



# Overcoming the Challenge of Bad Data Solutions for Salesforce Data Pollution

## Summary

What is bad data? Why should sales teams improve the quality of data in their Salesforce CRM? How can Salesforce administrators clean up their databases and maintain a consistently high level of data quality? Who should Salesforce administrators turn to for effective data quality solutions?

This white paper will answer these questions and more, explaining why data quality is mission critical to the enterprise and laying out a basic action plan for Salesforce administrators who want to neutralize the threat of poor data quality once and for all.



## Introduction

How many diligent, underappreciated Salesforce administrators have ever joked about their status as unsung heroes, worthy of glowing headlines such as “Salesforce Admin Saves Company” or “Data Pro Averts Disaster...Again”?

Of course, Salesforce administrators are rarely, if ever, the object of such lavish praise, but they should be—if they can maintain Salesforce data quality at a consistently high level.

According to a 2009 Gartner survey of 140 companies, the inefficiencies and missed opportunities arising from *poor data quality* cost each company an average of \$8.2 million annually. Almost a quarter of all respondents reported that bad data was costing them more than \$20 million every year, while 4% put the figure up to \$100 million.<sup>1</sup> With these kinds of numbers, it’s easy to see how a Salesforce administrator could be in a position to literally save the company.

Although Salesforce is a phenomenal tool for managing customer relationships, it doesn’t automatically produce high-quality customer data. In reality, Salesforce is like an empty filing cabinet. Each subscriber must decide what they intend to file, what file system they intend to use, *how they will maintain their files*, who will have access to the files, and *who will be responsible for keeping the files in good order*.

This white paper explains why organizations should invest time and resources into improving the quality of data in their Salesforce CRM. The paper also presents a basic action plan for Salesforce administrators who need to establish and maintain a higher level of data quality.

## What is bad data?

Although bad data comes in all shapes and sizes, with precise definitions varying from company to company, it typically falls into one of these categories:

- **Missing data**  
Empty fields that should contain data. Example: An automated billing process breaks down because a customer’s billing address is missing from the system.
- **Wrong or inaccurate data**  
Information that has not been entered correctly or maintained. Example: Bills come back marked “Return to Sender” because the zip code doesn’t match the billing address.

- **Inappropriate data**  
Data that's been entered in the wrong field. Example: A promising lead doesn't appear in regional reports because the city name is in the *State* field.
- **Non-conforming data**  
Data that hasn't been entered according to the organization's naming convention. Example: A critical report on all U.S. clients doesn't include clients with "USA" or "United States of America" in the *Country* field.
- **Duplicate data**  
A single Account, Contact, Lead, etc. that occupies more than one record in the database. Example: Sales reps in different regions unknowingly create three distinct IBM Accounts, wasting valuable time, sowing confusion, and causing missed opportunities.

Essentially, "bad" data is defined by its *potential to cause undesirable interruptions in the normal flow of business activities*.

### Why does data quality matter so much?

Bad data is expensive.

According to the 1-10-100 quality principle, the relative cost of fixing a problem increases exponentially over time. If the cost of preventing bad data from entering a CRM system is \$1, then the cost of correcting existing problems is \$10, and the cost of fixing a problem after it causes a failure, either within an organization or with a customer, is in the neighborhood of \$100.

As the saying goes: *garbage in, garbage out*. Left unchecked, poor data quality leads to:

- **Bad business decisions**  
Bad data produces misleading Salesforce reports and dashboards that sabotage the best efforts of decision-makers to guide the enterprise.
- **Inaccurate sales forecasting**  
Sales stats derived from bad data can be overly optimistic or pessimistic.
- **Shoddy customer service**  
When customer service representatives rely on incomplete or incorrect information, they're unable to deliver a top-notch experience to busy, demanding customers.

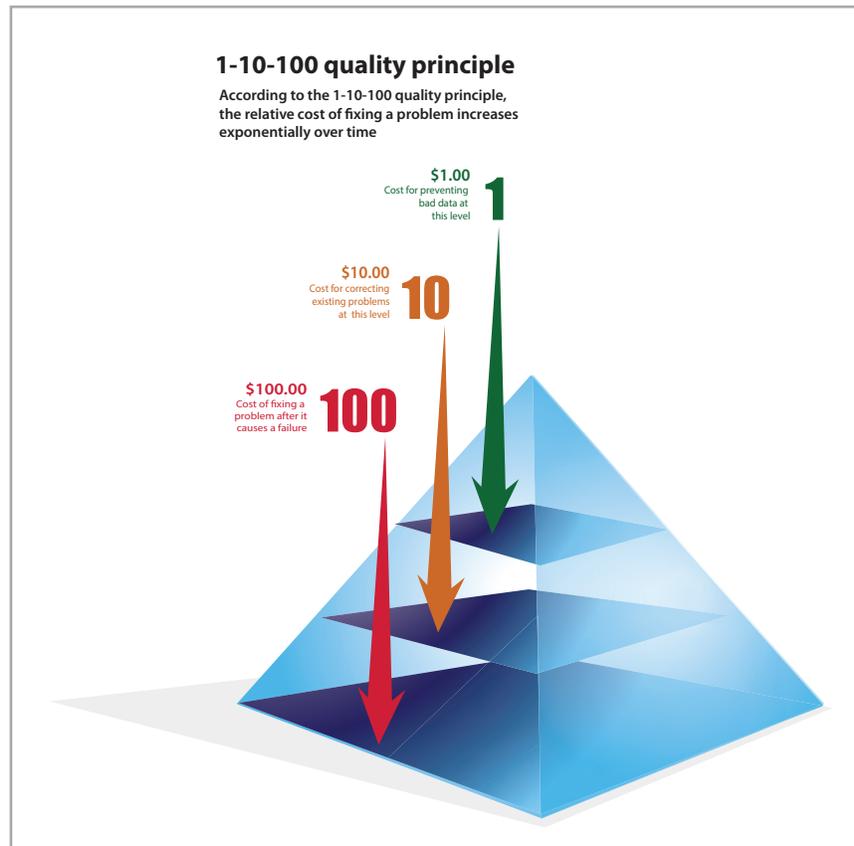


Figure 1: The 1-10-100 quality principle explains the incremental cost of bad data.

- **Reduced customer satisfaction**  
An organization cannot consistently deliver on its promises if bad data causes customers to fall through the cracks.
- **Damage to reputation and brand**  
An organization that unflaggingly relies on faulty CRM data can become notorious for not meeting customers' needs and expectations.
- **Decline in user adoption**  
If Salesforce CRM users don't have confidence in the organization's data, they'll abandon the system in favor of other, less efficient solutions such as individually maintained spreadsheets or local databases.
- **Wasted time and money**  
When customer data is inaccurate, organizations launch inefficient direct mail/email campaigns, produce off-target marketing materials, and generally underperform in sales and marketing activities.

**Case Study: Direct Mail Campaign**

*A successful company specializing in automotive data and marketing solutions regularly sends out marketing packages to car dealers across North America.*

**How bad data affected one of their direct mail campaigns:**

- *4000 packages @ \$20 each => \$80,000.*
- *500 bad addresses wasted over \$10,000.*
- *500 pricing errors resulted in people receiving the wrong package => another \$10,000.*
- *1000 duplicates => more wasted time and money.*

**Outcome:**

***More than \$20,000 wasted because of bad data.  
That's 25% of the total expense!***

One way to conceptualize the vital importance of CRM data quality to a business enterprise is to think of data as drinking water. A reliable source of safe, high-quality drinking water contributes to the health, welfare, and success of a community (the enterprise), while poor-quality water makes people sick, negatively impacting the community and forcing citizens to abandon tap water in favor of other solutions.

### Is it safe to drink from Lake Salesforce?

In Chapter 10 of his excellent book *Data Quality: The Field Guide*, renowned data-quality expert Tom Redman draws a vivid analogy between a database and a lake, where the lake water represents (Salesforce) data and pollutants represent bad data.<sup>2</sup>

For the sake of discussion, let's assume that pollutants enter the lake from only two sources: an inflowing river and rainfall. The inflowing river is analogous to mass data imports, where a large stream of data flows into the database, bringing with it duplicates and other bad data. Rainfall represents individual database transactions such as manually entered records, Web-to-Lead forms from websites, and records added by integrated systems through the Salesforce API.

A nearby community (representing Salesforce users and, more generally, the enterprise itself) relies on the lake for its drinking water, so high levels of pollution pose a serious public health threat. Therefore, the town must find a way to remove pollutants from the lake water and make it fit for consumption again.



Figure 2: A Salesforce CRM database is analogous to a lake.

### Taking action to clean up the lake

It doesn't take long for the town to identify where most of the pollutants originate: a factory that's dumping chemicals (representing "dirty" lists) into the river and releasing airborne pollutants from several smokestacks (representing lax data input controls). Knowing the source of the pollution, the town takes action.

Invoking environmental laws (enforcing data input and import standards), they successfully halt the dumping of chemicals, drastically reducing the amount of pollution (bad data) entering the lake via river water. Going forward, the factory agrees to release only treated water ("clean" lists) into the river. The regulations also compel the factory to install scrubbers (data input controls) on their smokestacks, significantly reducing the amount of airborne pollutants (bad data) entering the lake via raindrops.

Meanwhile, the town has also upgraded their water purification plant (data quality tools) to help clean up the entire lake. Although some pollutants will still enter the lake, the town is now capable of managing the problem and maintaining a high level of water (data) quality.

### Who's responsible for data quality?

There's no question that CRM data quality is inextricably linked to the performance and well-being of an organization, just as water quality impacts the health and wellness of a community.

Data quality has obvious enterprise-scale implications, but with so many obvious stakeholders, who's actually responsible for achieving and maintaining a desirable level of quality?

The sales rep who manually enters customer data?

The marketing manager who periodically imports leads en masse?

The senior managers responsible for setting company policy?

Or the Salesforce administrator who manages the database?

Of course, the right answer is "all of the above".

**Sales reps** should carefully enter customer data according to naming conventions...but they will make mistakes.

**Marketing managers** should do their best to scrub new lists before importing them into the database...but some bad data will still make it through.

**Senior managers** should establish and maintain reasonable company policies regarding data quality...but they won't be perfect and they won't always be followed.

Although the whole team is expected to exert some effort, inevitably it's the **Salesforce administrator** who must take the leadership role on data quality and make sure the job gets done right.

### What should a Salesforce admin do?

A Salesforce CRM database is in a constant state of flux as users routinely add new data and modify existing records. To achieve and maintain a high level of data quality, Salesforce administrators must take action on two fronts:

#### 1. Prevention

Minimize the amount of bad data entering Salesforce via individual transactions and mass imports.

#### 2. Remediation

Constantly monitor and cleanse data to a well-defined quality standard.

This two-part approach will enable Salesforce administrators to get ahead of the quality curve and stay there.

### Part 1: Prevention

Here are some things that Salesforce administrators can do to prevent their CRM system from being flooded with bad data.

#### i. Train users

To maximize the quality of data entering the system, Salesforce administrators should instruct users on how to perform routine tasks such as:

- Searching for duplicates before entering new data.
- Entering data that conforms to the standard naming convention.
- Completing all fields in each record.
- Using available data quality monitoring tools.
- Importing data properly (for users with access).

More generally, Salesforce administrators should seize every opportunity to educate users and managers about the importance of data quality to the organization as a whole, as well as to individual employees (e.g., vis-à-vis job performance).

## ii. Enforce data quality standards

Salesforce administrators must design Salesforce schema with data quality in mind. They should:

- Define required fields.
- Use automatically populated default values whenever possible.
- Create field dependencies and workflow rules (e.g., if A and B exist, then C must exist).
- Control object creation: what users are allowed to create Accounts, Contacts, Leads, etc?
- Implement validation rules to ensure that data is entered correctly.
- Impose restrictions on Web-to-Lead data.

## iii. Improve internal communication

The Salesforce administrator is generally responsible for answering questions and notifying users of changes to the CRM user interface (e.g., the addition of new fields or entire screens), revisions to naming conventions, updates to policies and standards, and anything else related to the Salesforce user experience.

To accomplish all of this, a Salesforce administrator might have to set up some company-specific resources to help users find answers to various kinds of Salesforce questions. Here are some areas where users might need help:

- **General Salesforce usage**—Salesforce help screens.
- **Company standards**—Internal naming conventions, policies, FAQs, wikis, or forums.
- **Practical advice**—Designated departmental resources or experienced colleagues.
- **All of the above**—Salesforce administrator.

Prevention will be most effective if the Salesforce administrator can foster a supportive atmosphere where users are comfortable asking questions, discussing problems, and suggesting improvements.

## Part 2: Remediation

Here are some things that Salesforce administrators can do to maintain data quality at a consistently high level.

### i. Monitor the database

Anyone who's maintained even a small database will agree that data quality degrades very quickly. While updating existing records, users sometimes replace valid information with erroneous data, or simply change/delete information by accident. New records, whether entered manually or imported, invariably contain a certain number of problematic fields, despite a Salesforce administrator's best preventive efforts. Thus, a Salesforce administrator must continually check the database, seeking out and correcting erroneous data.

### ii. Develop a data-quality process

- **Standardize**  
Every Salesforce administrator should develop a quality standard that defines "bad" data in their database. The standard is really a collection of rules or tests that, when applied to the database, identify bad data and, in some cases, automatically fix it. After establishing an initial standard, Salesforce administrators should continuously seek to improve and update it so that quality remains at a high level no matter how quickly the database evolves.
- **Cleanse**  
Having defined a quality standard for their database, Salesforce administrators must now implement it using data cleansing tools. With these tools, Salesforce administrators can search the database for records that don't conform to the quality standard and fix them. To maintain a consistently high level of data quality, (automated) searches and merges should be conducted on a set schedule—perhaps daily or weekly.
- **Enrich with outside data sources**  
Even if users could enter or import 100% clean data, it wouldn't change the fact that the world is a dynamic place. Companies grow, people change jobs. Contact information that was valid just three months ago could now be out-of-date if a customer moves their head office to a new location. Whenever possible, Salesforce administrators should check their data against credible outside sources.

- **De-duplicate data**  
Duplicate records—dupes—create confusion and make it more difficult for users to get a complete view of a customer relationship. Salesforce administrators should use a de-duplicating tool to regularly search for dupes in the database and combine them.
- **Validate data quality**  
After performing other remedial tasks, Salesforce administrators should verify that records have been properly updated and the database does indeed conform to the quality standard.

### Data quality solutions for Salesforce admins

CRMfusion's industry-leading solutions help Salesforce administrators achieve and maintain the highest levels of data quality.

### Regularly monitor and cleanse a Salesforce database with...



The industry's leading Salesforce data quality toolset, DemandTools has 11 modules for controlling, standardizing, verifying, de-duplicating, importing, and generally manipulating data. These powerful tools are a huge time-saver for Salesforce administrators, giving them the ability to cleanse thousands of records in mere minutes. DemandTools was first launched in 2004 and today is installed at 5000+ Salesforce.com customer locations in 21 countries.

*“DemandTools is...the single-most valuable app I've downloaded from the AppExchange. DemandTools has saved me immeasurable amounts of time and has helped to insure greater data integrity—huge issues for any Salesforce.com Administrator...We recently combined two separate instances of Salesforce.com and I shudder to think of the data nightmare that I would have had on my hands, if I didn't have my handy DemandTools to assist me...This is definitely a 'must have' application and well worth the investment! I truly could not do my job without it.”*

*“CRMfusion's DemandTools is my 'go-to' resource for many tasks, since it makes mass updates, imports, dupe checking, and discovery extremely easy. It has proven invaluable in our migration to Salesforce from another CRM system. Contacts that had been incorrectly aligned with accounts when our data was migrated were quickly updated to correct the problem.”*

### Prevent dupes during mass imports with...



The ultimate tool for importing Accounts, Leads, and Contacts into Salesforce, PeopleImport makes it easy for a sales team to integrate new lists or trade-show data into the database without creating duplicates or losing any valuable information. During import, team members can perform additional marketing functions such as campaign and task assignment.

*"We have been using PeopleImport for several years and I am thrilled with the results. We manage about fifteen events/seminars per year and constantly have to import new records and update existing leads and contacts. This application allows us to do that quickly and easily without having to worry about creating duplicate records. Most importantly, when needed, technical support is tremendous."*

### Prevent dupes during individual transactions with...



The only enterprise-capable, real-time duplicate solution on the market, DupeBlocker stops users from creating duplicates in real time—even in the world's largest Salesforce databases. DupeBlocker also prevents dupes from being created by Web-to-Lead forms and integrated software systems. DupeBlocker was designed to complement DemandTools and PeopleImport.

*"Visitors to our website need to fill out a form to access some of the collateral, and we use web-to-lead to create a lead in Salesforce. This resulted in new duplicate leads. Prior to DupeBlocker, we would 'de-dupe' on a weekly basis. DupeBlocker flags these as they occur, allowing us to review and merge the duplicates...In addition, DupeBlocker identifies potential lead-to-account and lead-to-contact matches. This is particularly useful when our sales team is already engaged with an account. Finally, DupeBlocker prevents our sales team from creating duplicates when they manually enter/edit leads or contacts in Salesforce."*

### Conclusion

No company can survive without customers. Since poor data quality is a significant root cause of customer relationship problems, Salesforce administrators must be vigilant and proactive about keeping their databases clean.

Although every member of the sales and marketing team should do their part, the Salesforce administrator must lead the way by developing and enforcing a quality standard, designing Salesforce schema from a quality perspective, training team members in Salesforce, providing educational resources, and maintaining open lines of communication.

With powerful apps like DemandTools, Salesforce administrators can monitor and cleanse their databases, achieving a consistently high level of data quality. They can use PeopleImport to perform dupe-free mass imports while simplifying marketing tasks, and run DupeBlocker to prevent dupes from entering the database via individual transactions.

Starting with the basic action plan outlined in this paper, and following through with the right software tools, Salesforce administrators can effectively eliminate poor data quality as a threat to their organization.



## References

1. Friedman, Ted. "Findings From Primary Research Study: Organizations Perceive Significant Cost Impact From Data Quality Issues", Gartner Group, August 14, 2009.
2. Redman, Tom. *Data Quality: The Field Guide*. (Woburn, MA: Digital Press, 2001), 53–55.

### Learn More

To arrange a Web demonstration, start a trial version, or simply learn more about CRMfusion's suite of data quality solutions:

- Visit our home page at [www.crmfusion.com](http://www.crmfusion.com), or
- Drop by the [Salesforce AppExchange](#) and search for CRMfusion, DemandTools, PeopleImport, or DupeBlocker.

The AppExchange has [hundreds of insightful customer reviews](#) of our products, so be sure to check them out.

## PRICING & DOWNLOAD INFORMATION

### DemandTools

DemandTools pricing is scalable based upon the size of your Salesforce installation, the base price is \$5750/year with significant discounts for salesforce.com customer installations of less than 100 users (for example, a 20 seat Salesforce customer can use DemandTools for only \$1150 per year (80% discount)).

### DupeBlocker

DupeBlocker pricing is scalable based upon the size of your Salesforce installation. Price is calculated as \$575 + (\$11.50 x total Salesforce users) per year to a maximum \$5750 per Salesforce database.

### PeopleImport

PeopleImport is sold on a per user per year basis. Each PeopleImport user pays \$1150 per year for PeopleImport with the price including upgrades and support.

Available on



appexchange

Free downloads are available for all CRMfusion products at [www.crmfusion.com](http://www.crmfusion.com) or the AppExchange.

Please contact [sales@crmfusion.com](mailto:sales@crmfusion.com) for more information or visit [www.crmfusion.com](http://www.crmfusion.com).



CRMfusion Inc.  
14 Wolford Court  
Keswick ON L4P 0B1  
Canada

Sales and Support Hotline  
(800) 961-8205

Development/Support and Administration  
Phone: (416) 628-1486  
Fax: (866) 289-2934

Email Addresses

[sales@crmfusion.com](mailto:sales@crmfusion.com)  
[support@crmfusion.com](mailto:support@crmfusion.com)

[www.crmfusion.com](http://www.crmfusion.com)



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