



DESIGNING CONNECTED CONTENT

PLAN AND MODEL DIGITAL PRODUCTS
FOR TODAY AND TOMORROW

MIKE ATHERTON
CARRIE HANE

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Mike Atherton and Carrie Hane

New Riders

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*To Ryan and Adam,
I hope you dance.*

*To Miranda,
Your future is whatever you design.*

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FOREWORD

YOUR CONTENT IS PROBABLY CRAP.

In 1951, science-fiction author Theodore Sturgeon gave a lecture at New York University. During the audience Q&A he responded to a remark that the majority of science fiction is terrible by saying “90 percent of everything is crap.”

Rather than refuting the point being made, he made the claim that science fiction is really no different than any other genre in terms of the prevalence of low-quality examples. This point has become known as Sturgeon’s law or Sturgeon’s revelation.

Before going any further, I have some bad news. Based on Sturgeon’s law, there is a 90 percent chance that whatever content you are working on is crap.

Here’s the good news. If you are reading this foreword, it means you found this book. Within these pages you will gain the knowledge that you need to make your content a lot less crappy.

When the authors of this book started talking about content modeling at information architecture and user experience conferences, it was like a breath of fresh air. Our community had focused for too long on the classification of content without consideration for the structure of the content itself and the useful relationships between individual pieces of content that were possible by looking past simple hierarchies. Our overly classification-centric view on digital content meant that Sturgeon’s law actually underestimated the amount of crap out there.

My hope is that this book is the first of many steps that our community can take toward improving the way the world creates and consumes digital content. I can’t think of two people better suited to the task than Carrie and Mike. Over the years they have tirelessly educated people in workshops and conference talks about the value that content modeling can provide. I am thrilled that they have finally sat down and put these lessons into a referenceable source.

I can assure you that this book is one of the 10 percent.

—Abby Covert

Author, *How to Make Sense of Any Mess*

INTRODUCTION

Hey, thanks for buying this book.

And if you're reading the free preview on Amazon, thanks also to you—you're illustrating what this book is about: how content created just once can be structured and connected to appear all over the place. But also you should totally buy the whole book.

HOW IS THIS A THING?

Indulge us while we tell you about people you've never heard of in a story that goes nowhere. Alternatively, call your mother. Back in 2011, Mike spoke at the Information Architecture Summit about how the BBC was doing a little remodeling of its digital publishing strategy to help people find and explore more world-class BBC content. The talk went down pretty well. It gave an overview of building content structures based on a subject domain (Google "Beyond the Polar Bear" to spend 45 minutes of your life that you'll never get back). But it had a missing link: how to go from abstract models to the nuts-and-bolts of content publishing.

In the audience for that talk was Carrie, who was coming at large-scale content publishing challenges from a different angle. As a consultant, she'd been helping clients set up their publishing pipelines in a way that best suited the shape of the content. We saw an obvious connection and found a way to make our pieces fit. Together we had the elements of a full-spectrum process that begins with researching your subject and follows right through to publishing content... well, wherever you want. As fate decreed, we would put this process through its paces for the same conference where we met.

Throughout this book you'll hear all about our work on the 2015 IA Summit, some of the mistakes we made, and what we learned as a result. Since that time, we've refined the process and the way we explain it. And each time we've explained it, in the limited space allowed by lectures and workshops, people have told us, "You should really write a book." You're welcome.

WHY WE WROTE *DESIGNING CONNECTED CONTENT*

As with many digital disrupters who proclaim the death of old media paradigms, what we really wanted was a book deal. Not for the fortune and glory, you understand. Nor to wax lyrical as the leading brainiacs in this subject. Because we're really not—though we're lucky to count as friends and advisors some of the true pioneers. (And believe us—if you want to find out how little you really understand something, try writing a book about it.)

No, we wrote this because we've found a way of working that addresses many of the problems faced by content practitioners like us. We've found success in taking ideas that look pretty technical and presenting them in a way that's a little less mystical and scary. Mostly we wrote it because we think this connected content stuff is cool, and we want you to think it's cool too.

For a long time, digital publishing was synonymous with “web design,” with projects focused on visuals and modes of interaction. Content got lost in the mix. Later the practice of “content strategy” shone a spotlight on the need to plan the process and purpose for content, rather than vomiting a load of old garbage onto the internet. Yet the folks we know in the content field often tell us that while they're rocking the creation of useful and usable content, it's a challenge to know how that content should be classified and organized. In several cases, they don't even have a hand in the presentation of the content they've made.

We want that to change. Making content make sense isn't just about the words on the page. Understanding comes from making the connections between one topic and the next. There's content in the context. So if you're in the business of making or publishing digital content, we want to offer you some tools that may help.

Over the past decade, we've begged, borrowed, and stolen the following from the best: a clear approach to determining which content to publish. Collaborative exercises to expose a natural content structure. And a development pipeline that drives content and all its connections to many places at once. We've remixed it into a process that's worked for us. It's a little bit technical. But not very scary.

WHO ARE YOU, ANYWAY?

But enough about us, let's do you. Your organization, or maybe your client, has a communications problem to solve. And somehow the responsibility for the design and management of digital content has landed on your shoulders. You're the content strategist. The content marketer. Maybe even the communications director or chief content officer. You wrestle with content audits, URL schemas, and a volley of incoming requests that leave you with a large content mess to keep untangled. We're here to help. There's a better way, we promise.

We assume you already have some game in making digital things for other people. And you probably work with folks brandishing a smorgasbord of skills different from your own. We offer you an approach that not only connects your content but helps you connect your team.

The user experience designers on your team are great at crafting environments that make content easy to find and explore. They want to display that content through new or updated interfaces without having to start over every time. We'll show how to inform interface decisions by designing and planning your content before a single pixel is drawn.

Together with your product manager you'll lay the foundations of a multidevice, multiplatform strategy. It's one where content structures map to mental models and accommodate existing and future needs. It's one that allows them to experiment more, iterate easily, and ship faster.

We'll bet the software engineers would like a more active role in the design of the products they're asked to build. They probably want more robust specifications and requirements, instead of being handed an interface wireframe and having to decode its implications. You'll be able to include them in a design process that begins under the hood and anticipates future expansion.

If your organization is grasping for that holy grail of digital transformation, they need to overhaul how they connect to customers. Being digital-first means being content-first. It means reaching customers on every device and every search and social platform with useful information that's less about you and more about them. We'll explore how the routes to content discovery have changed and show you how to maximize production budgets through efficient, reusable information focused on people's needs. Who knows, you might even get them to break the habit of commissioning a new website every three or four years.

THIS BOOK, THEN

While we'll opine muchly on the state of digital content (and the organizations that publish it), what you have here is a "how to" book. We're nothing if not pragmatic and practical, so we wrote a toolkit that you can adapt and apply to your own situation. It's a manual for creating and publishing useful and usable content.

It will show you how to

- Design digital products around content that's based on the needs and understanding of your audience
- Involve stakeholders where they offer the most value (hint: it's their business expertise, not their ability to judge design)
- Plan content and navigation structures that scale without breaking
- Separate content and structure from presentation, making future redesigns cheaper and less painful
- Align your multidisciplinary team on a common vision
- Publish your content to the desktop, mobile, wearable, and screenless devices of today and tomorrow

WHAT THIS BOOK ISN'T

As we'll get into later, something you realize when you explore any topic is how seamlessly and sneakily it connects to many others. Drawing the borders of the map can be difficult. So while we'll drop casual references to various strategies and tactics for content creation and management, we've tried not to drift into tangents.

This book is not

- A beginner's guide to content strategy
- A manual for visual or interaction design
- Tips on improving your grammar, punctuation, and writing style
- A tutorial on metadata schemas or publishing linked data
- Anything directly to do with improving your search rankings or marketing your content

There are far, far better people to guide you through those things. We're grateful to every one of them. And you should totally buy their books too.

HOW TO USE THIS BOOK

Carry it everywhere you go. Study its lovingly crafted words and sage advice. Slip in a bookmark and take it to the park. We spent months writing this damn thing, the least you can do is read it. Just start from here and go all the way through. You'll ace the exam at the end. (There's no exam. But there is an end, mercifully.)

Yeah, no. We certainly don't have the patience to read a whole book when we just want to brush up on a specific tactic, and we imagine you to be just like us. In the first couple of chapters, we'll tell you what's coming up in the book and lay out our argument for why a structured, content-first approach is a good thing. After that, we're into the tactics that take us from research through to publishing. But maybe you're already somewhere along this journey or doing things in a different order. Maybe some of our advice doesn't apply to your situation. Flip through and jump around. What might look like a recipe to be followed in sequence is really a collection of jazz riffs to be improvised upon.

PAY IT FORWARD

When first we latched onto domain-driven, structured content, it was one of those aha moments where we couldn't imagine going back to our old ways of working. We hope you'll feel the same way. Use the ideas in this book to facilitate conversations that get your team on the same page. Discuss, debate, and discover ways of working that help everyone play to their strengths.

Share what you learn with others in your organization and with the community at large. Share with us—we're @carried and @mikeatherton on Twitter, for as long as that's still a thing.

We've learned so much from others in the field, and we'd love to learn more from you. Just like the content, we're better when we're connected.

Grab a cuppa and dig in!

Mike & Carrie

CHAPTER 2

WHY WE NEED A NEW WAY OF APPROACHING DIGITAL CONTENT

Organizations are creating more content than ever. Endless website redesigns, excessive numbers of microsites to manage, and siloed content marketing channels all contribute to a plethora of content. Keeping up with new interfaces where your content needs to display seems like a losing race. It doesn't have to be this way. Take a step back and take a deep breath to get a grip on your content. There is another way that is better for your organization and better for your audience.

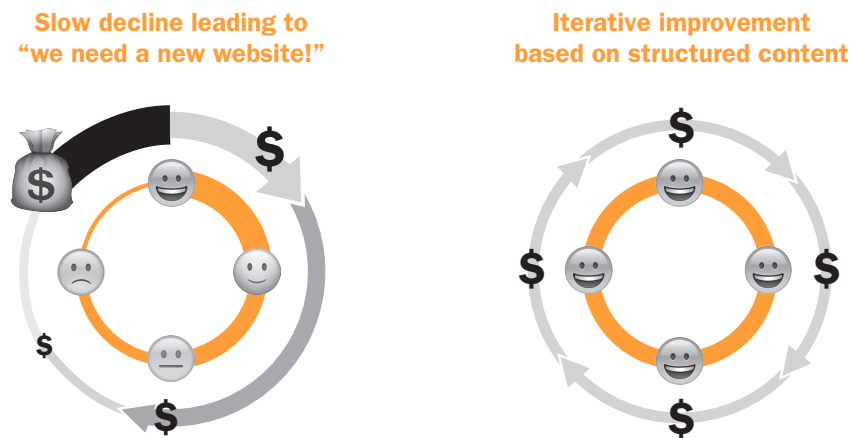
DOES THIS SOUND FAMILIAR?

You’ve launched a new website that took months (or years) to create. You’re excited about it, and you tell your audience (and board) all about it. It is gorgeous to look at, easy to use, and completely responsive. You ride the excitement for a few months. But the newness wears off. More and more pages get added by people putting their content wherever they think is a good place on the site. Everyone’s attention has moved on to the next shiny object. The website starts to fall into disrepair.

This goes on for another year, and people start to complain that they can’t find anything on the website anymore. Design trends have changed, and the site no longer looks “modern.” You stop referring people to the website because you’re embarrassed about it.

It seems the only thing to do is do a full redesign—rework the navigation, structure, content, design, *and* content management system (CMS). Because the website is important, it gets a substantial budget, and the project is high priority. And so the cycle starts again (FIGURE 2.1).

FIGURE 2.1 Product neglect leads to an increasingly negative experience, eventually requiring an expensive redesign.



Or maybe you recognize this pattern: Your organization is launching an initiative next month. The default reaction is “we need a microsite.” That’s what was done with other campaigns and initiatives, and it needs to be ready fast. You don’t have time to see how it fits with the other sites you’ve already got,

because they are such a tangled mess. What's one more site among the 10, 50, or 100+ you already have?

The problem isn't just too much content on too many websites. Each marketing channel has its own content created for it. Often there is no real connection between an organization's product, website, blog, Facebook page, and YouTube channel, or all the other places content gets published. The people creating the content for one channel may have little communication with the content creators for the other channels. Instead of complementing each other by driving toward the same goal, internal groups end up competing for attention and resources.

These patterns are unsustainable. They are expensive, disruptive, and inefficient. They focus on short-term solutions to solve immediate problems rather than on a strategy for long-term success. Over time, the result is a tangled mess of digital properties and content that gets reorganized, rewritten, redesigned, and moved into a new CMS at great cost. Repeatedly and regularly.

TAKE A STEP BACK

It's time to rethink our approach to creating and publishing content to maximize investment, make experiences coherent across devices and platforms, and ensure we meet audience needs efficiently and effectively.

The future is uncertain. New technologies, new devices, and new interfaces will always affect where content shows up and how people interact with and use it. What we do know is that the future will include screenless interfaces and algorithms to interpret our needs and connect us to the information we seek.

The solution to all this is to start thinking about content in a broader context, outside of an interface. We need to design content that is stored, structured, and connected outside any user interface, in a way that's readable and understandable by both people and computers.

This deliberate, forward-looking way of planning and creating content solves many of the problems organizations face in the third decade of the worldwide web. It benefits the business and its customers, the people working on the content, design teams, stakeholders, and the web as a whole.

A NEW APPROACH

Let's look at how designing content that is future-friendly and connecting it across multiple channels provides a better long-term return on investment.

BETTER FOR BUSINESS

In their budgets for marketing and technology, organizations spend massive amounts of money to maintain an online presence and keep customers or members or donors coming in the door. Digital products need to show measurable value. By thinking about how to better invest in digital content now, you'll be in a better position in the long run.

MAKE CONTENT WORK HARDER

Although much fuss is made about what a website looks like and which content management system to use, content—not the design or technology—is the whole point of what businesses do. The point of websites is for people to access information or complete a task. We need to make sure we're creating something of value. Each piece of content we create needs to match to a defined user need and business objective to give it meaning and provide a way to measure value.

A piece of content can appear in many places. It is hardly ever viewed only on a single web page and nowhere else. Consider all the places on the website, as well as on other systems, that it could be displayed. Never assume that a piece of content will have only one destination. Rather than re-creating content for each channel, create it once and publish it everywhere.

Before creating something new, look at what is already in your inventory and pull it together in a new way. Think of yourself as a curator. Don't re-create things that already exist. When you break content into its smallest pieces, you can mix and match it in many ways—much like an art museum. One year it has an exhibit of paintings by 19th-century French artists. Another year it has one of impressionists. Each one uses a subset of Claude Monet paintings, perhaps with different exhibit cards highlighting different qualities of the paintings. Even though the exhibits are made from familiar elements, the curators have told a new story through the threads they chose to weave together in the new curation. They would not re-create the paintings because there was a different context.

Museums can tell many stories with the same artifacts by reorganizing them, creating new displays, and curating the objects in different ways. Planning ahead and structuring your content saves you from having to re-create similar content and lets you put together new interfaces faster to tell a new story. Is your content working hard for you?

HELP PEOPLE FIND YOUR CONTENT

People need to find your content for it to be useful to them. In a world of billions of web pages, people rely on search engines to get them to where they want to go. Therefore, your content needs to show up near the top of search engine results for relevant terms. It's a competitive world, and it takes more than keyword research to make it to the top of the results.

Give search engines what they want: entities. Around the internet, within your own website, and among your properties, you should have a single content resource per thing, no matter how many ways it is chunked up and displayed. All that almost-the-same-but-separate content written by different teams within the same company confuses search engines and the people trying to figure out which link to click. You need an organization-wide plan for publishing. That plan needs to include creating content that your audience cares about and using technology and content structure in a way that allows Google's web crawlers to easily find and display it.

BE READY FOR NEW TECHNOLOGY

So many devices and screen sizes and viewports exist that it is impossible to account for all the ones that are available today, let alone the ones that will be in our pockets in three years. When we create a website or product, we have no idea what a visitor will use to access it, where they'll be, or what their connection speed will be. We need to plan for this infinite combination of sizes and uses. And that means making content machine-readable, ready for any artificial intelligence to repurpose and deliver in multiple ways.

If content is tied to design and visual cues that rely on human inference to interpret meaning, there is no way for it to be ready for voice recognition tools, smart homes, or wearables. Just because we can't imagine something doesn't mean we shouldn't be prepared to meet sudden demand. There was a time when we couldn't access the internet on a phone. Many businesses didn't believe that there would be a need for people to get *their* content on such

a small screen. Turns out, they were quite wrong. Don't be left behind just because you can't imagine a use case for your content to be found by a person five years from now on a device you can't fathom today. Plan your content for time travel by making it accessible to algorithms and portable from one system to another.

MAKE REDESIGNS ABOUT VISUAL DESIGN

Even though it's not the most important thing, it does matter how visually appealing a website is. Design trends change, and it can be easy for your site to look outdated, even if your content is excellent. With the right structure for your content, you can keep up with what looks modern without reconstructing the entire thing.

Too often, "redesign" means tearing down the entire site and rebuilding it, including the navigation structure, content, and CMS. If you get the structure and content right from the start, then changing the look is truly cosmetic—only the look changes. Like putting new slipcovers on a sofa, getting some new pillows, and painting the walls a new color. Much easier, faster, and less expensive than tearing up the floors, throwing out the old furniture, and moving the walls. You might want to change the design every few years, but do it as a refresh of visual design, not because the site has become unusable. With a plan for content to remain meaningful across interfaces and available for restyling, website redesigns become more a visual exercise than a giant project.

INCREASE RETURN ON INVESTMENT

Are you getting the idea that all this extra content is expensive? It is! Digital products need to pay their own way, delivering on business and customer needs. Those who control the purse strings are starting to expect a return on the investment.

The continuous cycle of spending five, six, or even seven figures regularly on new websites that don't deliver results is a drag on the bottom line. If you aren't already, soon you may be required to justify expense and show how you're contributing to revenue. If you are responsible or accountable for the website's strategic performance, expect to provide proof of success. Planning content with an eye on reuse and longevity will help keep costs down while helping improve revenue streams.

BETTER FOR TEAMS

Getting all the people involved in producing websites and digital products on the same page can be the most difficult part of any project. We are not promising magic, but a benefit of keeping the focus on content over interfaces is easier alignment among and between teams as well as between the organization and its audiences.

DESIGN TEAM

A certain level of disagreement on priorities or emphasis may exist among the design team—or web team or UX team or marketing team, whatever yours is called. Leadership, priorities, and overall project direction are often determined by seniority, the loudest voice, or sheer numbers (for example, one content strategist for every eight to ten designers and developers). Cross-functional teams with balanced representation tend to find more efficient ways of collaborating, where everyone’s contribution is valued and no effort is wasted. Beginning design outside the interface naturally enhances collaboration. It is a great equalizer because the focus is on the big picture rather than on each person’s role. The emphasis is on the input and outcome and finding the best way between those two points.

STAKEHOLDERS

With your design team aligned, you can get the benefit of stakeholder expertise and input when it matters most: before designing, building, or writing anything. Having stakeholders involved early and often will lower the chances of last-minute changes based on a high-level person’s opinion. As you’ll see as you go through this book, the process of starting with research and moving through modeling and implementation provides many stakeholder check-in points.

Research activities create space for stakeholders to share their knowledge and instruct the design team about what the concepts are and how they fit together. When you aren’t talking about web designs or navigation menus, you are gathering information rather than opinion-based web design. Getting small pieces of input and showing concepts throughout the project reduces the effect of politics and streamlines the process.

AUDIENCE

Many organizations still design and create content based on what they *think* their audience wants, not on what the audience *actually* wants. A website needs to be useful *and* usable. (Though your site might be perfectly usable, your audience may not want any of the things on it.) It is important to get the internal team and stakeholders focused on the right audience and what they want, as well as on what vocabulary the audience uses.

Use input from user research to help stakeholders see the overlap between their world and the audience's. The result is a persistent mental model that guides future content development, which in turn shapes what interfaces to create (rather than the idea of an interface dictating what content gets created).

Usability vs. Usefulness

Funny things happen when you do usability testing and listen to what participants say about the content, not just about the functionality. One time, Carrie's team was testing whether the forms for a new webinar subscription service were usable. They knew they had to make sure users weren't frustrated when the service launched. The good news: All the participants found it easy to complete the signup.

However, the comments of several of the participants were concerning. They said that although they completed the signup during the test, they would not necessarily have done so with their own money. Whoa! "Tell us more."

Turns out that they had unanswered questions, such as "How long do I have to use this?" and "Can I split this with a colleague?" Without understanding the full terms of the subscription, they were not likely to spend \$500. And they were not likely to ask the questions; they would just pass on the offer. A usable interface for a service people didn't want to buy isn't very useful.

With just a few changes to the content, both on the website and in the marketing material, the questions were answered, and the campaign launched with more confidence that the conversion goals would be met.

COLLABORATION ACROSS GROUPS

Within most organizations, silos are strong. People are doing different things with different priorities. That includes both silos between various departments and silos within design teams. The best outcomes happen when everyone focuses on the same things and has the same priorities. Instead of dividing attention across functions, different groups need to work together toward the same outcome. Content is an output of most groups. Shouldn't it be coordinated?

By starting with the question “What is going to be on the website?” we end up with a very tactical and emotional discussion. Everyone fights for their piece of the limited space on the home page and for a top-level menu slot. In these discussions, the squeaky wheel usually wins.

When you start by defining the domain in which your business operates—answering “Where do we fit in the bigger world?”—you help your organization beyond getting better content. It helps with the politics within the organization itself. Because you are elevating the conversation to be about what your stakeholders care most about—their area of expertise—you are more likely to avoid arguments about what goes on the home page.

Once you get that alignment, you can start to prioritize. Within every discipline or company, there are some basic facts or principles that need to be followed. If you can base your website's prioritization on real-world priorities rather than perceived screen real estate value, you'll be much better off. The time you take to get the buy-in for the *what* before the *how* will be more than made up for later.

MAKE IMPROVEMENTS FASTER

By separating the layers with greater persistence from those that are subject to change, you can deliver improvements and respond to customer needs faster. By creating content in smaller, modular pieces that are used across all interfaces, we can change exactly what needs to be changed instead of the whole thing.

Maybe you find that a particular call to action isn't working. After some A/B testing, you discover the right combination of design and text for a button on a website. Sitewide changes can be made with two small changes: updates in the CMS text field that holds that call-to-action text and the CSS that controls the button design. No searching through the whole site hoping you remember

where all the instances of that call to action are. Incremental change is more palatable because it is easy and requires only the resources you already have. All these small improvements add up to better conversion rates and happier customers.

CONTRIBUTE TO THE WORLD WIDE WEB

Your website is a window on your world. Your content is part of the wider world, both offline and online. It's important to remember that your audience cares less about your brand than about getting things done or having a question answered. That means you need to think about where your content fits in that wider world, not just about a single interface.

Make the mental shift of thinking about web pages as sets of information displayed together rather than as a discrete thing. Create content so that it's free to go wherever it wants to go, not just on the website you have right now. Then you can start creating the web that Tim Berners-Lee dreamed of in the first place. In 2008, 20 years after he created the worldwide web, he encouraged modularity in the systems being built:

We should always be looking to make a clean system with an interface ready to be used by a system which has not yet been invented . . .

Messy interfaces introduce complexity which we may later regret.

—Tim Berners-Lee, from “Simple Things Make Firm Foundations”
(www.w3.org/blog/2008/01/modularity/)

Let's create clean systems and get rid of the messiness by focusing on what we can do today to be ready for tomorrow.

How to Get Started with Domain Modeling

AN INTERVIEW WITH ANNETTE PRIEST

Annette Priest heads up Strategic UX & Product Design for health care at the Advisory Board, a research and best practices firm specializing in education and health care. As a leader in the user experience community, she helps companies solve problems in new and sometimes unexpected ways.

Tell me about the Advisory Board and your role.

The Advisory Board is a research and best practices firm. I work on health care technology products. We have a variety of products with varying levels of age and maturity across many platforms. We have a lot of information across the products and functional areas.

I lead an international team of researchers and designers. We serve all products based on their level of maturity and need. My team works directly with product management, development, and engineering, and tangentially with support and sales.

Do you act as an in-house design agency?

Yes. We were previously embedded in product teams and now have shifted toward a more in-house consultancy model.

Why did you undertake domain and content modeling?

I saw a strategic opportunity for the firm in terms of digital and product strategy and to help our own operations. For example, it could help our research division maximize the return on investment of their content by delivering it through various products and channels.

We are trying to get to a place of “create once, publish everywhere.” Modeling gets us closer to that. Specifically for product development, it ensures that we reuse information in ways that are meaningful and valuable to the people who use our products and services.

Do you have a lot of duplicate content?

I don't know. My hope is that we can find places where information is redundant once we have our models. We want content creators to have an easier and more meaningful way to begin their content creation—starting from what we already have. Even if the content is aging, modeling could be foundational for creating content more quickly and efficiently.

(continues)

(continued)

What challenges did you face to get this process approved?

It's complicated, but the short story is that the initial work overlapped with an initiative we were already undertaking. I was able to advance domain and content modeling as a way to move that work forward rather than as an investment in a new approach.

Our first project was a pilot to test the approach. Even if we did nothing else, it would help with that product. It was a baby-step approach: Spend a little money for the pilot and continue to scale and institute it more widely.

I needed to get executives from other functions to buy in to the concept so we could get time with their people, who we would interview as subject matter experts. In that sense, there is selling still to be done. It's important to understand how the other business divisions will benefit from modeling. It is up to me to translate how it has tangible benefits for them.

Who have been the biggest champions outside of your team?

With each iteration we understand each other a little more. It requires effort to get to a shared understanding. Having a physical representation (in the form of models) of what's happening and who's involved and what action is taking place has been helpful. Knowing the benefit of domain modeling and tailoring that for people from different functions has helped. That requires time and effort and vision—lots of communication. Patience is essential. We have to be okay with participation being a sign of success.

What challenges do you foresee in getting this methodology more widely accepted throughout the company?

We need to help the research group see the benefit to their digital world. It's a challenge to help them understand how it affects their ability to find content and make it available to both internal users and customers. We need to make the case that modeling has an internal business value, which requires education.

What are some ways you plan to keep the interest and patience of other groups for this long-term work?

We need to help other groups identify needs that can be more immediately addressed. As a result of our conversations so far, there is a better appreciation of how this work makes content more findable.

How does domain modeling help the firm?

It addresses a few different pain points. One particular problem we've discovered is that people spend too much time tracking down content. That means staff are starting from scratch too often and aren't able to point customers to existing information.

They spend a lot of time training new employees. A domain model can help people get up to speed more quickly. Other teams can spend time coming to a shared understanding more quickly.

It allows people to work across functions within the company while preserving flexibility and independence. They can maintain their independent process but collaborate better.

As for our product strategy, modeling allows us to build better products with modern interfaces.

Do you expect it to lower the lifetime cost of your product?

From a pilot perspective, no. But at scale, yes. What's really valuable about this approach is getting people to draw the line on where something begins and ends and how it fits together with other things. You have puzzle pieces that fit together. When dealing with such a complex product space and portfolio, it's important to know where things begin and end. It's important to know what's tangential, peripheral, adjacent—and where innovation can happen.

Any other thoughts on how others can get started?

I can't overemphasize how important it is to start small. Have something well-defined and scoped and continue in that area. That way, work can grow organically. I couldn't do this all over the place. Biting off just the right amount to get the momentum going is all you need to do. Focus on your own backyard.

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