

The DQ challenge: A comprehensive guide to managing data quality





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Introduction

Today's businesses are often overwhelmed by the very data that should be helping them stay abreast of client interests and competitor tactics. According to the 2015 Experian Data Quality Benchmark report, U.S. companies are now collecting data from 3.6 channels, just some of those including company websites, call centers, sales teams and mobile applications.

With data streaming in from a burgeoning consumer base—and studies calculate more than 1.7 billion people now constitute this base¹—companies can find the challenge of managing and governing their data akin to digging out of quicksand.

This white paper will discuss the key data quality challenges faced by companies today, stories of our customers that have successfully overcome these challenges and finally, provide solutions to combat these challenges.



¹ <http://www.worldwatch.org/node/810>



The main data quality challenges for companies

There are three main data quality challenges that companies today face. These are caused by the increasing number of channels they must operate in as well as optimizing those channels for the always-connected individual. Ensuring the quality of the data collected through those multiple channels, fully making sense of and leveraging that data for business purposes and combining the aforementioned into a single customer view are the three main data quality challenges for companies.

1. Collecting accurate data from multiple channels

Data collection involves a number of channels and platforms used to collect data.

Examples include:

- Website
- Blog
- Call centers
- Events
- Tradeshows

Increasingly, this means managing the data collected through omnichannel initiatives that take advantage of multiple client touchpoints.

2. Leveraging data as an asset

Businesses must be able to connect the dots from the data they collect and use that to ultimately improve client experience and drive revenue.

However, this endeavor is often limited by poor technology, poor processes and poor understanding of how the two work together.

Scenarios include:

- Legacy data environments that are unable to scale or keep up with increasing workloads
- Different internal processes regarding the organization and standardization of data
- Not having the employee know-how to create proper processes or optimize the use of technology

3. Creating a single customer view

Perhaps the greatest challenge of all is creating a single customer view with the data collected.

This requires both accurate and valid data as well as understanding how to properly leverage that data as a valuable asset.



How do these challenges impact companies today?

Companies must constantly strive to connect with their client base—one that is using more and more channels during purchasing and researching processes and one that is entering in data in more and more channels.

They must balance this influx of data with their main objective of providing real value through their products and services so that prospective clients will continue to buy additional products and services.

Too often, any combination of the three data quality challenges listed on the previous page will ultimately result in lost interest, having a negative perception of brand reliability and missed opportunities to generate loyalty and revenue.

With data being the foundation to any and every decision made, an inability to overcome these challenges can quickly snowball into wasted resources and missed revenue opportunities.

83% of companies believe revenue to be affected by inaccurate and incomplete customer or prospect data in terms of wasted resources, lost productivity or wasted marketing and communication spend.

– Experian Data Quality Benchmark report, 2015





Data collection meltdown

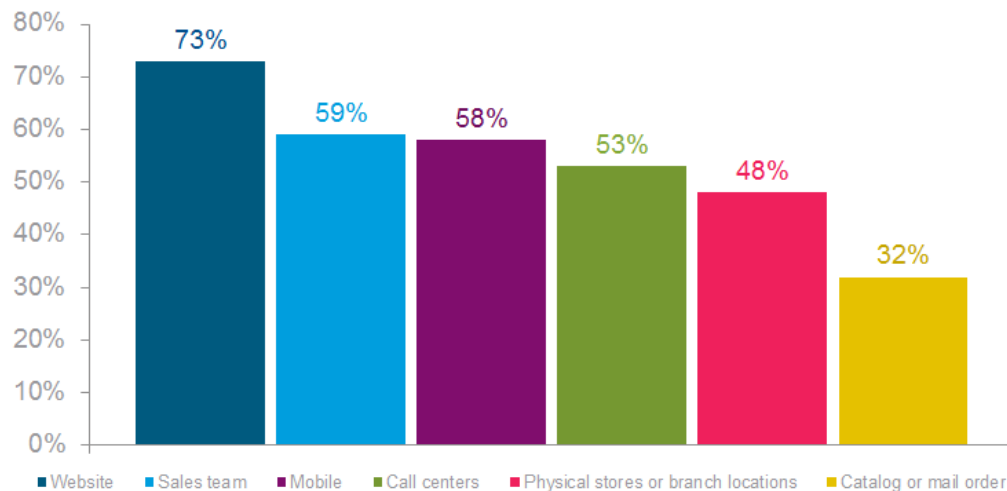
According to the 2015 Experian Data Quality Benchmark report, U.S. companies today use an average of 3.6 channels to collect data. That's almost four channels that companies must manage and ensure that the information they collect is able to be used.

Whatever the channel—company websites, sales teams, call centers, tradeshow, etc.—today's businesses must meet their clients, and not just half-way, but go the entire distance, using these channels in order to meet expectations. The problem, however, lies within the integrity of the data collected.

Data is the linchpin for many kinds of operationally critical activities (billing, tax collection, shipping, etc.) as well as revenue-generating activities (loyalty programs, lead generation, personalized marketing, etc.).

These activities and processes can cost companies anywhere from hundreds of thousands to millions of dollars. When there is confidence in the data collected, these activities show a positive return on investment. When that data is compromised, however, not only is the investment in time and resources unjustified, but client satisfaction with the brand can be jeopardized as well.

On average, U.S. companies use 3.6 channels to collect contact data



The 3 most common data quality errors for commercial companies that stand out above others are:

51% incomplete or missing data

48% outdated information

44% inaccurate data

– Experian Data Quality Benchmark report, 2015



Pitfalls of leveraging data as an asset

Businesses who are able to analyze the billions of bytes clients leave behind have a major advantage over competitors who still rely on intuition to predict behavior. While it can be true that more data collected can produce better, more complete analyses, most organizations are still trying to figure out what to do with, and how to optimize, their data for use.

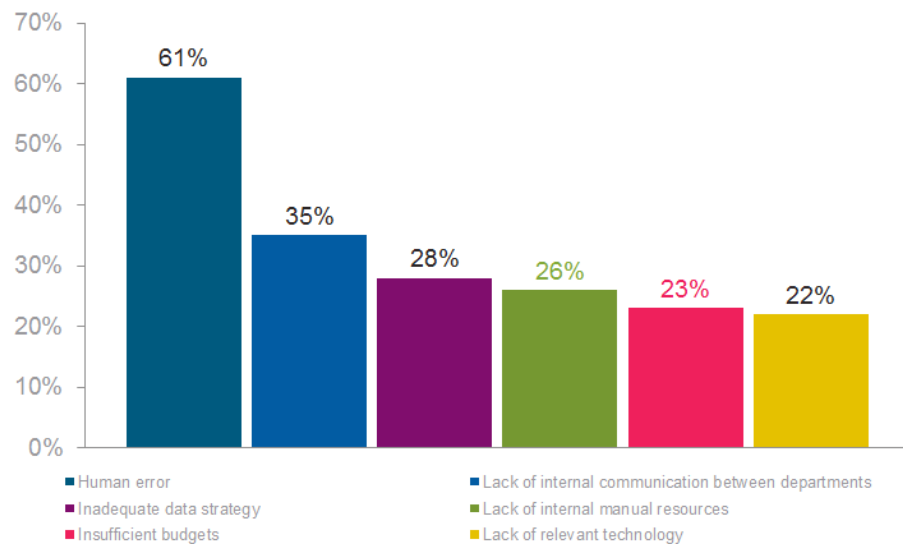
A number of factors restrict companies from turning their data into insight.

- Lack of internal guidelines on how to process and standardize data
- No clear or set rules for data formatting upon entry by employees
- No ownership of data by a set person within the business
- Using different systems with their own separate databases

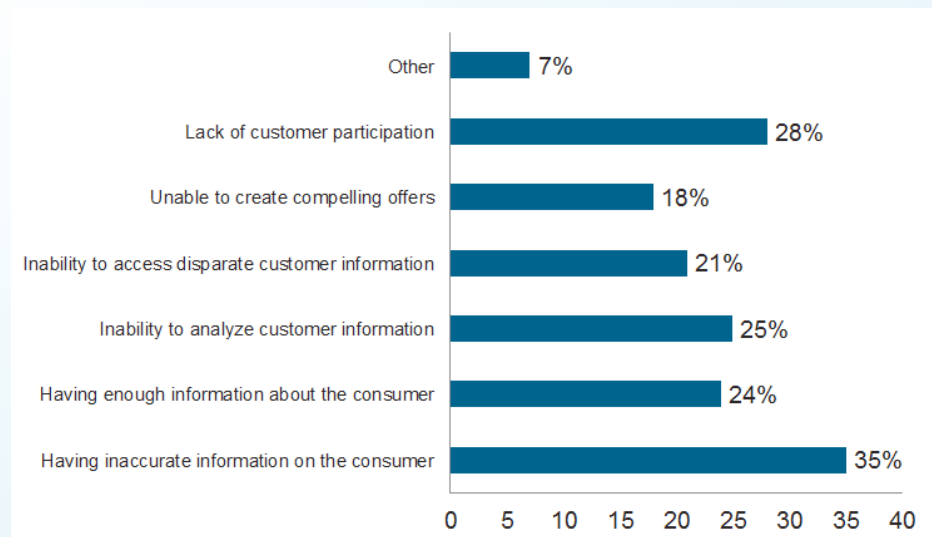
A huge challenge for companies, therefore, is packaging up the data collected from the thousands of clients viewing their brands every day through different channels and being able to use that to their advantage.

Causes of inaccurate data:

*The biggest cause of inaccurate contact data in all industries is human error.



Impact of poor data quality on business processes:





Troubles with creating a single customer view

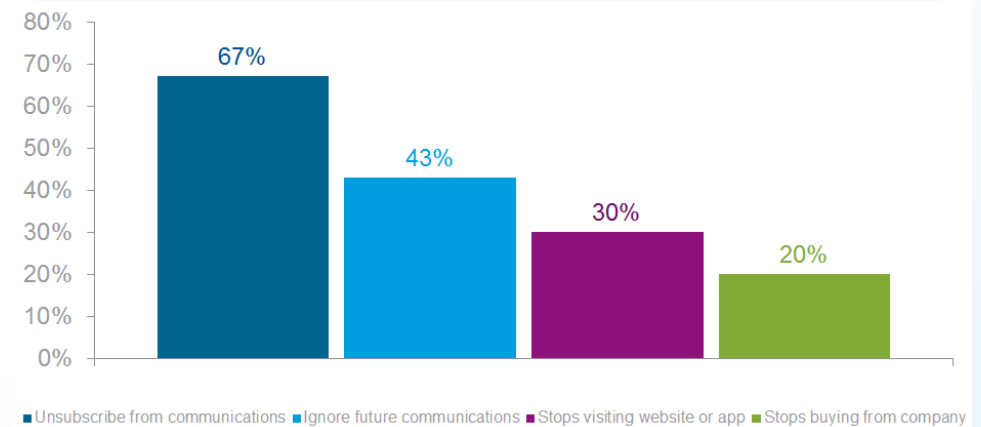
The imperative behind obtaining good data quality and being able to leverage that data as a valuable asset is so that companies may achieve a single customer view and maximize on client/company relationships.

Benefits to a single customer view:

- Improved customer experience
- Reduction in duplicated information and communications
- Reduction in customer call times and cost per call
- Improved product development based on customer preferences
- Personalized cross- and up-sell marketing opportunities
- Increased customer satisfaction and retention

Data is imperative for a single customer view. As shown above, poor personalization efforts can result in costly consequences for businesses.

After receiving irrelevant information or products from a company, approximately...



Obstacles

Obstacles to achieving a single customer view will vary greatly across organizations.

Large companies that have grown through mergers and acquisitions, for example, may face considerable challenges in terms of legacy infrastructures, numerous databases and an assortment of IT platforms.

Smaller organizations, by contrast, should find it simpler to obtain a single customer view, but may lack the structural processes and bandwidth to achieve it.



Looking at customer success stories

This section details the examples of how poor data quality negatively impacted these companies' ability to carry out business objectives and drive effective marketing efforts, and how they overcame those challenges.

See how data quality affects everything from client purchasing process and operational efficiency to omnichannel initiatives and back-end processes.





Mackenzie Health: Collecting accurate patient information

Mackenzie Health was a regional healthcare provider in Southern Ontario collecting over 600 patient registrations daily and 200,000 annually. They needed a solution that could speed up their ability to collect patient information as well as ensure its quality.

Consequences

Accurate entry of patient information was essential for ensuring the highest quality patient communication and service. As a healthcare provider, Mackenzie Health knew they had to provide superior patient satisfaction.

However, with six address fields for patient information and such a high volume of daily patients, Mackenzie Health required a solution that could provide quickly verify the accuracy of patient records.

They wanted to focus on providing excellence in patient support and service, and as a leader in healthcare, a solution that could help them collect accurate patient information was essential.

“I worked with one contact point throughout the entire process.

Troubleshooting and working through any issues that came up was an easy process, and I could implement the tool on my own with their help.”

– Lindsay Lankin, Mackenzie Health



Solution

Mackenzie Health decided to employ Experian Data Quality's address verification API into their existing system to improve the overall quality of patient data they collected.

“The results were fast—we saw quick improvement. Our form fields now auto-populate with a simple click, making registration faster and more accurate,” stated Lindsay Lankin, coordinator of patient access at Mackenzie Health.

The hospital staff was concerned about having to learn an entirely new system; however, they realized that not only was the address verification solution simple to use, it made their jobs easier as well.

Through their overall strategic data quality initiatives, including a combination of better infrastructure, education and Experian Data Quality's solution, Mackenzie Health has doubled their data accuracy to 99 percent.





Hastings Mutual Insurance: Leveraging data as an asset

Hastings Mutual Insurance, an insurance company boasting more than 125 years since its inception, has always placed the well-being of their constituents at the forefront of their business.

Consequences

In an effort to ensure accurate addresses, Hastings Mutual implemented a “dual-entry” process, where each address was entered twice, first into a third-party website for verification, then into their own systems. However, as many as 20 percent of all addresses were still incorrect.

According to Joe Sacco, IT application development supervisor at Hastings Mutual Insurance, the company faced thousands of dollars in unnecessary labor, postage and printing expenses each year because of inaccurate address data.

A dedicated team of five to seven employees devoted all their spare time over an eight-month period working to fix the bad addresses, impacting employee productivity and led to increased labor costs.

In addition, Hastings Mutual also estimated they were losing over \$80,000 a year in postage, printing and labor costs alone due to incorrect addresses.

“Addresses are a key data element in insurance. We wanted a point-of-entry address verification solution to solve the issue of invalid addresses before they affected rating, billing and customer service.”

– Joe Sacco, Hastings Mutual Insurance

Solution

“Of all the products we evaluated, Experian Data Quality’s software was the easiest to work with, which was very important to us...With Experian Data Quality’s solution, we have all but eliminated incorrect addresses entered internally,” stated Sacco.

With the implementation, Hastings Mutual was able to eliminate its “dual-entry” system, saving employees significant time and effort, while boosting productivity.

In addition, Hastings Mutual has seen improved productivity on policy processing as the software provides the full and correct address even when only parts of the address are entered.

Sacco estimates the total volume of incorrect addresses will decrease to one to three percent.

“That’s a significant reduction from a year ago when 20 percent of our addresses were incorrect, and it is a real benefit for our organization,” Sacco concluded.





Saks Fifth Avenue: Driving towards a single customer view

Saks Fifth Avenue looked to perfect clienteling efforts and marketing communications, but realized that the large number of unrecoverable addresses entered into their customer database impacted their ability to get to a single, consolidated view of the customer and required heavy patchwork correction on the back end.

Consequences

“We had text in the address fields, but no mail would ever be delivered to those addresses—they were worthless,” stated Kakoli Seal, vice president of customer insight and database marketing at Saks Fifth Avenue.

In Saks' case, quality addresses were essential to gaining a 360° customer view, ensuring that marketing dollars spent on mail catalogs and other materials reached their intended destination and that special offers or promotions were communicated in a timely fashion.

The causes of bad data varied by channel and included simple human errors like mistyping or “fat fingering,” as well as accidental customer omission of address components like apartment numbers. Saks employees also unknowingly created duplicate accounts, resulting in scattered customer preferences and history.

“Address data coming into our customer data warehouse is more accurate and more complete, which significantly improves marketing campaigns, drives better clienteling efforts and streamlines back-end processes.”

– Kakoli Seal, Saks Fifth Avenue



Solution

In order to do so, the retailer integrated a front-end solution into their eCommerce and call center websites as well as at point of sale.

Data was now validated across all the channels and their new standardized format made customer analytics a more streamlined process.

Saks has since enjoyed having more confidence in the customer address data. The standardized data is also easier to consolidate in their customer data warehouse, which Seal says is “immensely useful” for customer analytics.





Key takeaways

Ultimately, contact information is too valuable to not get right. The three challenges that businesses face of collecting accurate data, leveraging that data and obtaining a single customer view can all be compromised with invalid contact information.

While basic in its simplicity, client contact data is extremely valuable to analysts and decision-making. Inaccurate contact data can mean subsequent analyses can be incorrect, and potentially useless.

For example, a common headache companies face from collecting information from numerous channels is having duplicated client data; that is, having multiple accounts for the same individual. Aside from the time wasted from sifting through mounds of information to decipher who's who, duplicate accounts can lead to a poor understanding of client preferences and poorer penetration into target demographics.

Building off that example, if companies can't make sense of their data, they can't use that data to ensure that marketing efforts reach intended prospects or clients. Seeing a high percentage of emails go into the undeliverable bucket, for instance, is not only a waste of valuable budget, but also represents a missed opportunity to sell additional product and damages the conversion rates of campaigns.

But not to worry; while the solutions to these challenges aren't easy, some progress is better than no progress. Here's what businesses can do to overcome these challenges.





What you can do

If you find yourself being dragged down by data quality challenges, don't worry. This section will detail three actions you can take to prevent bad data from clogging up your database. Here are our three best tips to make sure dealing with data quality is as easy as possible.

Action Item 1: Develop a formal data collection process

An astonishing 61 percent of data issues are the result of human error. Mistyping information, hurried employees, distracted prospects and poor phone connections are just some of the problems that can result in the entering of inaccurate data.

Employees should be trained on best practices for data collection. For example, there can be a documented step in the data collection process that has call center employees verifying the accuracy of prospect information at multiple points throughout the call before ending communication.

Having a formal data collection process means employees can have something easy to repeat and follow, which ultimately decreases the margin of error.

Action Item 2: Verify data—both as you collect it and what's already in your database

Sometimes, despite the best data collection training, mistakes will still occur—there are only so many variables that companies can control, particularly when prospects themselves are entering information.

In order to prevent this from happening, real-time verification tools that verify data as it is entered and stops inaccurate data before it enters your systems. These can be deployed where prospects themselves enter data (websites, kiosks, etc.), or wherever employees are typing in contact details (events, tradeshow, call centers, etc.).



Additionally, you'll want to ensure that the data already in your system is valid and updated. You can do this through via one-off or regular data cleansing services that confirm and correct the information you already have.

When evaluating which solution and vendor is appropriate, there should be several questions you should ask:

Question 1: How flexible is the data quality vendor?

A data quality solution should be able to fit your unique infrastructure and data environment. It doesn't matter how many bells and whistles a solution has; if it can't match the look and feel of your website or standardize data to fit your specific data governance requirements, it's not the vendor for you.

Question 2: Will implementation of this solution run smoothly and seamlessly?

Implementation should be flexible, integrate seamlessly into your current environment and be customized to fit your needs. The goal is for the solution to work and exist within your environment, not the other way around.

Question 3: Is the vendor capable of adapting to requirement changes?

The vendors you evaluate should be continually innovating and improving their solutions to keep up with your changing environment. Data quality requirements change frequently as new data elements emerge and desired data insights change—you'll want to work with someone who will either have a solution to address those new requirements or are looking to create a new product based on market feedback.

Question 4: Does this vendor have a history of collaboration?

You'll want to work with someone who has a history of successful collaborative efforts with customers. Even the smoothest implementation processes will run into obstacles and a vendor should come with a proven track record of good customer service and implementation teamwork. Case studies, for example, are an excellent resource to check for collaboration efforts.



Action Item 3: Deduplicate data

Businesses today have realized two important and corresponding truths:

1. Existing clients make up a large portion of the revenue stream
2. New clients are very expensive to acquire

In order to successfully sell, cross-sell and up-sell to clients, companies must have a complete and accurate view of each client to effectively target individuals with varying needs and behaviors.

However, due to human error, multiple accounts can exist for the same person which not only clouds the ability to target messaging, but creates massive back end work to deduplicate that data.

Using matching and linkage tools can help eliminate the volume of duplicate information in your database. Whether this is done in real time by matching records instantly and removing duplicates before they hit your system, or on an ad hoc basis for your existing data, these tools can help get you closer to a complete, single customer view.



Conclusion

Businesses need accurate, complete data to enable effective decision making. Data quality issues such as duplicate accounts, inaccurate or incomplete client or prospect information or no formal data collection process all contribute to the data quality challenges they experience as well as an inability to carry out strategic initiatives.

Prioritizing data quality as an initiative is crucial to overcoming these challenges. By developing formal processes, implementing the right tools and working with industry experts, companies can dramatically impact and improve their ability to engage with, effectively market to and ultimately drive more revenue from clients.

Learn more about Experian Data Quality's solutions at www.edq.com or (888) 727-8822 or email us at dataquality.info@experian.com.



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