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Foreword

Ann Rockley has been talking about content strategy and intelligent content for over a decade. Why haven’t the rest of us been talking about it, too?

Perhaps Ann’s vision of content as a business asset was simply ahead of its time. Maybe the idea of “intelligent content”—content that’s free from the constraints of a document or page, and therefore free to adapt to any context or platform—didn’t seem as applicable to our challenges as, say, a website redesign or migrating to a new content management system. Of course, none of our tactics seem to have solved the core challenge enterprises have faced: ineffective, poorly organized, and laborious content processes.

So here we are, stuck with the same challenges we had last year, and the year before that, and the year before—you get the picture. On top of it all, we’re dealing with the constant introduction of new platforms where we need to (or should) make content available to our customers. There are countless new opportunities to deliver the right content, to the right people, in the right place, and at the right time. How can we take advantage of them without starting from scratch?

The good news is, we don’t have to. It’s very likely that your organization has at least some form of content infrastructure; the question is, how will it need to change? As Ann and her coauthor, Charles Cooper, write, “The processes and best practices to create and manage content are undergoing a dramatic shift as content creators adapt to the increasing demands of a volatile content world.” I’d call this an understatement. Content processes and best practices are evolving at the speed of light, and it’s not enough just to keep up. If you want your content to truly realize its value as a business asset, you need to be able to look ahead. And the only way you can continue to face forward toward an unknown future is to know your content is truly ready for it—no matter what may come. That’s intelligent content.

Ann Rockley is nothing short of a visionary, someone who truly understands the value of content as a business asset. Intelligent, adaptive, nimble, or agile content—call it what you will, but without it, you’ll stay mired in the content mess that’s keeping you from getting ahead. It’s time to make intelligent content a reality for your organization. Managing Enterprise Content: A Unified Content Strategy will show you how.

Kristina Halvorson
A typical organization has multiple content creators who design, create, manage, and distribute customer-facing content. Content is created and delivered on the Web, in print, and on multiple devices. The processes and best practices to create and manage content at an organizational level are undergoing a dramatic shift as content creators adapt to the increasing demands of a volatile content world.
The Web

With more than two decades of website creation behind us, you'd think that the processes for effective website content design and development would be well defined. But content best practices and methodologies have only come into their own with the advent of content strategy.

In the early days of the Web, when large volumes of content had to be uploaded and integrated into the web environment, the focus was on how to achieve this process as efficiently and accurately as possible. Content wasn’t considered part of the solution; it was considered more a problem to be solved.

Many organizations felt that if they purchased the right software tool, they could create a great website. Not so. Content management projects have a 30 percent failure rate, with failures occurring when software tools are purchased without a clear understanding of requirements and design. That’s because a tool doesn’t make a website; a website is only as good as the content you put in.

Ironically, content—the heart of a website—isn’t usually coherently designed or managed. It's typically driven by groups saying, “We need content that talks about this, or covers that,” rather than by the groups that drive the customer experience. Content is measured by how well it’s written, not by how well it conveys the right message or elicits the right response. Content is handcrafted to get the message right as opposed to getting the correct content to the right customer in the right context. Disparate groups across the organization create their own content in isolation, resulting in a disjointed customer experience.

The concept of content strategy has been around since the late 1990s, but it really took off in 2009 when Kristina Halvorson wrote Content Strategy for the Web. This book has galvanized web content authors, designers, and editors to put content once again front and center in website design. Kristina defines content strategy as:

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**Content strategy plans for the creation, delivery, and governance of content.**

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While not yet fully formalized, the concepts of content strategy have made huge inroads, moving website content creation from an art to a methodology. However, content strategists have fallen into the same trap that print designers fell into before them. They continue to design content for a given platform, a certain screen resolution, or a given size on the screen—the container of “the page.” But content is no longer restricted to the page; people expect to be able to consume or use content on the device of their choosing.

Focusing on the issues of screen size, many organizations are adopting responsive web design principles that scale the visual design down for small screen displays and up for very large screen displays. However, responsive web design only resizes
of content for customers. Only adaptive content design can give customers what they want, in the form they want it, and in the right context. Resizing visuals is not the solution to platform proliferation.

The only way to create content that meets changing customer needs is to adopt a unified content strategy. Such a strategy allows you to develop adaptive content that’s modular, structured, reusable, and not tied to any device or platform.

Adaptive content automatically adjusts to different environments and device capabilities to deliver the best possible customer experience, filtering and layering content for greater or lesser depth of detail. Adaptive content can:

- Be displayed in any desired order
- Be made to respond to specific customer interactions
- Change based on location
- Integrate content from other sources

Mobile

Mobile is the driving force in the move away from handcrafted content. According to a report published in July 2010, 38 percent of US cell phone users, an estimated 89 million people, accessed the Internet from their phones. The same report identified that more than 47 million US mobile users accessed the Internet daily.

Venture capital firm KPCB has identified a number of mobile Internet trends, including these:

- Combined shipments of smartphones and tablets exceeded that of PCs in 2011
- 60 percent of time spent on smartphones comprises new activities
- Global mobile data traffic is expected to grow to 26 times its current volume over the next five years

There are 5.3 billion mobile subscribers worldwide (77 percent of the world’s population) with growth led by China and India.

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The combination of the volume of mobile devices being sold and the reduction in the number of PCs will result in mobile, rather than the PC, becoming the dominant platform.

**Beyond the Web**

While the concept of content strategy was popularized with the Web, it doesn’t end there. Just as mobile has caused content strategists to rethink their content for mobile devices, the proliferation of other types of customer-facing content is forcing content strategists to rethink their entire corporate content strategy.

Take eBooks, for example, which are creating just as large a shift in content delivery (refer to Chapter 4, “Publishing”) as mobile is, and which are not just an alternative delivery vehicle for print books. PDF versions of white papers are being replaced by eBook versions, and annual reports are also being produced as eBooks with interactive graphs, videos, and audio. Anything that potentially requires offline access or encapsulated reading can, and is, being distributed as eBooks or enhanced eBooks.

Likewise, product content such as online help and manuals is starting to see a shift toward mobile access, and there’s increasing pressure for learning teams to develop mobile learning materials and eBooks as well.

Content is moving into very different delivery vehicles, such as third-party electronic point of sale (EPOS) apps, which necessitate the integration of extremely modular content that’s updated frequently.

Currently, too many organizations create content in something like Microsoft Word, move it into a particular format such as HTML, and then get stuck when it needs to be delivered in another channel such as print. There’s a constant churn of preparing content for one format, extracting that content and preparing it for another, and potentially bringing any changed content back to the first format. These processes are incredibly manual, error-prone, painful, and ultimately they’re unsustainable.
Case study: Breastcancer.org

Breastcancer.org is a nonprofit organization dedicated to providing up-to-date medical information to women with breast cancer. Their website is the most heavily trafficked breast cancer website in the world (source: Alexa, www.alexa.com).

For many women, the four most frightening words they will ever hear are “You have breast cancer.”

Newly diagnosed patients are thrust into a world filled with unfamiliar terminology and concepts normally reserved for advanced biology courses. In addition to dealing with the extreme emotional shock of a breast cancer diagnosis, many people must also navigate employment, financial, insurance, and family issues.

These circumstances create a difficult state of mind for someone trying to understand a complex cancer diagnosis and make informed treatment decisions.

It was obvious that providing an up-to-date website, intuitive information architecture, and powerful search tools was critical. But we realized we had to do more in order to serve our users.

Our goal was to reach breast cancer patients with the information most relevant to their specific diagnosis—even when they didn’t know what they should be looking for.

Our user research indicated that the vast majority of patients could not accurately report their own diagnosis. This was true even of highly educated, affluent women with access to some of the best breast cancer doctors in the world.

How could we personalize content to a person’s diagnosis when we couldn’t be sure the reported diagnosis was correct?

We began this project with a content inventory, which helped us develop a metadata schema that would eventually power content personalization. We needed enough granularity to support medical accuracy, but we couldn’t overwhelm content contributors. Content components were stored as XML, and a rich API (application programming interface) was developed to allow export to other software systems.

As the project progressed, we realized that mobile devices could help us reach women at a critical point in their diagnosis: in the doctor’s office. Our content was modular and in XML, making it easy to reuse and share among software systems. This resulted in a smooth transition from website to iPhone app.

In September 2010, we launched the Breast Cancer Diagnosis Guide, a free iPhone app that serves three specific goals:

• Provides a 24/7 resource for understanding complex diagnostic tests and terminology
• Gives breast cancer patients a place to record their own diagnosis information for easy reference
• Retrieves up-to-the-minute research findings and news tailored to each breast cancer survivor’s unique diagnosis

The app has had over 10,000 downloads, and over two million in-app page views. It was also a 2011 Webby Awards Official Honoree.

People typically don’t leave the house without their mobile phones, which means that the Breastcancer.org app is readily available for patients to record correct diagnosis information while in the room with their doctor. This solved one of our major challenges—the accuracy of self-reported diagnoses. Without a robust and evolving content strategy, our leap into the mobile arena would have been cost prohibitive.

Derek Olson, Vice President of Foraker Labs
The role of a unified content strategy

The way content is created today (with multiple versions for different mobile platforms, different versions for different web browsers, tweaks for PDF web distribution, as well as slightly different versions for each eReader environment) is untenable. It’s as if we’re in the preindustrial age—handcrafting expensive artisanal products. With the proliferation of mobile devices, that task isn’t getting any easier.

We have to move to a manufacturing model. We need to be able to build information products the same way Swatch™ makes watches—using well-designed, reusable components in new and interesting ways, producing products that people are happy to purchase.

You might say, “We do that—we send our content out to our web server for automatic distribution, we even send some of the same content out to our manufacturer, our publisher, and our conversion facility to manufacture books and applications.”

That’s not what we’re talking about.

We want to move the manufacturing paradigm all the way back to the beginning of the content design and creation process. Only when we start there will the true benefits of a unified content strategy become apparent.

When a physical product is being designed, the individual components are considered as part of an interconnected whole, not just as small stand-alone pieces. The design is built around the fact that the components are reusable—you don’t need to create new components to build new products. When you’re manufacturing things, you can’t be wasteful, rework is costly, and bottlenecks can kill productivity. We have to create content the same way: considering each component not only as an individual piece of information that has value, but also as a part of a larger information product, or ideally, part of more than one information product.

Doesn’t this slow things down?

Not really. There’s more upfront design, but less rework and less wasted time and effort. Manufacturers have been working on these ideas for years and we can learn from their efforts. The last 20 years in manufacturing have seen a number of techniques and methodologies come and go. But at the heart of the best of them lie
two concepts that drive manufacturing toward making higher-quality products for less cost: lean manufacturing and agile manufacturing.

Lean manufacturing focuses on value; unless an action adds value to a product, it shouldn’t be done. Agile focuses on speed. Together they concentrate on eliminating valueless work, errors, rework, and bottlenecks and promote automation to allow people to work smarter, not harder.

This doesn’t mean that the quality of the final product will be reduced—it means that content creators will be able to concentrate on creating high-quality content that can then be reused in multiple information products and channels. Think about it: A car manufacturer doesn’t recreate all the parts of the car each time they design a new one; they use many prebuilt components. With those components they can build a basic model of a car or a super sport version, and changing the color is a snap. You can mix and match your content the same way, and if you want to make it look different, that’s easy—just add a different stylesheet.

That’s what a unified content strategy is all about: designing modular, reusable content that can be efficiently “manufactured” into a variety of information products for multiple devices.

**Summary**

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