

## Rich Data Products... Five Steps for Building New and Self-Sustaining Revenue Streams

### Executive Summary

Static or declining revenues from advertising and other traditional sources are forcing many companies in the publishing and information services business to step up their pursuit of new revenue streams. But if they look closely enough, they might find that one of the most promising sources actually lies within their existing resources – their own content.

As they create content in articles and other more traditional forms, publishing companies routinely amass data as varied as charts, maps, digital images, lists, key facts or statistics. While this information is packaged into print and online media for customer consumption, innovative companies are discovering additional uses for the vast amounts of unstructured information stored within their respective content repositories.

Reviewing this content from their readers' point of view, publishers and information services providers are finding new ways to charge users by breaking this content down into more digestible and searchable components, and then adding value-added context to transform it into must-have information.

In other words, they are creating rich data products.

Many publishing and information services companies already have the necessary ingredients to develop compelling and profitable rich data products. The key is to first survey the marketplace and their readers to identify information needs that are not being met and then exploit this data cost effectively for competitive advantage. Companies that develop rich data products to meet those criteria will be the ones best positioned to thrive in the years ahead.

In this paper, we will examine the challenges facing publishing and information services companies, review how many firms are already using rich data products to create new revenue streams, and then outline five steps for exploiting and implementing rich data products.

## Background

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In the last half of this decade, publishers face two dramatic choices – either they compete for a share of a steadily shrinking pie from traditional revenue sources like advertising, or they can find and nurture new revenue streams. While advertising will continue to be the largest contributor of most publishers’ revenues, it can no longer be counted on as a source of future growth. Moreover, short-term measures like rate increases, bundling products and adding new features are also unlikely to serve as a magic-bullet that would remedy the problem. In short, the surest and most reliable way for publishers to fuel revenue growth is to find and tap new sources.

### Information Access Challenges for 2006 and Beyond

Businesses and individual consumers are less dependent than ever on traditional media as the sole source of all the information they want and need. As consumers become increasingly Internet-savvy, they are no longer satisfied to have content delivered solely through on-line newsletters or via the same Web sites. They know how to search for detailed content on the Web, and then compile and manipulate that information into categories they consider more relevant to their needs.

However, most users lack the time to pull this information together in a truly meaningful and timely fashion. In this on-demand world, users need real-time information delivered to them, almost continuously. Publishers that continue to leave their content untapped and unstructured in content repositories are missing an excellent opportunity to repurpose and reuse that material. Other companies, however, are transforming this content into structured information – componentized raw data – and becoming trusted partners for their users. Publishers that learn how to do this right will be positioning themselves to thrive in tomorrow’s information marketplace.

How can companies do this? By smashing the old boundaries between what was previously considered content – articles, photos, charts – and breaking that information down to its basic elements. They can parse and contextually tag data, in its most basic elements of information, such as an individual table cell. Publishers that make it possible for users to access data at that level of detail, and devise a reasonable fee schedule, will be tapping into a huge demand for this kind of data. And savvy users will parlay that data-access into valuable intelligence, turning this concise and relevant data into a critical business tool. This is already happening in the legal field, where users are willing to pay for access to data that is extremely relevant to their goals. That is what it takes to create rich data products.

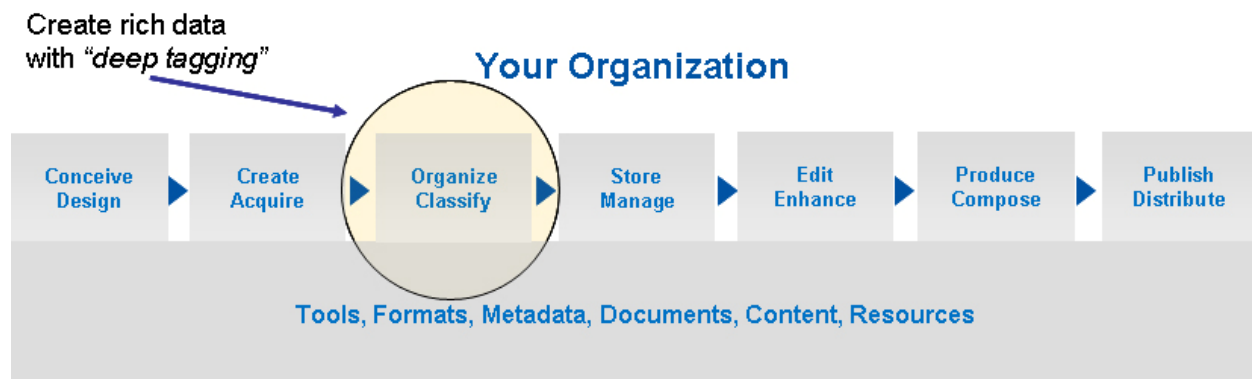
## What Are Rich Data Products?

We define rich data products as componentized content, which is linked to a web of value-added knowledge. These existing content assets are made more useful or saleable as bits of information, not as unstructured content. Publishers can do this, for example, by taking their content-based products and slicing them into smaller components –copy, charts, tables, maps, images, or lists – and then linking that data with related pieces of information, such as supporting articles, real-world applications or other resources.

These components are then enhanced with richly contextualized markup, or deep-tagging, to identify, separate, and make every individual data component instantly accessible and semantically valuable.

This contextualized markup is driven by standards-based platforms such as XML (eXtensible Markup Language). XML and related structured-information standards represent the first wave of bringing standard information encoding to the masses of content creators. Sharing a standards-based encoding scheme allows data to be made accessible to a wide range of systems, regardless of the platform or application in which the information originated.

Through deep-tagging, granular data components can be made individually accessible for any user who wants to call them up. This means that data can be used by anyone who pays for that level of access. Enriching data this way also enables publishers and other media companies to repackage it into new products for different markets. Customers can retrieve this data and use it as they see fit, not in a pre-conceived format.



This new accessibility enriches the value of data. Now that customers are able to customize data for their specific needs, quick and easy access to this data makes it part of their day-to-day workflow, becoming an indispensable part of their business.

## Business Issues Addressed by Rich Data Products

While rich data products may not be the single key to future growth for publishers and media companies, they represent an important opportunity for companies to improve their return on the investment they have already made to create the content. To that end, proprietary data that can be sold on its own and/or woven into new products represents the future of publishing as the data itself becomes the product.

### Anticipating and Meeting the Needs of Users to Generate More Revenue

- An information product is successful only if it is needed. With today's customers as our guides, we can tell that traditional pre-packaged products, while still relevant and in demand, may one day be eclipsed by information products that the user personalizes and packages on his or her own. The growth for publishers today lies in identifying and anticipating the user's wants and helping the user satisfy those wants. Some publishers are already offering rich data products to their customers. When a lawyer consults a law trade publisher's databanks for previous verdict and settlement histories and the right expert witness, the lawyer's information needs are being met by the publisher. This rich data provides a tangible benefit for the lawyer, thus building a mutually valuable relationship, one in which the lawyer will be willing to pay for in the future.

### Expanding the Brand Franchise

- In some cases, today's successful rich data publishers have established their foothold in the data marketplace by calling on the cachet of an industry-leading magazine, journal, or set of books that they publish. For example, the publisher of a leading automotive trade magazine has built a business based on rich data by selling essential information to auto body shops and insurance companies. The rich data business makes available information that the publisher gathers continuously, which their customers consider must-have data to maintain their competitive positions. One reason for the success of this company's rich data offering is the reliability and validity of the information churned out by this company's major magazine. Now, the rich data offering is fueling the company's brand resurgence. Many of the company's customers call upon this automotive rich data on a daily basis, turning it into an integral working tool for its users. The company is now a partner in the day-to-day workings of its users' businesses, which significantly strengthens its brand image.

### Creating New Revenue Streams

- The downturn in advertising revenue after the dot-com implosion jolted the maxim that it was the most reliable revenue stream for publishers, forcing publishers to look elsewhere for new revenue streams. Taking advantage of existing proprietary data – which by their nature publishers continuously collect in huge amounts – some companies have built new revenue producers by selling this data to markets with ravenous appetites for that type of information. One major publisher has made available for customers the information its reporters gather on energy pricing around the world. Traders who access this Rich Data can see pricing movements within seconds after they occur, providing many traders with on-demand, real-time information they rightly believe is essential to their business. The publisher also parlays the data into new digital products that allow trending and comparison. Another company built on its considerable presence in the oil and gas industries by developing a comprehensive database with information about pipelines and electric power networks. Users in the oil and gas industry tap this rich data product when they need detailed information on a specific power plant or a specific pipeline's diameter, owner, and direction of flow, which the database then delivers in a map format.

## Real-World Examples of Rich Data Products

There is no standard model for building a rich data product. Although many companies are successfully marketing rich data, each does it in its own way, to reach unique customer segments. Some rich data products are already up and running, generating new revenues for their companies. Other rich data offerings are still in the start-up phase, although they are being developed with fervid commitment by their respective publishers. Clearly, many publishers believe they cannot afford to ignore the potential of rich data products – even those publishers who do not feel they have the resources or in-house expertise. But the evidence is growing that rich data products can yield impressive returns for their companies that have committed the time and effort to developing them. Here are a few compelling examples.

### Online Bookseller

- When you search a major bookseller's Web site for a specific book, the site automatically lists recommendations of other books – books purchased by other readers who purchased the book you are seeking. That Web site smoothly combines sales records with site traffic data and contextualized data on individual books. Sometimes you may check out their recommendations, other times you may go elsewhere. But at all times, you are in charge of the process and the more you follow your inclinations on the Web site, the more the site automatically recommends additional avenues for exploration. The online bookseller is opening up its entire inventory for you to consider as you pursue your own interests and needs. Some people go to online booksellers just to get further recommendations of books, CDs or other products. By mining its inventory of data and continually making it accessible to customers – in other words, making it a rich data product – the online bookseller almost fills the role of personal consultant, one whose advice may not always be followed, but is usually appreciated. This company shows that simply giving customers greater flexibility to explore your entire inventory of data may be one relatively simple way to enrich your data products.

### Legal News Publisher

- A major company that produces trade publications for lawyers has expanded and enriched its databank. This publisher has componentized and enhanced its data, thus making available an online database of verdicts and settlements as well as expert witnesses to jury members. If a lawyer wants quick access to a list of experts in a specific field, they can find it here – at a price. This is one time when the publisher gets to have his cake and eat it too, since it also receives revenue from experts who want more expansive listings. Searching the database costs up to \$195 a day and experts pay as much as \$10,000 to become listed.

The company's publications promote the database business. However, what is most compelling about the database is that lawyers must have this type of information. Whenever someone hires a lawyer to execute a lawsuit, a diligent attorney would immediately research similar lawsuits to learn about settlements, the history of the jurisdiction in which it was filed, as well as potential expert witnesses. This publisher has now created a database that contains all this data and is rapidly providing must-have information to lawyers and generating a strong, self-renewing revenue stream for the publisher.

Rich data products offer another advantage, as long as the data exists, it's relatively easy to expand the service. For example, this law trade publisher provides a service by phone whereby legal researchers search for the right expert witness for a lawyer, and the company offers clients the option of an unlimited annual contract or a flat research fee.

## **Automotive Trade Publisher**

- Most auto body shops today use an online system developed by an automotive trade publisher. The system is a rich data product that leverages the information regularly collected by the publisher. If you get into an accident with your car, your insurer will direct you to a body shop. The shop takes digital images of your car and transmits them to your insurer. The publisher's online system instantly displays a protocol based on thousands of similar situations, providing the procedures, parts, and the costs involved. The claims adjuster does not have to leave the office, and can perform fifteen appraisals a day instead of four. The body shop is able to order parts and schedule the repair in a timelier manner. Over the years, much of the country's collision repair business has come to rely on this automotive trade magazine's online system, because insurers and body shops need it to maintain their competitiveness.

This same publisher also has a database that tracks dozens of car auctions. The database is so accurate at tracking residual values that most insurance companies insure against its projections. Large auto fleet owners, such as major auto rental companies, mine the database to determine at which auctions they will sell certain models. Dealers of new and used cars rely on the database to see how many days each car sits on the lot. The dealers calculate their markdowns and determine when to auction cars based on this information. This trade publisher created its rich data product by allowing customers to use its data, observing which questions customers asked, and then building the product to help customers find their own answers in real time.

## **Medical Trade Publisher**

- This automotive trade publisher also publishes medical trade titles. The publisher continually collects information for its enormous pharmaceutical database, which it has now turned into a rich data product. Pharmacies and hospitals regularly consult the database to prevent drug interactions. The system highlights all relevant aspects of a prescribed drug. By cross-referencing physicians' admitting records in hospitals and customers' historical buying patterns at pharmacies, the database increases the chance of spotting a longstanding medical condition or drug regimen that might cause a reaction. This is simply essential information for pharmacies and hospitals.

The publisher is realizing an impressive return on investment from both rich data products, one reason it has achieved double-digit growth for eleven consecutive years. For example, the company realizes an operating margin of about 15% to 20% on its controlled-circulation magazines, compared to an operating margin of about 35% for its rich data product business. Even though the editorial costs are much higher for the database publishing business, the company's sales and circulation costs are significantly lower. For example, the circulation-based business reported average monthly sales costs of 20% to 25%, while sales costs for the rich data business averaged about 5%. Moreover, the circulation costs for the rich data operation were negligible.

## Construction Trade Publisher

- A company that produces some of the construction industry's most widely read publications has also launched a rich data offering. The publisher integrates a large building database, which includes a project listing of hundreds of thousands of commercial projects, describing every workflow stage in detail – from digital plans and specifications to information on architects, engineers, and bidders. Database users can determine what type of building products will be needed in a commercial construction project. For example, a wallboard manufacturer could obtain immediate leads on new projects that require a specific grade of wallboard.

To obtain access to this database, customers pay annual subscription fees, choosing their tier of participation based on the scale and function of their data requirement. The highest tiered customers are charged more than \$10,000 and receive complete CRM and leads that include detailed product specifications. To compile this data, the publisher employs a staff of more than 500 people in major metropolitan areas who document the specs, cost, and stage of every construction project. What makes this information particularly valuable, is that it's not in the public domain. By investing heavily and working hard to collect this information, the company seeks to have its clients manage their workflow using the publisher's information, which can build a long-term partnership and strong revenue stream.

## Technical and Scientific/Medical Publisher

- An online technical and scientific/medical publisher is offering users a customizable portal creation service. This service allows the publisher's clients to add their branding and internal content to the publisher's medical information product. Depending on which of three tiers the customer selects, services are available for site branding and basic functions such as text browsing, searching, viewing and retrieval, e-mail alerts, discussion forums, posting of multimedia content, live discussion forums, online continuing medical education testing, case reports, and classified advertising. This portal service allows the publisher to generate additional revenues from its existing customers, and the choice of three gradations does not limit participation to only the company's largest clients.

## How to Create a Rich Data Product for Your Customers

Of course, any initiative that can produce such a dramatic payoff comes with a price. Building the sophisticated information architectures required to support rich data products can be a monumental task for any company. Few organizations have the resources or expertise to do this job cost effectively, and those that do may lack the time.

In addition, building rich data products also requires a different mind-set. Instead of writers and editors, employees need to approach the task as content aggregators who are producing snippets of information that have more value as individual elements rather than as examples in an overarching story. Moreover, the act of collecting, tagging and indexing this content can be quite immense. So too is the task of creating, configuring and maintaining the content management system required to deliver the rich data to customers. And this is an ongoing process. To be valuable, the rich data must remain current with the latest advances in knowledge or fact-gathering.

At the same time, many companies recognize that offering rich data products could be a key to their future success. Even though advertising still represents the backbone of publishing revenues, providing this kind of must-have data enables publishers to set up an easily expandable business model. Once a company develops rich data expertise, it not only continues to repurpose existing deep-tagged data, but also tracks the demands of its markets so it can exploit new models. In that sense, rich data products become a self-fulfilling prophecy, inspiring the publishers to develop more rich data products that will generate additional revenue.

So far, major publishing companies have been the most aggressive ones to exploit the rich data opportunity, leaving many smaller publishing companies on the sidelines. Like their larger counterparts, they understand the rationale behind offering rich data products, they're just not sure how to go about tapping their own content assets. Working with an experienced content services provider could be one way for them to get started in building a rich data offering.

## Rich Data Products – 5 Steps to Success

Obviously, not all companies will conclude that marketing rich data products makes sense for them. But at the same time, we believe it makes eminent sense to explore the rich data products opportunity and determine whether your company should move forward in that direction. To that end, there are five steps necessary to develop a successful offering.

### Step 1: Perform a Customer Survey

The demands of the market must always come first. Ask your customers how you are currently meeting their needs. How you can help them exceed their expectations and realize their vision for the business. In addition, ask your staff – management, editors, researchers, and IT people – how *they* think your customers are now using your information and what *they* believe your customers would love to derive from it. Develop your best analysis of what people are doing with your data now, and how they would use it in the future if it was accessible in greater detail.

### Step 2: Audit Your Content

Take a careful and thorough look at your own content resources. See where your data is already rich and where it could be further enhanced. Can you add depth and detail to this data, does it need to be repackaged differently? Imagine how useful this data could be if it were easily accessible – as readily available as the data from the above-mentioned online bookseller, or the law trade publisher. Could this data become *must-have* information if it were prepared and offered properly? Consider how well you are positioned to develop and market a rich data product. What is your company's mind-set? Do you see yourself as a publisher of books and journals? Or do you see yourself as aggregator who can package content into whatever format the customer wants? That latter mind-set is an important building block toward developing successful rich data offerings.

### Step 3: Find an Experienced Partner

Look for a rich-data savvy partner who can help you go from concept to reality. This partner may be one that could help you transform or overhaul your IT architecture, or it may be one that could help deep tag your content. Ideally, your partner should be able to provide all the resources you need to develop rich data products – editors, researchers, IT professionals, technical expertise and experience. Keep in mind there are certain risks to trying to build the offering on your own. First, every company has a biased view of its own data. In addition, you may not be able to spare the internal resources to do the job effectively. An outside expert that has extensive experience indexing content, developing

abstracts, and deploying content management systems could give you a key edge in developing and implementing a cogent strategy for repackaging and repurposing your existing data.

#### **Step 4: Lather, Rinse, Repeat**

Once your rich data product system is built, start feeding the data back into itself. Your data is only as rich as your customers believe it to be. By its very nature, offering rich data products is an ongoing process – one that constantly requires you to analyze what your customers are doing, and not doing – with your data, what they would prefer to do with your data and how you can meet their expectations, if you're not doing so already.

#### **Step 5: Observe, Analyze, and Improve**

Track your rich data products revenue streams. Continually find new ways to ease access to your data to customers, until it becomes as natural as breathing for the members of your content services teams. Remember that rich data products are a process, not a destination. If you don't continue to enrich your data, it will grow stale and your competitors will beat you to the punch with more relevant content. Never stop looking for ways to augment your revenue streams and develop new ones.

#### **Conclusion**

While many companies are already carving out new revenue streams by exploiting their own data, most existing successful rich data offerings started as relatively simple experiments to test demand for new types of content. As companies enabled customers to access their content, they developed the databases that would support more meaningful searches. And the more meaningful the search, the greater the customer's craving to access even more data.

In other words, most rich data products were actually created by market demand. And this demand is only in its infancy. Whether or not you choose to create rich data products from your existing content, we are convinced that those publishers and information services companies that objectively explore how to transform their content into rich data offerings will be positioning themselves to take advantage of these emerging opportunities in tomorrow's information marketplace.