

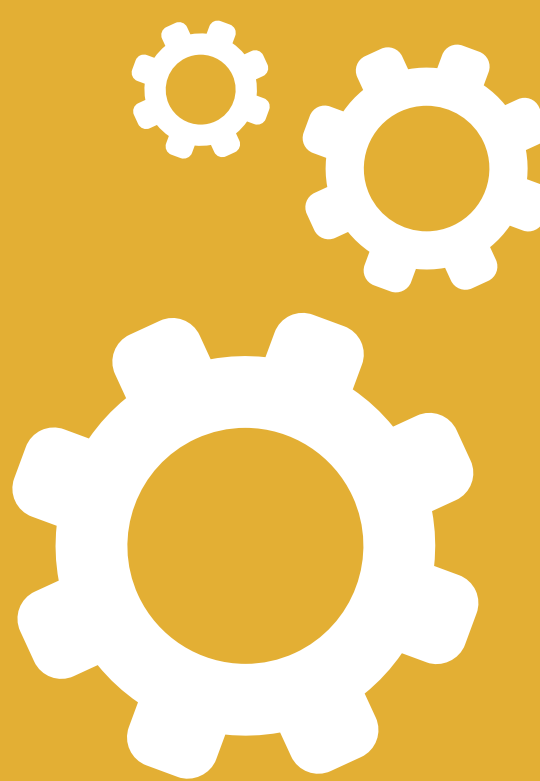
THE
BEGINNER'S
GUIDE TO
 **CONTENT**
AUTOMATION

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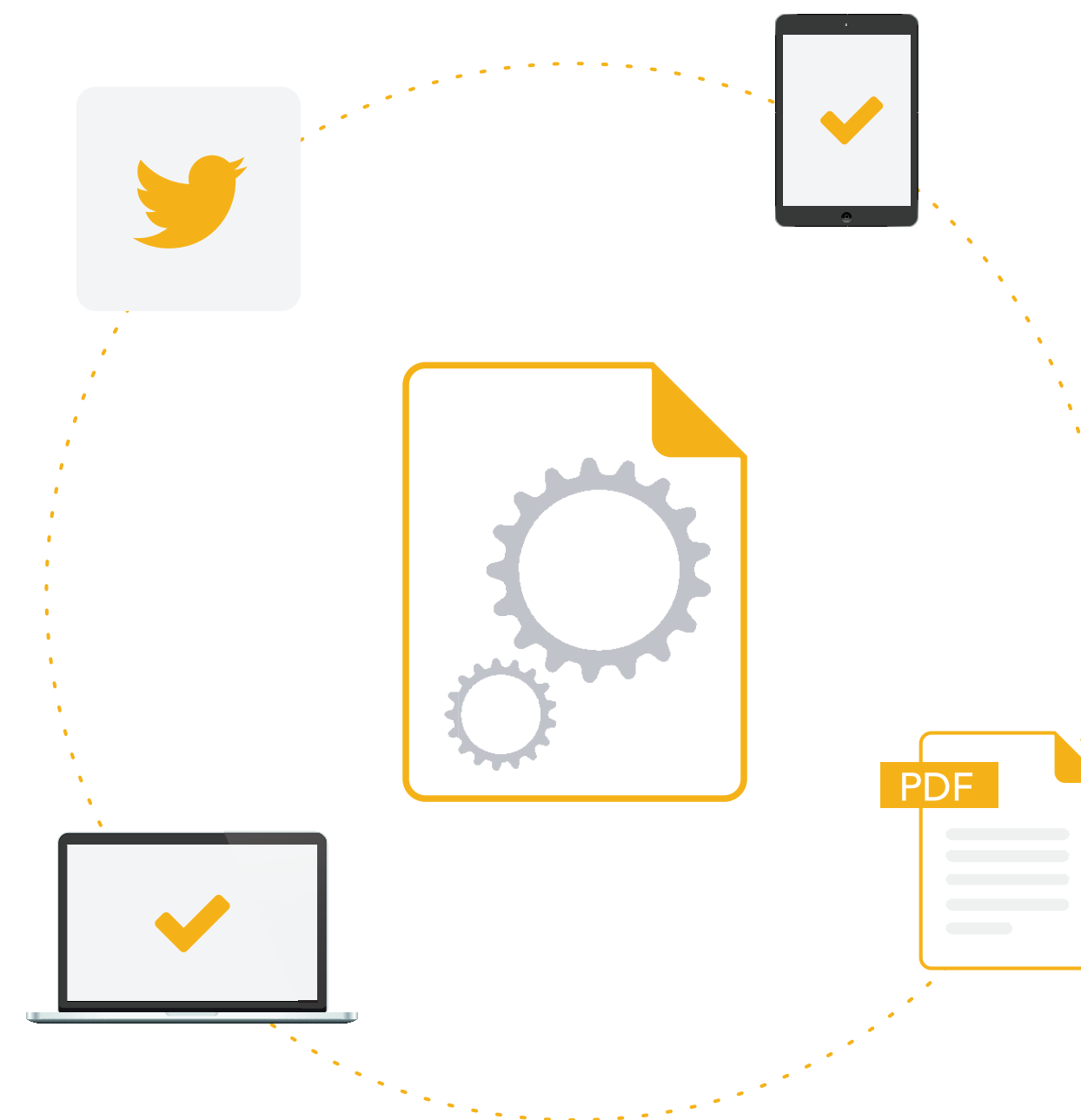
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Today's businesses and organizations need to create an increasing volume of content that can be shared with customers (or potential customers) across multiple channels, including print, desktop and mobile websites, social media platforms, and maybe even mobile apps designed for the many mobile operating systems. Your business may be struggling to keep up, especially if your processes and software still reflect the traditional content workflow model where content is manually adapted for each of the many different channels. If this struggle sounds familiar, it's time to consider content automation.

Content automation improves and streamlines old content processes in the following ways:

- It makes the creation and consumption of content more efficient.
- It automates publishing content to multiple platforms.
- It simplifies keeping track of content updates.
- It makes finding and reusing content a breeze.
- It enables you to deliver personalized content to different audiences.
- It improves the process and timeline for translating content into other languages.



In this eBook, we'll take a look at how automation transforms each phase of the traditional content production process.

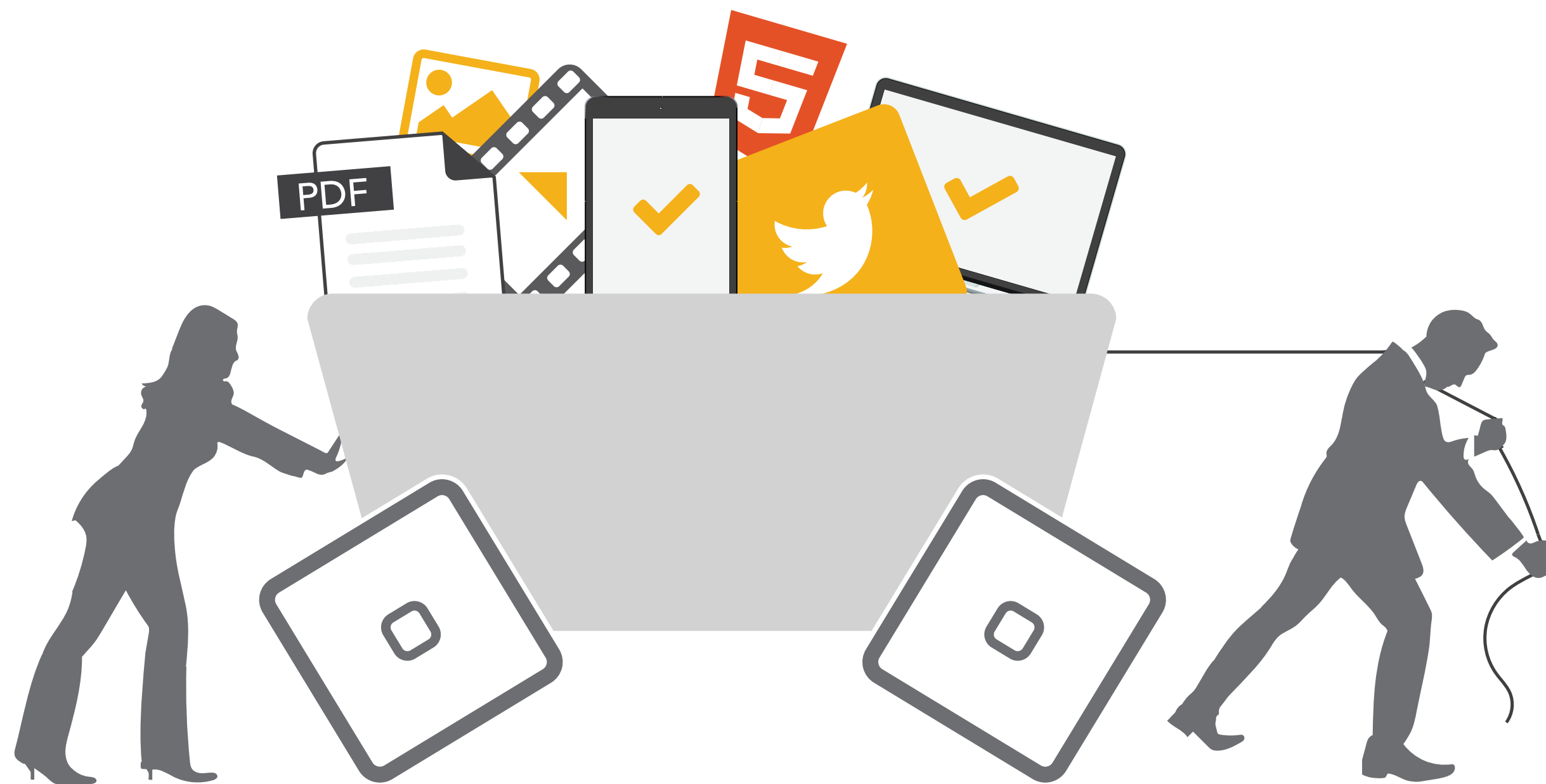
With content automation, your organization can:

- **Save time**
- **Save money**
- **Keep your subject matter experts focused on what they do best.**

(SPOILER ALERT:)
That isn't cutting, pasting, and reformatting content.

The way people find and read content has changed beyond recognition, but in many businesses, the processes for creating and distributing content have simply not evolved.

The truth is, for many businesses traditional content workflows might just feel comfortable. And if you've been using traditional models for a long time, it might be hard to see how those models are dragging down your organization and your content team. The next page offers a little perspective by outlining some of the key characteristics of a traditional content workflow and the problems that these characteristics pose in today's multi-channel world.



Characteristics & Problems of Traditional Content Workflows



Content Locked to Media: The author and designer commit content to design very early in the publishing process.

Problem: To reuse content in other formats, the content often must be reformatted and re-designed.



Duplicate Content: The same content appears in multiple documents and media.

Problem: The documents are entirely disconnected, often leading to the same content being recreated and translated multiple times.



Copy and Paste: Content is reused by authors or designers copying and pasting content between documents and media.

Problem: This technique is labor intensive and significantly increases the opportunity for errors and inconsistencies.



Manual Review and Approval: Typically, Word docs and PDFs are emailed back and forth, or markup of printed documents is mailed or sent by courier.

Problem: Consolidating changes into one document is time-consuming, error-prone and expensive.



Labor-intensive Content Updates: The only connection between content that's reused in multiple places is human knowledge.

Problem: Content changes have to be manually replicated across multiple documents and media, including manual review and approval of every instance.

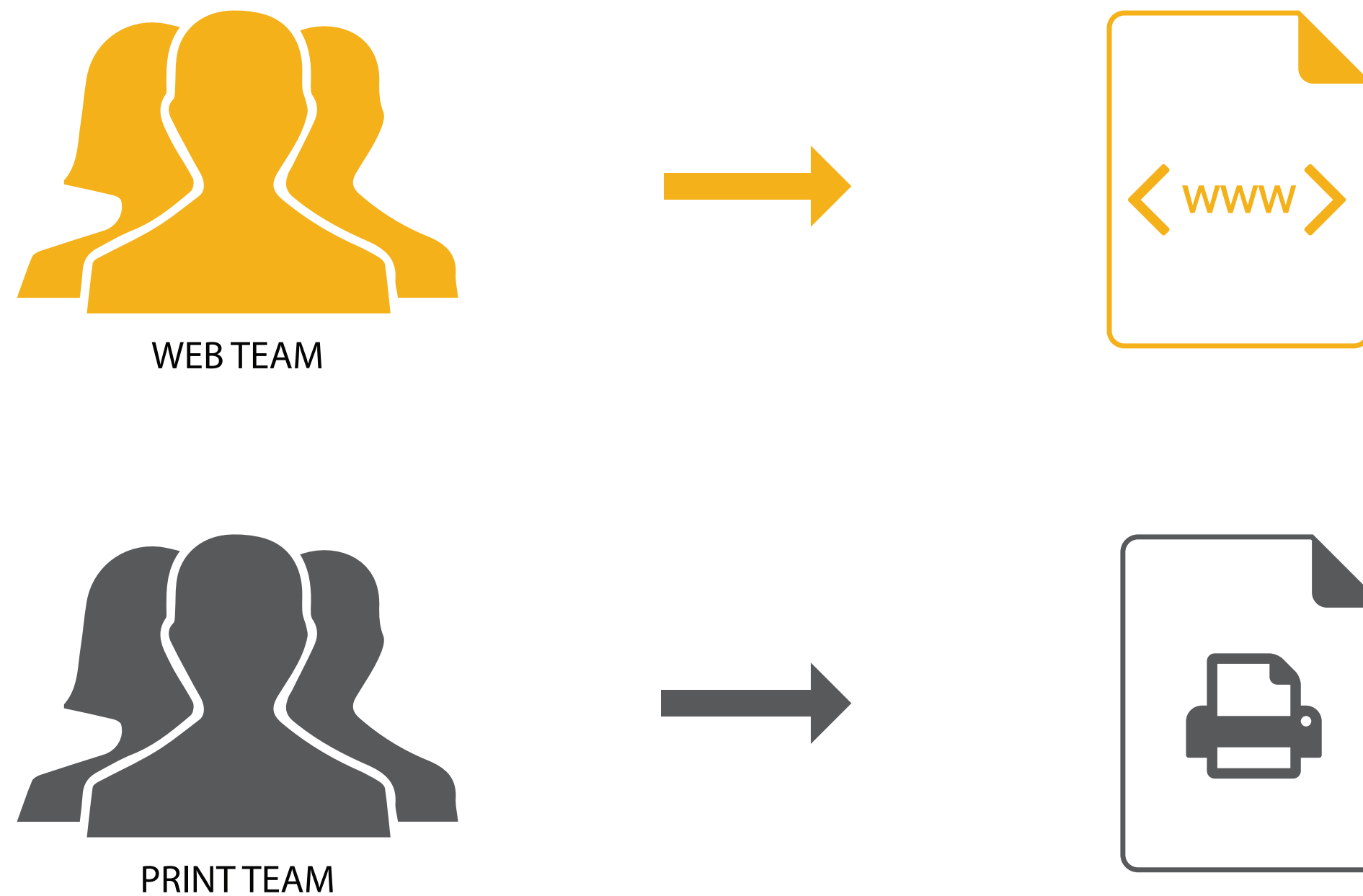


Lack of Data: The content is document-centric and doesn't contain metadata when content is created.

Problem: Without metadata, reusing content and delivering personalized content to different audiences can't be automated.

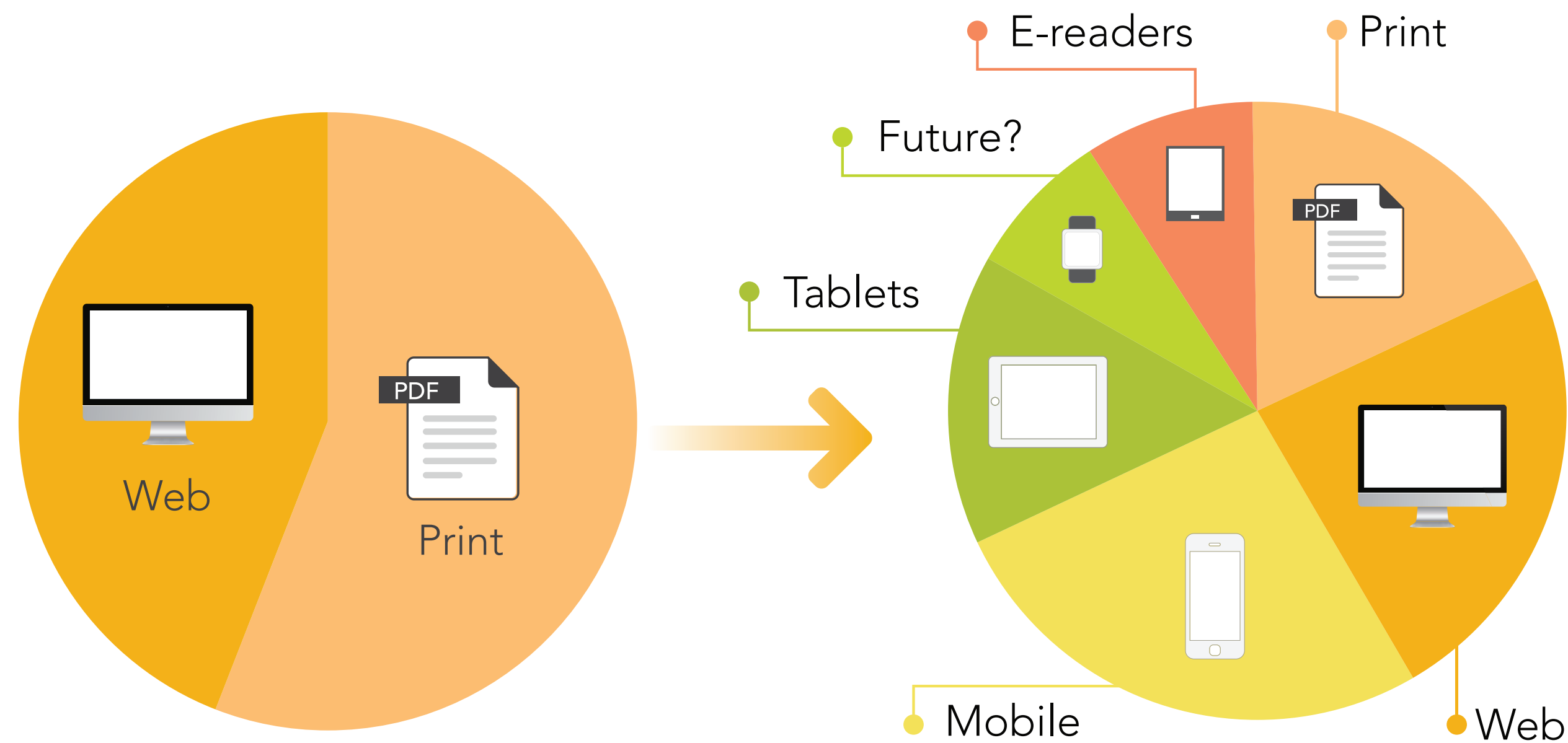
When the content world was print-centric, organizations only had to think in terms of producing print content in order to reach their customers or internal audiences. Sure, creating multiple versions of print content had complications, but those were largely manageable through manual processes and desktop tools.

The birth of the publicly accessible internet was the first sign that traditional content processes might not work. Instead of rethinking their processes, many organizations simply added duplicate teams to be responsible for the web. The process of getting content to print and the web involved lots of copy-and-paste, reformatting and often devolving to the lowest effort by simply using PDFs everywhere.



The advent of the PDF made it possible to share flattened documents across hardware and operating systems. This changed the distribution and consumption of printed material – both on and offline. However, PDF is a generally static, unresponsive format which makes for a lackluster consumer experience when presented through digital and mobile channels.

After the mobile web and tablets entered the fray, customers quickly started demanding more than a desktop website or PDF on their mobile devices. They wanted a mobile-optimized experience and predominantly they wanted apps. While the initial move from print only to print and Web was slow, the acceleration in multi-channel content, as the pie chart below illustrates, has been tremendous.



Moreover, mobile isn't just one platform. It includes several operating systems, app stores, and devices with different screen sizes—and further breaks down geographic barriers between your content and your audience. Take a look at the illustration below and think about the complexity of creating and delivering content to just the major mobile platforms.



When you consider the cost of creating, reviewing and approving content, running compliance checks in regulated industries, publishing and distributing the content, and then making updates to that content, the business cost is significant. When you consider applying this same content process across multiple channels, the cost is prohibitive.

You could simply decide not to support all of these channels—and you certainly need to assess your customers' and employees' content-consumption preferences. However, the rise of digital content, social media, and mobile devices – even wearable tech like the Apple Watch – has resulted in more empowered, better-informed customers and employees with high expectations that you'll need to meet in order to win and retain them.

Your customers in particular not only expect content across all of the channels, but also want it to be immediately accessible, relevant, and engaging.

So if traditional content workflows and processes can't get you there, what can?



The only real answer to the challenge of creating, publishing, and delivering content to such a diverse array of media channels is automating this process. And that, in a nutshell, is what content automation does: It automates the assembly, publishing, and delivery of content for multiple media and audiences.

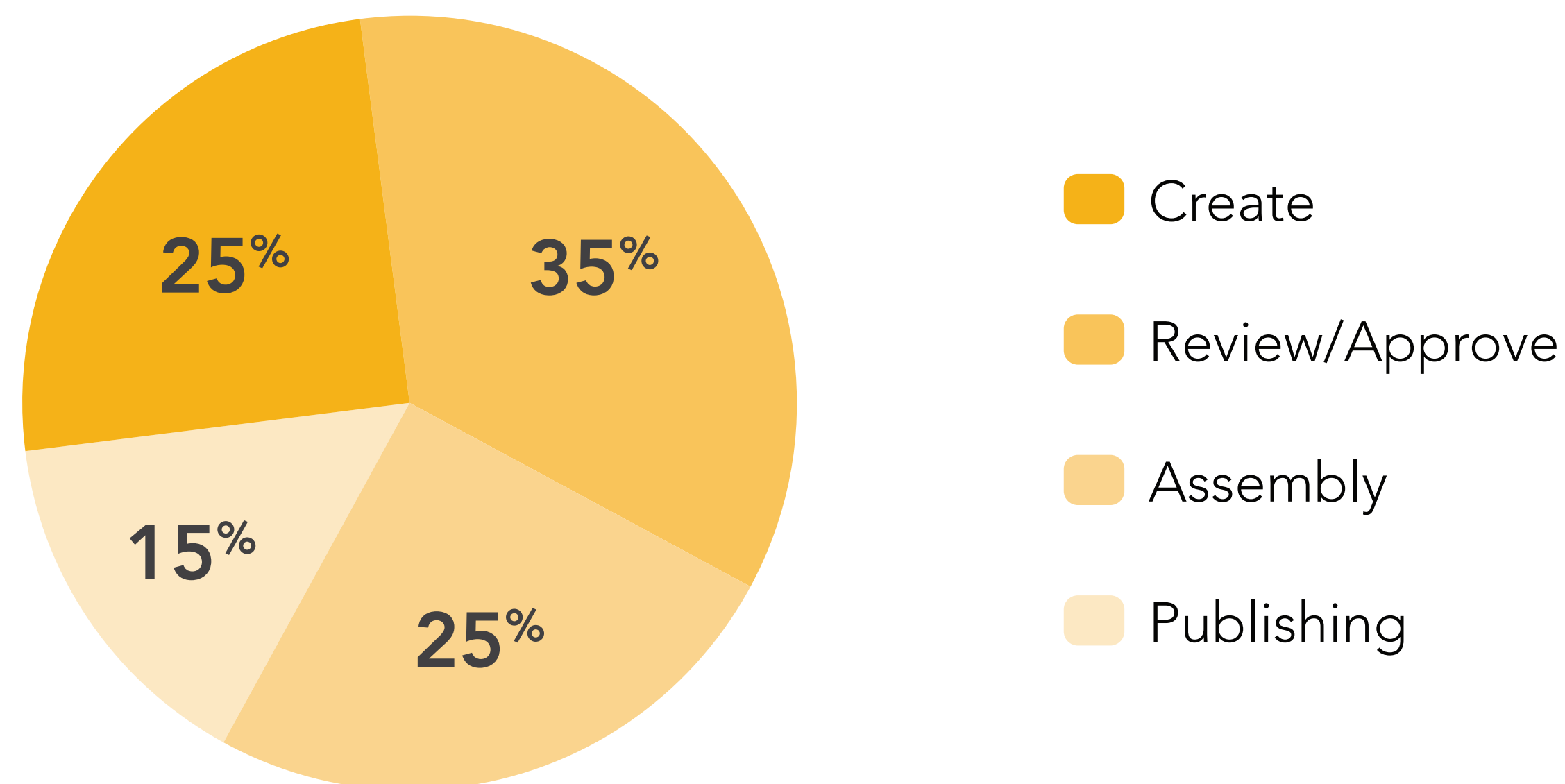
In the same way that the manufacturing industry embraced automation to meet the insatiable consumer demand for products, organizations need to automate their content process to meet consumers' demand for digital content.



Although automation sounds simple – and conceptually it is – automating the content process to multiple media and audiences requires some substantive changes to how you create, manage, publish, and deliver content.

The objective is to eliminate as many manual processes as you can in order to increase productivity, reduce costs, and increase the effectiveness of your content. You want your most important resources – your people – focused on where they add the most value to the content process. You don't want them spending time on work that doesn't add value.

Traditional Content Production Process



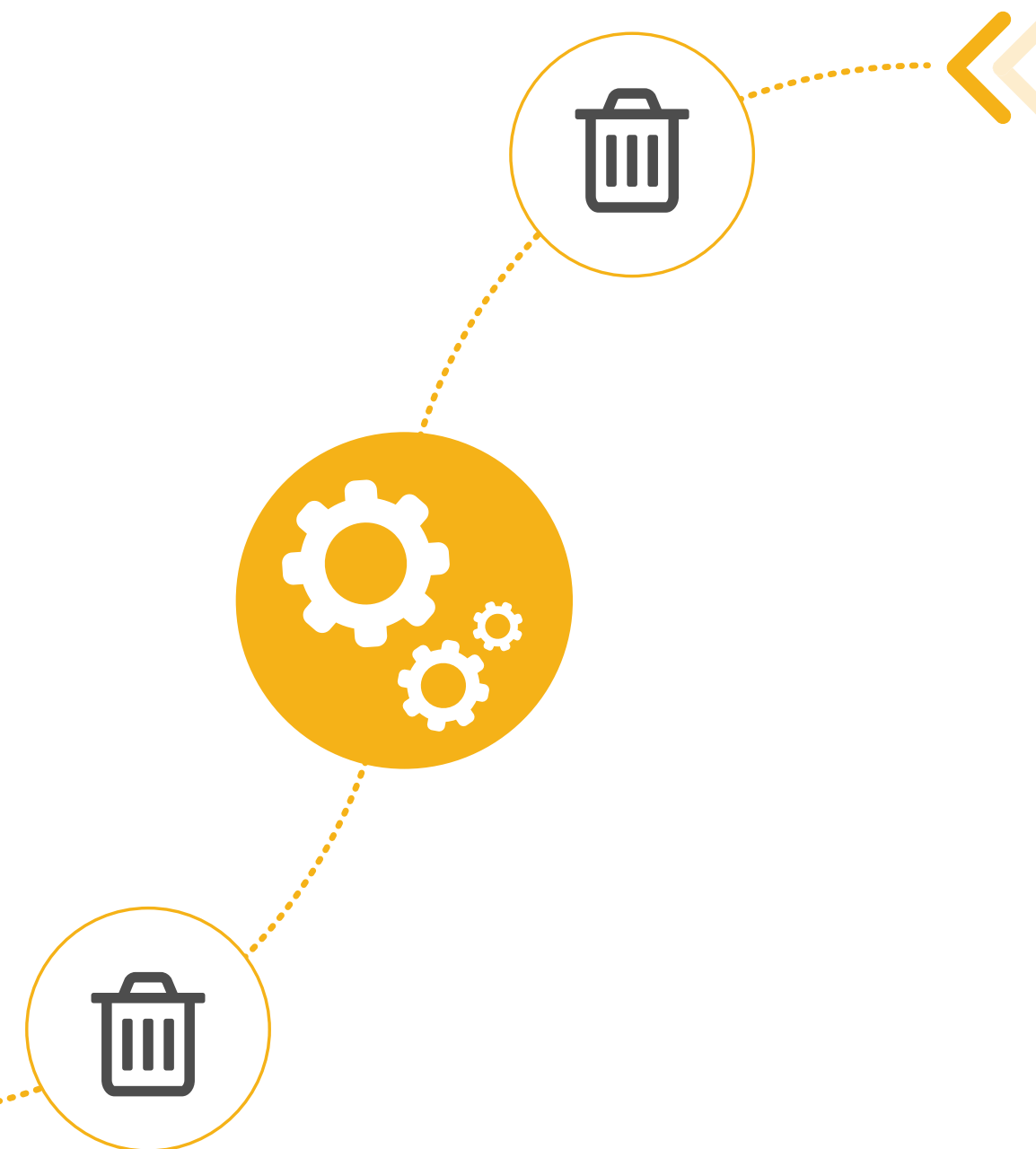
The following sections examine the opportunities to automate specific tasks in each phase of the content process create, review/approve, assembly, and publishing.

Creating content is perhaps the most valuable part of the process—not least because it involves your well-paid subject matter experts and authors. It's also one of the prime areas where authors waste time performing tasks that don't add value, such as the following:

- Recreating information that already exists
- Updating information that has been copied and pasted many times
- Applying formatting to – or “decorating” – documents that does not improve readability or that will be altered later in the design and production process
- Converting and reformatting documents for different media

BOTTOM LINE: <<

Authors waste up to 50 percent of their time on low-value work. The result is unstructured content that cannot be automated.



With content automation, your authors move from creating documents to creating reusable content components. That's worth stating again because it's fundamental to automating enterprise content. Instead of creating one-off documents where content is locked into a specific document and format, authors create reusable content components, and they are able to capture knowledge about that content using metadata.

Reusable content is the secret sauce that enables you to automate low-value tasks and has a dramatic impact on your authors' efficiency and effectiveness.



Inefficiencies abound in the review and approval stage of the process because of its linear nature. For example, consider the following bottlenecks and inefficiencies in a traditional content workflow:

- Authors don't know how their content will look when they create it. As a result, the process includes review cycles for the sole purpose of fitting content into each layout.
- Before the author can see how the content will look in its final format, a designer manually formats every piece of content. Alternatively, the content is copied and pasted into a delivery system, such as a web content management system (web CMS).
- The designer or web team don't know the purpose of special formatting in the original document. To clarify how it should be interpreted in the final output, the designer, web team, and author must communicate back and forth.
- Review typically happens in PDF by email. The PDF review approach results in a PDF from each reviewer, and requires that all changes must be manually reproduced by the designer, which is time consuming and error prone. It also doesn't add any opportunity for collaboration between reviewers thus raising the possibility of confusion and conflict.
- Review and approval is document-focused. When you've created multiple documents from the same content, the content gets reviewed and approved multiple times.
- If any content changes, it has to be updated and then reviewed and approved in multiple documents.
- The length of the review and approval process significantly affects time to market—especially when you consider the additional compliance checks that are required in regulated industries.

In an automated content workflow, you remove multiple review and approval cycles from the process as well as the designer bottleneck:

- As the author adds data instead of formatting as part of the content creation process, the author can preview how the content will look in its final format using a series of templates without requiring manual design processes. For example, they can see how it will look as a PDF or as HTML or on an iPhone.
- The author creates reusable content components that are not tied to a specific document or format and adds metadata (information about the content). The reusable content keeps the source content available in one component so no one has to keep track of updates to multiple documents, and the metadata enables downstream systems to automate how the content is output.
- What's more, because the author creates reusable content components that can exist as a single source of content in multiple documents in multiple media, if a content component is updated, the updated content must be reviewed and approved only once.

This radical new approach to the review and approval cycle can cut days or weeks from a traditional publishing process.



In a traditional content workflow, a number of content assembly tasks must be completed:

- Manually adding headers and footers to pages
- Creating indexes
- Creating tables of contents
- Inserting references
- Adding markup for HTML links
- Enhancing content with interactive features
- Optimizing images and media for each output channel

In a content automation workflow, all the preceding manual tasks are automated because the reusable content components contain metadata that the system can interpret.



In a traditional workflow, because every document is a one-off, your creative resources soon become a bottleneck in your content publishing process:

- Although you start from a template or previous version of a document, every document is laid out manually.
- Content is copied and pasted onto the page.
- Any tabular data from Excel or other data sources is also copied and pasted and manually styled.
- Formatting is applied manually to text through style sheets or styling tags—if you're lucky. More often than not, consistent style sheets are not even used.
- Interactivity is added manually in a process that's disconnected from the author who created the content.
- To convert the content and layout from one medium to another, again the content is manually copied and pasted.



With content automation, the design templates are built to automate much of the layout and eliminate the manual copying and pasting:

- The creative team creates design templates that include layout rules. These rules enable the content components to automatically flow into approved templates for each medium and document type.
- Data is flowed and styled directly into the template. Charts are dynamically created and inserted. Any layout rules — for example, where a disclosure statement must appear — are followed.
- Interactive elements are added based on the intended output. For example, print templates can use an available image while digital templates can use multiple images for a slideshow. A print template will automatically accommodate a sidebar while digital will allow for a pop-up.

Within the content automation methodology, designers focus on what they do best, which is the design of the template and layout rules. The author sees how the content will look in each output format while he or she is authoring without waiting for a creative team to lay out the content. Your organization can reduce its content publishing timeline from weeks to seconds.

Although the challenge of multi-channel content publishing with manual processes applies to every organization, content automation makes sense only if your business or organization is creating content at a large scale.

Content automation is best deployed when your business or organization is creating content that has one or more of the following characteristics:

- A high volume of similar documents
- A high volume of revisions
- Frequently repeated creation processes
- Government-regulated or corporate-regulated documents
- A high possibility of reusing content across multiple documents
- Integration of data from databases and other systems into the content. For example, inserting the latest financial information from a Bloomberg data feed into a research report, or inserting technical specifications into an infosheet from a product information database
- Translation to multiple languages
- Delivery in multiple formats
- Delivery with multiple presentation styles

When content automation is appropriate, the results – the return on investment – are extremely valuable. Productivity goes up, time to market is reduced, your company can support more information products without adding resources, and you improve the quality of your published content for better customer engagement. In other words, it will have a transformational impact on your business.

Many issues drive businesses to implement a content automation platform. Depending on the business challenge, you may not immediately appreciate that you have a content process problem. Here are some phrases you may hear as well as business strategies that suggest the time has come to leave your traditional content process back in the '90s:

1. "Why does it take us so long to publish content? It's already out of date by the time it gets to our customers."

2. "There are too many errors in our regulated documents."

3. "Customers are dissatisfied with inconsistency of content across our Web, PDF, and print collateral."

4. "We need a digital transformation within our business."

5. "It takes too long for employees to find the right standard operating procedure."

6. "Keeping track of who last updated this content is impossible."

7. "We need to publish more without increasing the size of our team."

8. "Our customers are asking for an optimized mobile experience. PDF just isn't good enough."

9. "I'm spending too much time recreating content I know already exists."

10. "Because we can't keep up with the publishing demands of the business, we can't enter new markets."

11. "There must be a way to reduce the cost of localization (or translation) of our content."

12. "Hiring contractors is difficult, because they'd need an overwhelming amount of knowledge about our systems and processes in order to be effective."

13. "We need the ability to integrate remote authors into our business."

Content automation is being applied to a wide range of business-critical content types across many different industries. They include content that you sell, or content that you use to run your business. Here are some examples:



**INVESTMENT
RESEARCH
REPORTS**



**FUND
FACT
SHEETS**



**STANDARD
OPERATING
PROCEDURES**



**POLICIES
AND
PROCEDURES**



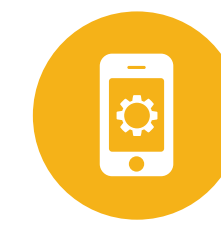
**TRAINING
MANUALS**



**DATA
SHEETS**



**SALES
COLLATERAL**



**CONTENT-
DRIVEN APPS**



**LEGISLATION AND
REGULATORY
DOCUMENTS**



**ANALYST
REPORTS**



**PHARMACEUTICAL
TEST SPECIFICATION
DOCUMENTS**



**BUILDING
CODES**



**HIGH-VALUE CUSTOMER
COMMUNICATIONS**



**INFORMATION
PRODUCTS**

Hopefully you now have a solid understanding of content automation and frameworks to assess if it would be appropriate for your organization. There is of course a lot more to content automation so please check out other resources available at www.quark.com/resources. This eBook is the first in a series of eBooks on content automation. Look out for the following eBooks that will be available over the coming months:

- Understanding Your Enterprise Content
- Creating and Managing Content
- Publishing and Delivering Content
- Choosing a Content Automation Platform
- Bringing About Change

If you would like to dig deeper immediately on content automation, our team of experts work with leading global organizations across a range of industries and can answer your questions, assess your specific needs, help identify where you can achieve the best return and build the case for a content transformation within your organization. To speak with one of our experts visit: www.quark.com/contact.

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