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Data Quality? That's IT's problem not mine

What Business Leaders Should Know About Data Quality

WHITE PAPER

Clarence W. Hempfield, Jr., CIARP • Director, Global Analyst Relations & Strategy
Pitney Bowes Business Insight

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ABSTRACT

WHEN BUSINESS LEADERS MAKE STRATEGIC DECISIONS, WHICH ARE BASED ON BAD DATA, THOSE DECISIONS CAN RESULT IN FINANCIAL LOSS, NEGATIVELY IMPACT CUSTOMER RELATIONSHIPS AND IRREPARABLY DAMAGE AN ORGANIZATION'S CREDIBILITY IN THE MARKET. IN FACT, OVUM, A GLOBAL ANALYST FIRM, ESTIMATED "THAT POOR DATA QUALITY COSTS U.S. BUSINESSES AT LEAST 30% OF REVENUES—*A STAGGERING $700 BILLION PER YEAR*" (SHEINA, 2010) AND OUR DATA CHALLENGES HAVE ONLY BECOME MORE COMPLEX AND COSTLY AS ORGANIZATIONS ENTER GLOBAL MARKETS AND MUST INCREASINGLY MANAGE DATA IN MULTIPLE LANGUAGES, FORMATS AND CULTURAL TRADITIONS.

WHAT CAN BUSINESS LEADERS DO? A CRITICAL FIRST STEP IS FOR THE BUSINESS LEADER TO ACKNOWLEDGE OWNERSHIP OF THE ORGANIZATIONS DATA AND ITS DATA QUALITY ISSUES. IMPROVING THE QUALITY OF THE ORGANIZATION'S DATA MUST BE LEAD BY THE BUSINESS, BUT THE BUSINESS WILL NOT HAVE TO GO AT IT ALONE. BUSINESS AND IT HAVE A SHARED OWNERSHIP OF AND ACCOUNTABILITY FOR PROTECTING AND ENHANCING THE ORGANIZATION'S DATA.

COMPANIES CAN ILL AFFORD TO LEAVE THE QUALITY OF THEIR DATA TO CHANCE, PARTICULARLY IN STILL-TOUGH ECONOMIC TIMES. HAVING ACCURATE, CONSISTENT, AND UP-TO-DATE INFORMATION IS NOW A BUSINESS IMPERATIVE RATHER THAN A LUXURY. —SHEINA, 2010

Data is the lifeblood that powers every organization today—big or small, commercial enterprise or government agency. Currently, organizations are capturing a tremendous amount of data about their customers, partners and employees. IDC estimated that in 2011 the amount of data available in the "digital universe" has reached nearly 1.8 trillion gigabytes (Gens, 2010). However, the amount of data available continues to explode exponentially and will reach nearly 7 zettabytes (ZB) by 2015 (Gens, 2010) (A zettabyte is a one followed by 21 zeros!).

This explosion in data means that organizations have to contend with both traditional forms of business data and a rapidly growing list of non-traditional data sources, such as social media—blogs, communities, Facebook, Foursquare, YouTube, Twitter, LinkedIn, Google+ and others. In addition, there is a steady stream of potentially high value data emitting from radio frequency identification (RFID) tags, devices with global positioning systems (GPS), bar code readers (i.e. QR Codes), etc. In an effort to better understand and anticipate the needs of its customer, organization's have a growing need to process and analyze this data in real-time. An organization that is not in control of its data is not in control of its business.

An initial challenge is that few individuals can successfully discuss poor quality data issues with business leaders before the executive has redirected them to the IT organization. The belief is often that the business leader is focused on driving their business and as a result they focus on issues directly impacting the business. The belief of many senior executives is that "data quality" is an IT problem. However, there are many critical business issues which are directly impacted by missing, inaccurate, incomplete or corrupted business data.

When business leaders make strategic decisions, which are based on bad data, those decisions can result in financial loss, negatively impact customer relationships and irreparably damage an organization's credibility in the market. In fact, Ovum, a global analyst firm, estimated "that poor data quality costs US businesses at least 30% of revenues—a staggering $700 billion per year" (Sheina, 2010). And our data challenges have only become more complex and costly as organizations enter global markets and must increasingly manage data in multiple languages, formats and cultural traditions.

What can business leaders do? A critical first step is for the business leader to acknowledge ownership of the organizations data and its data quality issues. Improving the quality of the organization's data must be lead by the business, but the business will not have to go at it alone. Business and IT have a shared ownership of and accountability for protecting and enhancing the organization's data.

It is vital that business leaders take an active, leading role in fixing their organization's business data. The business must resist the urge to only implement a technology solution, but rather partner with IT and address the larger "people issues" which are at the root of its poor data problem: business process, employee training, business rule creation and enforcement. The business leader has to foster a culture that views data as a critical business asset and holds people accountable for the caretaking of data. Improved business data results in more accurate decisions, lower operational costs, improved customer satisfaction and improved financial performance.

You'll want to talk with IT

Has anyone ever tried to have a conversation with you about data quality and its impact on your business? How long did it take you to redirect them to IT? Data quality is a somewhat abstract term that once it is uttered in a business leader's presence seems to generate an almost instantaneous and nearly unconscious response—redirection of the "utterer" to IT. The belief is often that the business leader is focused

on driving their business and as a result they focus on issues directly impacting the business. The belief of many senior executives is that "data quality" is an IT problem. Well, data quality is IT's problem, right?

Have you, or your peers, ever considered any of the following:

- How can we improve customer retention?
- How can I reduce out-of-control expenses?
- Why are our customers churning?
- Which customers are most profitable?
- Who are our most valuable best customers?
- Which customers segments can we grow through cross- or up-selling?
- How much can we save through more effective marketing campaigns?
- Why are our customer service/support response times increasing?
- Will I get fined or face jail time by signing this financial disclosure?
- Are we truly compliant with key industry regulations (Basel II, SOX,HIPAA, Gramm Leach Bliley, Office of Foreign Asset Control, etc.)?
- How well do we "know" our customers?
- What is our total potential exposure for every client who is on the Office of Foreign Asset Control (OFAC) or Politically Exposed Person (PEP) lists?
- Are we respecting our customer's privacy preferences and in compliance with privacy regulations?
- Which customers are outside our acceptable credit risk tolerance?
- How can we reduce cost of sales?
- How can we reduce budget overruns?
- We seem to have an unacceptably high number of vendors, how can we reduce this number?
- How can we ensure adequate inventory levels?
- What can we do to improve the quality of our products?
- Our shipping expenses are excessively high, how can we fix this?

All of these issues, and many more, are routinely faced by leaders within the business. And the answers to these questions are derived from an analysis of the organizations biggest asset—its data. What a business leader often does not consider is that the quality of the organization's data plays a direct and critical role in their strategy formulation and it can ultimately undermine its execution and performance. When business leaders make strategic decisions, which are based on bad data, those decisions can result in financial loss, negatively impact customer relationships and irreparably damage an organization's credibility in the market.

How is my business impacted by bad data?

In one of the most powerful, and often quoted, research reports to be published in the last 10 years—that you likely never saw—The Data Warehousing Institute (TDWI) estimated that "poor quality customer data costs U.S. businesses a staggering *$611 billion a year* in postage, printing, and staff overhead" (Eckerson, 2002). While that number may be tough to digest, it is also sobering to consider that it may have only been the tip of the iceberg. Many believed then and now that the costs businesses incur due to rework, workarounds and lost revenue opportunities push that number even higher.

According to research published by Gartner, some individual organizations estimate that they "lose as much as $100 million annually due to poor data" (Gartner, 2010). Ovum, a global analyst firm, estimated "that poor data quality costs US businesses at least 30% of revenues—*a staggering $700 billion per year*" (Sheina, 2010).

...IT'S TIME FOR BUSINESS PROCESS PROS TO WAKE UP AND SMELL THE DIRTY DATA. —KAREL, 2011

This is a global issue challenging business across all industries. In research conducted by Capgemini, a global consulting firm, it found that poor data cost the UK economy £67 billion per year—£46 billion in the private sector and £21 billion in the public sector (Capgemini, 2008).

In the nearly 10 years since the TDWI published its report, our economy has become increasingly globalized. Our data challenges, as a result, have become more complex and costly as organizations who conduct business across international borders must increasingly manage data in multiple languages, formats and cultural traditions. It is reasonable to think that the global impact of poor data would indeed be significantly higher than $700 billion annually.

OK, but how does this affect me?

Often leaders within the business are sponsors of or direct beneficiaries of the implementation of large business applications (CRM, BI, ERP, etc). Data quality problems make it difficult, if not impossible, to generate business value from business applications as they require significant integration of data. In fact, poor data quality can cripple large, high profile projects. In 1996 Fleet Bank (now part of Bank of America) attempted to implement a $38 million CRM project that never reached its original objectives and lead to dismissals after three years of failure (TDWI, 2002).

Other painful, cautionary tales unearthed by TDWI's research include:

- A telecommunications firm lost $8 million a month because data entry errors incorrectly coded accounts, preventing bills from being sent out.
- An insurance company lost hundreds of thousands of dollars annually in mailing costs (postage, returns, collateral, and staff to process returns) due to duplicate customer records.
- An information services firm lost $500,000 annually and alienated customers because it repeatedly recalled reports sent to subscribers due to inaccurate data.
- A large bank discovered that 62 percent of its home equity loans were being calculated incorrectly, with the principal getting larger each month.
- A global chemical company discovered it was losing millions of dollars in volume discounts in procuring supplies because it could not correctly identify and reconcile suppliers on a global basis.
- A regional bank could not calculate customer and product profitability due to missing and inaccurate cost data.

The best case scenario for avoidable mistakes such as these is that the trajectory of a once promising career is temporarily put on-hold. Worst case, it can force the leader into an unexpected job search following an embarrassing separation. However, it may take years for the organization to recover, if it ever fully can.

How do I fix this on my own?

A critical first step is for the business leader to acknowledge ownership of the organizations data and its data quality issues. Once the leader has accepted this fact, he/she can begin the long, hard process of affecting culture change within the organization. As it is the business employees who introduce the lion share of bad data into the organization's business systems during the normal execution of their jobs, they must embrace their active role in the organization's improvement process.

Improving the quality of the organization's data must be lead by the business, but the business will not have to go at it alone. The IT organization is an incredibly important partner in this process. Business and IT have a shared ownership of and accountability for protecting and enhancing the organization's data. It is important

to understand that to truly fix the organization's data quality problems, the implementation of technology on its own will not solve the problem. What will be required is a culture change; the creation and enforcement of new business processes; employee training; an enterprise data quality solution; a dedicated team to manage and measure continuous data improvement—all of these items are part of what industry analysts call a data governance program.

Resist the urge to sponsor a data quality improvement project and then expect IT to implement a solution to fix. IT should not be left to fight this problem without the active participation by and leadership of the business. Simply put, IT does not feel the true impact of poor data, they do not know your organization's business rules that govern data and its use, and they do not own the subject matter expertise ultimately to fix it. Just as importantly, only the business can define what "good enough" data is.

In order to properly correct the organization's inaccurate data, business must actively lead this effort while partnering with IT.

Best practice examples

The Schwan Food Company

The Schwan Food Company, a multibillion-dollar private company with approximately 18,000 subsidiary employees worldwide, sells fine frozen foods via its traditional delivery trucks as well as in grocery store freezers, online and through the foodservice industry. Schwan products have a solid presence in approximately 50 countries.

CHALLENGE:

Schwan's Home Service, Inc. sought to eliminate thousands of duplicate customer records, which were hampering customer service efforts and causing delivery delays.

SOLUTION:

Schwan's Home Service, Inc. implemented an Enterprise Data Quality Solution to improve customer service, eliminate duplicate customer records, while building a 360-degree view of the customer.

MSC Industrial Direct Co., Inc.

MSC Industrial Direct Co., Inc. a Fortune 1000/Forbes Platinum 400 company, is one of the nation's largest direct marketers of industrial supplies and equipment. Since 1941, MSC has set the industry standard for quality, selection and customer service. With inventory housed in four large distribution centers throughout the U.S., MSC supplies a catalog of more than 500,000 products—selling everything from cleaning supplies and shelving to electrical tools and machinery. MSC reaches its customers through a combination of approximately 27 million direct-mail catalogs and CD-ROMs, 97 branch sales offices, 912 sales people and the Internet.

CHALLENGE:

Following a company merger, MSC Industrial Direct Co. found that duplicate customer records were disrupting the business workflow and causing sales compensation issues.

SOLUTION:

MSC Industrial Direct Co. implemented the Pitney Bowes Business Insight Data Quality Solution to eliminate duplicate customer records and minimizing its credit risk exposure.

Summary

Data quality has long been viewed by business executives as a problem for their colleagues in IT to resolve. These executives often have overlooked the role that poor data has on their decisions and job performance.

AS WE REDUCE [CUSTOMER RECORD] DUPLICATES, WE REDUCE BILLING ERRORS AND MINIMIZE INTERNAL COMPENSATION ISSUES DUE TO THE ELIMINATION OF BACKEND ADJUSTING.

—PATRICK HASHIMOTO, NEW BUSINESS DEVELOPMENT MANAGER, MSC INDUSTRIAL DIRECT CO.

Consider how one would make strategic business decisions utilizing missing, inaccurate, incomplete or corrupted business data? Now, consider the impact of such a fatally flawed decision—particularly in our already challenging economic times. How long will it take your organization to recover from a self-inflicted mistake? As budgets continue to get squeezed, how does an organization justify wasting nearly 30% of its revenues annually (Sheina, 2010) due to poor data?

PricewaterhouseCoopers in its 2001 Data Management report may have said it best:

"For a director in charge of marketing, production or CRM to fail to take an interest in data management, or any responsibility for its quality, is a clear abdication of duty. The companies which have established clear management control over data management are acknowledging the fact that it is a core competency like managing people or customer relationships—and that, as a key foundation of the business, it should be handled at the board level alongside other business-critical issues" (PWC, 2001).

It is vital that business leaders take an active, leading role in fixing their organization's business data. The business must resist the urge to only implement a technology solution, but rather partner with IT and address the larger "people issues" which are at the root of its poor data problem: business process, employee training, business rule creation and enforcement. The business leader has to foster a culture that views data as a critical business asset and holds people accountable for the caretaking of data.

Improved business data results in more accurate decisions, lower operational costs, improved customer satisfaction and improved financial performance. Isn't it time that you became actively involved in fixing your organization's data?

REFERENCES

Capgemini. "The Information Opportunity Report: Harnessing Information to Enhance Business Performance." 2008.

Eckerson, Wayne W. "Data Quality and the Bottom Line." TDWI 2002.

Gartner. "Findings from primary research study: Data quality issues create significant cost, yet often go unmeasured." 21 October 2010.

Gens, Frank . "IDC Predictions 2011: Welcome to the New Mainstream." IDC December 2010.

Karel, Rob. "Data Governance Must Bridge Business Process, Policy, Architecture, and Value." Forrester Research. 4 May 2011.

PricewaterhouseCoopers (PWC). "Data Management Survey." 2001.

Sheina, Madan. "Best practices for evaluating data quality tools." Ovum 24 August 2010.

Pitney Bowes
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UNITED STATES

One Global View
Troy, NY 12180
1.800.327.8627

pbbi.sales@pb.com
www.pbinsight.com

CANADA

26 Wellington Street East
Suite 500
Toronto, ON M5E 1S2

1.800.268.3282

pbbi.canada.sales@pb.com
www.pbinsight.ca

EUROPE/UNITED KINGDOM

Minton Place,
Victoria Street
Windsor, Berkshire SL4 1EG
United Kingdom

+44.800.840.0001

pbbi.europe@pb.com
www.pbinsight.co.uk

ASIA PACIFIC/AUSTRALIA

Level 7, 1 Elizabeth Plaza
North Sydney NSW 2060

+61.2.9437.6255

pbbi.australia@pb.com
pbbi.singapore@pb.com
www.pbinsight.com.au

92891 US 1109