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How Big Data can fuel bigger growth

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In the right hands and handled strategically, the massive amounts of information companies collect today can become a valuable new asset. Players seeking additional organic revenue streams should consider tapping their data trove to power a new information services growth engine.

Strong growth remains a hallmark of corporate success. But how do CEOs move the needle on their already huge, multibillion-dollar companies?

Mergers and acquisitions can quickly add big chunks of value to an organization, but in many industries, attractive targets have become scarce. For mature industries, untapped geographies and markets are similarly hard to find. Using traditional cross-selling and up-selling strategies to generate baseline growth? Been there, done that.

Instead, the answer may lie in one of the most valuable but underused assets a company already has: its customer information.

Call it Big Data. With the rise of digitization, established enterprises in industries ranging from telecom and media to healthcare and financial services have amassed terabytes of information about their legions of customers. This digital treasure trove, already highly valued as a way to help meet the evolving needs of customers and spot trends, can help companies create new products and services, and perhaps even spawn entirely new businesses. Moreover, a significant number of consumer-facing organizations have natural advantages in this area; for them, leveraging Big Data represents a particularly lucrative opportunity.

Untapped value

Overall US demand for information services is expected to exceed $600 billion by 2015.

As data-driven insights become an increasingly critical competitive differentiator, companies will use them to drive and optimize business decisions across industries. In the past, this market was largely limited to traditional market research and data specialists, but today, virtually any company with a large customer database can potentially become a serious player in the new information game.

Take the auto industry. Since many vehicles now feature GPS and telematics systems, some car manufacturers have been able to collect and monetize a wealth of data on customer driving habits.

General Motors Co.'s OnStar telematics system, for example, not only provides vehicle security, information and diagnostics services to drivers, it also captures telemetry data. In 2007, OnStar and GMAC Insurance partnered to create an opt-in program that uses the telemetry data to offer lower insurance premiums to customers who drive fewer miles. Thanks to the program, consumers can save significantly on car insurance, which boosts GM's customer satisfaction performance. This, in turn, helps GM attract new OnStar paying customers.

In another example, in 2009, American Express Co. launched an analytics and consulting business that draws on the purchasing behavior of its 90 million credit card holders across 127 countries. This organization, American Express Business Insights, hopes to attract direct marketers by using proprietary data to enhance customer acquisition and retention programs.

Companies sitting on large amounts of customer data—including insurance carriers, retailers, transportation companies and communications providers—have a unique opportunity to make this type of information services play. With their direct relationships with millions of customers, they typically have the most accurate and complete information on large sets of consumers. By contrast, competitors such as third-party information providers must rely on publicly available or purchased data.

Better yet, the cost to obtain the raw data contained in these compre-

hensive and often unique data sets is virtually nonexistent, since the company's core organization collects it in the course of doing business.

Using information services to drive growth requires a thorough understanding of what kinds of raw data exist in the organization. Armed with that insight, companies can then decide which tier of information value they should aspire to provide.

We use the Accenture Information Value Pyramid to illustrate various information service strategies. The pyramid has three levels—raw data, insights and transactions. The potential value and profitability of an information services business depends in large part on the condition of the data the enterprise owns. The base of the pyramid features raw, less differentiated and thus less valuable data. Moving up the pyramid creates larger revenue opportunities, although these tend to be more difficult to execute (see chart, page 4).

In some cases, government agencies have been ahead of the curve in recognizing the value of the raw data they hold.

Providing raw data requires minimal effort and calls for the least strategic differentiation. It is the most common strategy but generates the least amount of revenue. As a strategy, raw data makes sense in industries with fragmented information and where the sharing of information does not put your business model at risk.

A number of major US banks and credit card issuers have begun to sell raw data about their customers' debit and credit card shopping habits—spending behaviors, the stores they frequent and what they buy—through intermediaries such as Cardlytics. Retailers use the data to offer targeted discounts via text messages or email, and pay commissions that range from 10 percent to 15 percent for each customer who takes advantage of the discounts. A report by Aite Group projects these types of card-related revenues could be worth $1.7 billion annually for card issuers by 2015, up from roughly $100 million in 2010.

Likewise, third-party data aggregators and information services providers such as Experian Information Solutions, Acxiom and Blue Kai collect raw consumer and business purchasing information on tens of millions of consumers from a variety of sources, including websites, loyalty programs, self-reported sources, public records and retail point-of-sale data. They then provide data, analysis and more to marketers looking to boost the effectiveness of their advertising and promotional campaigns. Other customer data intermediaries exist in the catalog and specialty retailing industry, where firms such as Abacus Direct Corp. and I-Behavior collect transactional data to provide direct marketing services to members.

In some cases, government agencies have been ahead of the curve in recognizing the value of the raw data they hold. The United States Postal Service, for one, sells a variety of licenses, for up to $175,000 annually, giving organizations access to its National Change of Address database. At the state level, Ohio, Illinois and many others have collected millions of dollars over the years by selling records containing personal information, such as that found on driver's licenses and driving records, to a variety of companies. Since 2005, Ohio, for example, has sold nearly 1.4 billion individual records—names, addresses, dates of birth, driver's license numbers and vehicle title information—for more than $40 million. While Ohio is compelled to sell this data at cost, other states such as Oklahoma and Tennessee charge significantly more. At least one national licensing agency in Europe made several million dollars selling driver information during the same period.

Privacy is a paramount concern for these government data vendors. The

What's your data worth?

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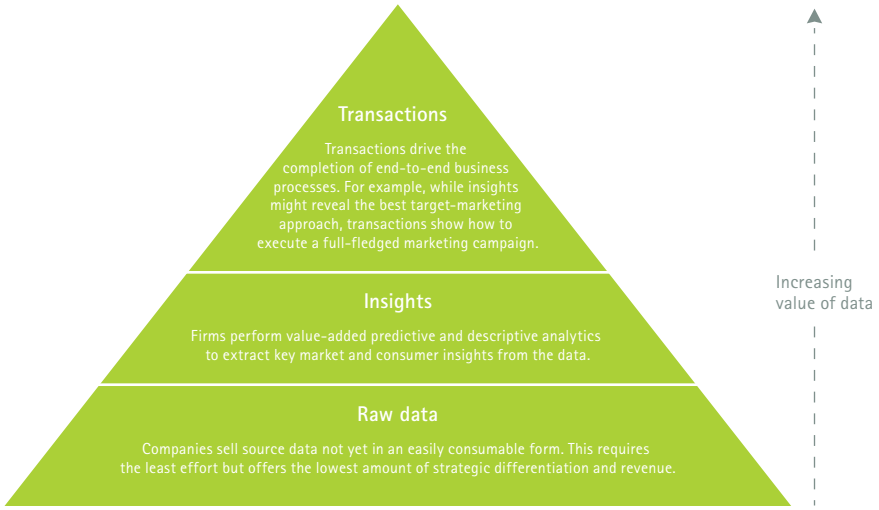

Source: Accenture analysis

Ohio Bureau of Motor Vehicles, for example, operates as an information vendor under strict rules set out by the federal Driver's Privacy Protection Act.

Providing "insights" requires more effort and more strategic differentiation, but also generates more revenue than simply selling raw data. In the United Kingdom, supermarket giant Tesco sells data on the shopping behavior of its Clubcard users to retailers and big manufacturers through a majority-owned shopper information company—which in 2010 earned £53 million in profits.

Several years ago, Google, taking a more altruistic tack, discovered that an uptick in searches concerning flu-like symptoms could be an early indicator of flu outbreaks. By externalizing this search insight into Google Flu Trends, the company has been able to change the game regarding disease prevention. US public health organizations such as the Department of Health and Human Services can now act more quickly to combat outbreaks through early detection. Beyond the United States, Google uses search patterns on dengue fever among users in countries such as Brazil, India and Indonesia to alert health organizations to potential outbreaks.

Data at the "transactions" level enables companies to execute their end-to-end processes better, and could help improve point-of-sale retail transactions, marketing campaign rollouts or fraud detection. In some cases, a company's data may be so differentiated and applicable to another industry that it inspires the company to venture

into a new industry and compete effectively there.

American Express provides transaction-level value by running marketing campaigns on behalf of merchants, for example, and Google's business model is based on its ability to use search data to connect advertisers effectively with potentially interested consumers. A number of major US retailers infuse their brands with new competitive strength through transaction-level data analysis. Working with proprietary analytics platforms, these retailers can externalize descriptive analytics in an easy-to-use interface. With access to such data, brands can drive targeted in-store campaigns more effectively, boosting sales.

On average, as companies move up the information value pyramid from data seller to insight provider to transaction enabler, the value they receive jumps significantly.

More and more data-rich companies are crafting strategies to climb the pyramid. As data storage costs drop and digital convergence provides new data collection sources, companies are using these technologies to gain a more complete picture of their customers—a few of them seeking a level of omniscience that makes some observers uncomfortable.

Consumer protection

At the same time, government agencies, consumer advocates and some companies have raised concerns about the unethical sale of consumer data, exemplified by the GPS device maker that recently apologized for selling customers' driving data to local and regional governments in the Netherlands that the police then used to set speed traps.

One approach to protecting consumer privacy proposed by the US Federal Trade Commission offers organizations a simple three-phase framework: promote consumer privacy throughout your organization; simplify consumer choices; and increase the transparency of your data practices. The FTC also provides best-practice examples regarding the collection, storage and use of consumer data.

Companies, too, are looking for the responsible use of consumer data. For instance, Microsoft has called for cloud computing data security standards.

New privacy legislation is pending in the United States, while other countries have or are also creating laws and regulations that address these issues. The United Kingdom, for example, passed the Data Protection Act of 1998, which outlines the legal obligations that companies must adhere to when handling an individual's personal information.

In 2003, Japan passed the Act on the Protection of Personal Information in response to consumer and social pressure to protect individual privacy in commerce. Full understanding of and com-pliance with the evolving scope and details of such laws and regulations in response to the rise of Big Data must become part of any go-to-market strategy.

Some companies are investigating ways to compensate customers for their data. In 2009, for example, Bank of America Corp. applied for a patent on the monetization of personal information in an information bank that not only provides customers control over their information but also enables them to receive value in exchange for it.

This process can be configured in a variety of ways. One version relies on mobile devices and other technologies along with a concierge service to enable users to monetize their information, which could include their personal recommendations

regarding products, services and entertainment choices, for example, as well as transaction data. Users can adjust the device's privacy settings to release their personal information incrementally to others as desired.

Differentiation through data

This data-driven opportunity is causing some players to consider bold strategic moves that can set them apart from the competition and provide vital new revenue streams.

The value of a company's information hinges on its ability to differentiate itself in the marketplace in terms of information scale and data scarcity, and on its capacity to combine differentiated elements with traditional sources of information using data management and analytics capabilities. So before launching a new information business, leaders need to address three fundamental considerations by answering the following questions.

Information scale. Do we have enough information to differentiate ourselves in the marketplace? (Having a customer base in the hundreds of thousands is not enough in an age where some companies count heads in the tens of millions.)

Data scarcity. Do we have data elements that are difficult to replicate in the marketplace? (Leaders should determine if the company's core business creates effective barriers to third-party data collection and whether other businesses can collect alternative data that would serve as a substitute of comparable value.)

Data blending and analytics. Can we combine our data with information from others and then use sophisticated data analysis to create differentiated products? (No single organization has all of the data it needs to meet the demand for information services products; as a result, the ability to take your own information, combine it with other data and make it uniquely valuable via robust analytics will be critical to success.)

Concrete action

Once these questions are answered, companies can take concrete actions to assess whether the opportunity is real or not and if pursuing it makes sense.

First, a company needs to assess the industry applications for which its data would be relevant. These typically span the decision sciences and could include marketing, risk management, and research and development. But some types of data could also help to drive better operational effectiveness and manufacturing performance.

Having chosen the appropriate applications, a company should methodologically analyze the attractiveness of its information compared with that offered by current incumbents. Knowing how your information could drive cost, quality or responsiveness benefits in a market can provide insights into whether your offering will fit in with or disrupt the existing information value chain.

One effective tactic involves validating your information services strategy by discreetly contacting potential strategic customers. In addition to providing possible price points for various data products, this contact can help the organization build its credibility in what are probably new markets.

The next step involves understanding capability gaps. Companies often lack important capabilities or assets they will need to win business in the information services arena. As a result, even an organization well positioned with a uniquely valuable information-based offering has to recognize that it may not have the

For further reading

"How to turn data into a strategic asset," *Outlook* 2010, No. 2.

For this and other articles, please visit accenture.com/Outlook.

skills, resources and systems in place it needs to collect, store, analyze or monetize the data.

Additionally, companies must assess the legal, privacy and policy implications of monetizing information assets. One suggestion: Look to other information services entrants and industry bodies for best practices on how to comply with regulatory requirements and provide transparency to customers.

Yet another consideration involves the go-to-market approach. Do you assemble the data for off-the-shelf catalog sales, establish a dedicated sales team, develop a key account management approach—or all three? The choice will depend on the number and types of customers interested in purchasing your data, its assessed value and the amount of value-added you plan to offer on top of the raw numbers. Ultimately, companies need to decide whether the Big Data prize is big enough to warrant the creation of specific sales capabilities.

Finally, companies should follow an accelerated product design and prototyping approach when launching these products. Because the information services business is evolving rapidly, winners are usually those that are fastest to market. Leveraging an agile prototyping process will not only improve a company's speed to market, it will also enable it to align with the potential strategic customers identified earlier. These customers can provide invaluable help in shaping the product, tailoring it to meet the exact business challenges targeted customers face and boosting the odds of market adoption upon product launch.

Executives often find it difficult to value opportunities within the information services landscape due to the intangible nature of pricing products that primarily aid decision-making activities. While raw data, insights and transaction-level information provide the rootstock onto which companies graft their strategic visions, assessing the value of these assets can be a challenge, since the "product" often offers different levels of value to different organizations. As a result, companies should experiment with value-based pricing techniques to arrive at equitable terms.

While other competitive "essentials" fall in and out of fashion, growth remains the defining measure of business success—it's how markets assess companies and leaders gauge their performance against peers. But achieving adequate growth in today's often-difficult competitive environment means everyone and everything in an organization needs to work harder than ever. Companies endowed with massive amounts of customer information can use it to supercharge their growth engines, potentially making Big Data a very big deal indeed.

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