeshow demonstration without significant space and time.

So, they were often displayed in an exhibit booth simply to allow customers to see them. Their physical display became, in effect, a large visual aid, humming away with the occasional blinking lights. Meanwhile, a well-trained salesperson would explain the details of the product and its benefits—when they were fortunate enough to encounter a customer with enough time and willingness to listen. This was far from an ideal customer experience.

The Catch-22

When it comes to getting prospects to understand the value of your products and become customers, there’s a catch-22.

A recent CEB/Motista survey found that business buyers who perceive the personal value of your products are not only more likely to buy them, they’re also more willing to pay more for them. More than 75 percent of those B2B buyers saw the personal value in the products they’ve purchased. Even more good news.

But less than a third of non-customers saw the personal value of products they hadn’t yet purchased. That’s not-so-good news.

The simple fact is that customers see more value in your products once they’ve experienced the benefits of using them. And when they see the value, they’re more likely to buy your products and pay more for them. The question then becomes: How do you get customers to experience the benefits of using your products when they haven’t yet purchased and used them? There’s the catch-22.

The Demo Challenge

If your product is easy to implement and simple in its use, you can offer trial use or the opportunity to test your product in a sales center or exhibit booth. Cloud-based products are often readily demonstrable over the web, assuming the user interface is intuitive.

But what if your product is highly complex and not so easy to loan out to the customer to try without significant effort? What if your solution’s differentiating features and functions are not so easily recognizable and require a lot of time to explain or demonstrate? How do you demonstrate, for example, complex enterprise information technology in the non-enterprise constraints of a tradeshow booth or over the web? How do you get customers to take the time needed to understand your
complex technology story when people’s attention spans are shrinking at dramatic rates?

Stop Demonstrating Your Product
There’s a classic joke that starts with a patient saying, “Doctor, it really hurts when I do this.” And the doctor responds, “Then stop doing that.”

If your product doesn’t lend itself to a brief, easy-to-follow demonstration, maybe it’s time to stop demonstrating your product—and replace its physical demonstration with an animated, interactive product demonstration.

Interactive technology demonstrations are designed to augment or even replace the demonstration of your actual product with a virtual representation of the product experience. Such demonstrations can provide an interactive and effective experience of your technology products—one that lets customers better visualize themselves benefitting from your products. And the interactive technology demo accomplishes this without requiring the use, or even the presence, of your actual product.

You can easily and cost-efficiently present an animated digital replica of your product, for example, on a touch screen in your tradeshow exhibit or demo center or on your website. You can control the key messages the demo conveys while allowing prospects to explore, at their own pace, those aspects of the product story that interest them most. Technologists can dig into technical details while business users can focus on high-level business benefits. The prospect decides the level of detail they want to see, and customer testimonials and videos of your product in use help them visualize their own future use and benefits of your product.

The Salesperson Is Welcome, But Optional
One of the benefits of using an interactive product demonstration—versus your trying to demonstrate the actual product—is that the customer can decide when and if it is time to involve your salesperson. They can choose to self-guide through the product demonstration or request a salesperson or product expert to guide them through it. This lets the customer choose the level of personal interaction they want. In addition, the interactive demonstration helps to prevent your salespeople from “going rogue,” because the messages it conveys have all been defined and approved in advance by your product managers and product marketers.

Developing Your Interactive Product Demonstration
There are several key steps that will help you develop an interactive product demo that is effective and impactful:

1. Identify your target audiences.
If you haven’t already done so, you’ll need to identify your target audiences for your interactive technology product demonstration. Typically, three levels—executive, business and technical—need to be addressed. Each audience will have different views and needs, and each will want to learn different information from your demonstration. Beyond those three general levels, your product may sell to different industries or other segments that may require their own specific messaging that you’ll want to address in your interactive product demonstration.

As with all good sales messaging plans, your demo messaging plan should tell a compelling product story that highlights outcomes and value benefits. You’ll want your product story to appeal to each of your target audiences. For each audience, your story should tell how your product addresses customer challenges to help overcome roadblocks and better attain strategic goals.

A good interactive product demonstration allows the prospect to “choose their own adventure,” so you’ll want to ensure your product story includes paths that allow each type of prospect to easily find and explore the information that’s most appealing to them. The most common B2B technology audience types and their typical product-story needs are:

- **Executive/strategic story**—Executives typically want a brief, high-level overview with minimal technical or functional details (with the option of exploring further technical detail, if they like). They want you to demonstrate that you understand their strategic challenges and goals and have a viable product that addresses those challenges and goals.

- **Business/solutions-focused story**—Line-of-business and operations managers and directors want to understand how your product addresses the specific problems their organization faces. They want to understand the functional capabilities of the solution. And they need reassurance that similar companies have used your products successfully to overcome those problems. Depending on their technical proficiency, some of these managers may also want the option of exploring the technical details of your product.

- **Technical/technology-focused story**—Technologists and often users of your product are your most traditional technology audience. They’re eager to explore your product’s technical and functional capabilities and understand what makes your product uniquely capable, among all similar products available, to address their
needs. They’ll take stronger interest in how your product was developed, what technology and/or platforms you chose to build your product on, and the technology architecture in use.

3. Identify the demonstration environment.
Will the prospect access your interactive demonstration at an event, in their office, at home, or perhaps at your visitor centers or sales offices? Will salespeople be present when the customer interacts with the demonstration, or will it be a standalone demo that must be self-guiding? Will prospects access the demonstration using mobile devices? Or will it mostly be accessed by laptops or large display monitors? It helps to identify how prospects will interact with your demo—touch input versus mouse, keyboard versus augmented reality. These different engagement models impact the way your message is absorbed.

By knowing where and how prospects are likely to engage with your demonstration, you can better understand what user experience you should provide.

4. Plan the customer experience by creating a visual storyboard.
With a solid understanding of your target audiences, their interactive media and the product story you’ll offer each, you can get to work on the visual storyboard, which will serve as the development guidebook for your interactive demo.

Start by walking through the entire customer experience from beginning to end—including the paths that allow prospects to choose their own experience. Ensure that the information and levels of detail are appropriate at each stage of the storyboard and for each target audience. It’s important to give prospects options to delve into different topics, but you may not want to give them everything at once—allowing information to unfold in the order you gently want to encourage them to follow. They should be allowed to peel back layers to reveal the details they want, or to simply take in the product story.

You’ll want to identify where to integrate videos and animations that help to inform the customer in an engaging manner. These may include customer testimonial videos, animated tours of technical features, brief success anecdotes, animated graphics to explain benchmark results or exploding views of product components or architectures.

5. Test the storyboard with trusted current customers.
Leverage your trusted relationships with customers who are willing to provide feedback on your storyboard. Use their feedback to help refine the interactive product demonstration. Remember Pragmatic Institute’s NIHITO principle: “Nothing Important Happens in the Office.” It’s vital to get out and talk to customers.

6. Lead the customer toward measurable action.
Ensure you’ve designed your storyboard to lead all target audiences toward measurable action—such as requesting further details, downloading product data sheets, registering for an upcoming webinar or requesting a follow-up discussion with your solutions expert. Let the customer decide when they’re ready to engage with you—but make it as easy as possible for that engagement to happen by ensuring your call(s) to action are always immediately accessible.

Avoiding the Linear Content Mindset
Interactive product demos designed in a linear fashion are often less effective. Most product marketers design their sales collateral, PowerPoint presentations and product demonstrations with a linear mindset—as with this common example:

TYPICAL LINEAR CONTENT PRESENTATION PATH

The Customer → Introduction → The Problem/Challenge → Product General Overview → Product Features → Customer Benefits → Your Differentiation Summary → Call to Action/Close

Effective interactive product demonstrations require that you avoid this linear mindset when creating your demo storyboard. Your interactive demonstration should work like a dashboard where customers can choose their own path to tour and learn about your product at the level of detail they want.
Real-World Benefits
For those who offer complex products and find it challenging to get prospective customers to understand differentiating details, an interactive demonstration offers a number of benefits:

**Boosts the customer experience.** Well-designed interactive presentations are more engaging and thus more readily attract customers—and each customer spends significantly more time viewing the demonstration. Most important, it better helps the customer visualize the experience of using and benefiting from your product.

**Allows more consistent messaging.** The interactive demo guides customers (or your sales staff) to ensure they don’t miss, or misunderstand, key messages. And salespeople like it because the demo prompts them with key information during the presentation, ensuring they provide accurate, timely information.

**Keeps the customer in the driver’s seat.** Customers take control of their experience, allowing them to learn your product story and tour your product at their pace, based on their priority of needs and interest. And the customer chooses exactly when they want to engage with your salesperson or company further.

**Provides stronger content for early-stage buyers.** Prospective customers in the informational/exploratory stages of their buying journey are often not ready to talk to salespeople. But recent research shows that supporting the early stages of the customer’s buying journey can be key to winning their business. The interactive demonstration offers customers a highly engaging self-guided tour that allows them to absorb information at the level of detail they choose.

**Logistically easier to manage.** Interactive product demonstrations can be quickly and cost-effectively updated via the web when new product features or upgrades are released. This removes the expense and inconvenience of shipping physical products that will eventually need to be replaced with the latest versions—while also eliminating the need to take your actual products out of production and dedicate them to tradeshow or sales-center demo use.

When designed and deployed properly, interactive product demonstrations give customers a more effective means of exploring and experiencing your complex technology products—yielding measurable improvements in the overall customer experience.

**About the Author**
Rod Griffith is the co-Founder and chief client officer of MarketReach Inc., a B2B technology marketing services agency headquartered in Nashua, N.H.
HOW EFFECTIVE LEADERS

Use Reframing to Tackle Challenges

“THIS ISN’T A PROBLEM; IT’S AN OPPORTUNITY” is a cliché with oomph. It’s a simple, oft-referenced statement masking a powerful tool called reframing. The essence of reframing is to encourage us to look at situations from different perspectives in search of unique and improved solutions.

For individuals involved in the world of design and design thinking, reframing vexing problems is a standard part of the process. For the rest of us, a bit of design thinking focused on reframing is invaluable in our daily labors. In my experience, effective leaders at all levels are masters of reframing when it comes to tackling the vexing issues and challenges of organizational life. Here are some examples you can leverage and build on in your workplace.

REFRAMING IN ACTION
Here are three situations where reframing can create potentially remarkable results.

1. Challenging Conversations
   Most of us dread difficult feedback or performance discussions, or meetings with managers seemingly resistant to the idea of change. For many, just the idea of confronting these conversations generates considerable stress that feeds our desire to delay or avoid them as long as possible.

   Reframe:
   Accept and internalize that challenging conversations are where problems are solved and the seeds of innovation are identified. Recognize that the sooner you move to tackle these conversations, the faster you create new solutions or uncover opportunities to innovate.

   Approach the challenges in a positive spirit of issue identification and mutual problem-solving. There’s a strong chance that the employee with the performance issue doesn’t want to lose his or her job. And there are likely some good reasons why your managerial counterpart resists change. Once you’ve framed these as opportunities, you open up the lines of communication for productive dialogue.

2. A Competitive Threat
   Competitive threats tend to induce a bad case of organizational tunnel vision where everything is viewed through the lens of this threat. Meetings to discuss the threat sprout like dandelions in a June Chicago lawn, and many companies respond with what Jim Collins references as, “the undisciplined pursuit of more.” These chaotic situations burn critical organizational energy in unproductive ways and often work to help the competitor succeed.

   Reframe:
   One potentially helpful reframe is to recognize the competitor has exposed their strategy and where they are committing resources, leaving other areas potentially vulnerable. Instead of focusing on the question, “How can we match their strategy?” reframe the question to some variation of “Where can we solve problems for our customers that our competitors will be too distracted to pay attention to?” or “How can we minimize the value of what they are doing by drawing upon our unique strengths and relationships?”
Regardless of the question you select, the one you are likely not choosing is the most common (and weakest): “How fast can we match their offering?”

### 3 Talent Selection
Many of us frame talent selection around the question, “Who’s the most qualified for this position?” And while this is understandable, it fails to take into account many important issues, including what your organization might look like in a few years and how you’ll be successful in adopting new technologies or shifting to new markets.

**Reframe:**
I unabashedly encourage organizational leaders to look for the best learners, the most open-minded individuals and individuals who thrive on exploring the new and different as part of the talent-selection process. Instead of asking, “Who’s the best qualified for the job?” where the focus is on evaluation against some potentially dated or limiting job description, ask “Who’s most likely to help us move from where we are today to where we need to go in the future?”

This issue of reframing your criteria for talent selection helps you avoid hiring clones and minimizes your risk of hiring individuals who aren’t well-suited to helping you rethink (reframe) and reinvent your organization.

### HELP YOUR TEAM EMBRACE REFRAMING
These four approaches can help you jump-start reframing on your team.

1. **Encourage Solution Development Using Multiple Frames**
   When your project teams or functional groups are navigating a tough decision, encourage them to use more than one frame to identify potential solutions.

   In working with an engineering team stumped over an important and very technical issue, the manager encouraged them to shift from “This is a problem” to “This is an opportunity” and develop a unique solution. Using the opportunity form of framing, the team identified a completely different approach that likely never would have emerged with just the negative framing. It involved unpacking some assumptions and rethinking their design, but that’s what reframing is supposed to do.

2. **Increase the Field of View**
   Often, we get bogged down in the minutiae of a problem, and our thinking becomes constrained to the small, almost microscopic, view. Instead, much like playing with Google Earth, zoom out and look at the bigger picture.

   An organization struggling with a revenue shortfall focused initially on identifying where sales and marketing were falling short with their execution. By zooming out, they were able to locate a bigger issue with changing customer tastes.

   I like to continue to increase the field of view so that I can see the issue in the context of the environment, marketplace and even the world at large. Too many of us view the world only through the lenses of our industry and competitors when the real threat or opportunity is likely somewhere outside that field of view.

3. **Reframe the Problem by Rethinking the Question**
   Although implied in these reframing activities, strive to deliberately challenge the question you are asking and either increase the field of view or challenge the assumptions behind the question.

   I love the example provided by Tina Seelig, a creativity and innovation expert at the Stanford Design School, in a recent *Fast Company* article. She uses the question, “How should we plan a birthday party for David?” and the reframe “How can we make David’s day memorable?”

   This example reflects a fundamental reframing of the problem. The problem isn’t the birthday. It’s creating a memorable day. Now that you’ve permitted yourself to look at the problem differently, the ideas can and will flow.

   Most of us have heard of using “five whys” to help crystallize a problem or challenge a solution. You keep asking yourself or your colleague “Why?” until the situation achieves a new level of clarity (or they storm off with steam coming out of their ears!). My alternative is the equally simple (but not simplistic) “Why not?”

   Asking “Why not?” helps uncover false assumptions and self-limiting beliefs, and it is, in itself, a direct reframe, leading to new veins of idea gold as individuals and teams let go of their constraints.

### The Bottom Line for Now
Learning to reframe is a behavior worth developing. It frees you to think beyond the constraints of the moment and to look at situations from many perspectives and varying heights. It’s a powerful tool for stimulating curiosity and promoting innovative thinking on your team. It’s energizing to think beyond the perceived limitations of any situation. And it just might be the difference maker for the big problems in front of you.

### About the Author
Art Petty is a multi-decade software executive and leadership and management speaker, executive coach and author. After guiding multiple software firms to positions of market leadership as a senior strategy and marketing executive, Art is now a management team advisor and works with emerging leaders as an executive coach. He is also a keynote and workshop presenter and serves as a graduate management educator at DePaul University in Chicago. Art is the author of four books: *Practical Lessons in Leadership, Leadership Caffeine: Ideas to Energize Your Professional Development, Leadership Caffeine for the Project Manager* and *A Bold Cup of Leadership Caffeine*. Contact Art at art.petty@artpetty.com.
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