

# General Electric Uses Tamr To Unlock Hundreds Of Millions In Cost-Savings

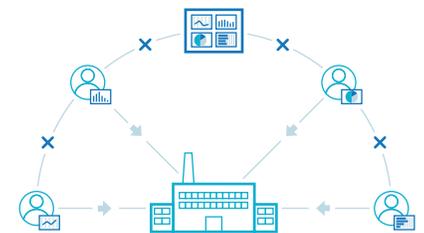
## Traditional Methods Of Preparing Data Aren't Sufficient For Large Companies

General Electric, the world's premier digital industrial company, focuses on solving some of the world's most complex challenges in areas ranging from Energy to Healthcare. GE offers an enormous variety of products and services to enterprises, governments and consumers - spending roughly \$60 billion annually within its core industrial businesses alone to procure and provide those offerings.

In many large organizations - especially those like GE that have grown through acquisitions over many decades - businesses and their supporting information systems eventually become extremely fragmented. For example, GE has more than 75 transactional systems within procurement that support 8 key industrial businesses, each with its own sourcing organization and particular process of managing data.

This fragmentation led to a lack of visibility into the supply base and current data preparation methods could not handle a challenge of this scale. Emily Galt, Executive Sourcing Product & Solutions Manager for GE, summarized this difficulty in saying "we didn't know how many unique parts we were buying and from whom because the information was so fragmented." Using traditional methods to integrate and cleanse data from across divisions, each with their own data management practice, had several implications for the corporation, including:

- An inability to generate cross-business views of the supply base -- GE wasn't able to get a cross-business view of its supply base (i.e., suppliers and parts) because of difficulties in scaling to the many, constantly-growing number of sources containing spend data
- Difficulty maintaining data quality -- GE manages a high volume of transactions daily, meaning that new suppliers are added to their records at a pace that makes traditional data management (such as operational mastering) infeasible, with data quality suffering as a result



There was no cross-business view of GE's supply base due to massive data variety

- 8 Key Industrial Businesses
- 75+ Transactional Systems
- \$60 Billion In Annual Spend

## GE Views Innovation Through Machine Learning As The Answer

Convinced that the organization could benefit from fast, robust procurement analytics - both strategically and tactically - the GE sourcing leadership team embarked on an initiative to improve the preparation of their industrial business' data for use in analytics. In doing so, they decided that the best approach was "analytical mastering" - which involved loading their transactional systems into a data lake and then connecting, enriching, and cleansing their procurement data prior to analytics.

The team, led by Ms. Galt, needed an approach to quickly and accurately connect and cleanse the cross-business data, which varied in structure and contained many duplicative entries. GE engaged Tamr because of its unique approach of using machine learning and expert insight in the data preparation process. Today, GE leverages Tamr in order to:

- **Process** roughly 20 million transactions - representing GE's \$60 billion in spend - as well as millions of supplier records
- **Connect and cleanse** all transactional / ERP systems across 8 industrial businesses -- This includes identifying duplicative / mastering suppliers as well as parts within the data. Tamr did this through first using machine learning to join datasets and identify duplicative records then reaching out to experts within the organization to validate the matches. This is also done continuously so information delivered to analytics is much more timely
- **Classify** transactions at the most granular level within GE's internal taxonomy (Level 4) -- This provides downstream analytic drill-down capabilities and is achieved utilizing the same Tamr workflow of machine learning and expert validation in a continuous manner

Ultimately, Tamr was able to prepare all of the data for analytics within weeks, greatly improving GE's speed and scalability in data preparation. Ms. Galt, referring to the power of Tamr's offering, called machine learning "a game changer and the foundation for 21st century analytics."

## GE Used Tamr To Drive Hundreds Of Millions Of Dollars In Savings And Position Itself As A Digital Leader

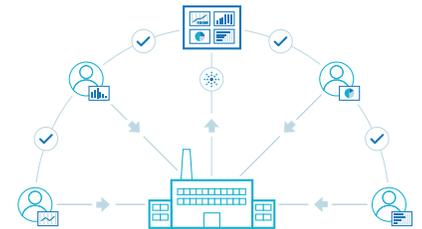
GE has realized significant, tangible benefits from its first Tamr implementation. Working with a single, clean view of its procurement data has enabled GE to unlock insight and improve downstream processes in an unprecedented way. Specifically, Tamr has allowed GE to:

- Gain first-time visibility into spend across businesses and unlock hundreds of millions of dollars in cost-savings opportunities while realizing a 10x ROI in Year 1 -- GE now has a robust set of analytics that provide, for example, insight into the lowest-cost supplier for a given part number and can identify opportunities to harmonize payment terms with a particular supplier
- Transform its strategic planning process to be more data-driven -- including understanding where the organization can shift spend from high-cost countries to low-cost countries and better identify pre-qualified suppliers across GE to reduce lead time
- Develop an internal mobile application for sourcing -- the application will benefit sourcing teams by leveraging the unified, clean data from Tamr and advanced features to, for example, immediately alert the user when a PO is placed above a certain threshold

GE's success in working with Tamr has spawned new conversations regarding how the companies can work together - from extending procurement analytic capabilities to tapping into new use cases around customer data. GE and Tamr are tightly aligned when it comes to envisioning the future of business being digitally-driven and firmly believing that machine learning is the gateway to success. In summarizing this alignment, Ms. Galt concluded "the interest in using machine learning to solve GE's largest data problems has been embraced by the highest levels of the company."

“Machine learning is a game changer and the foundation for 21st century analytics”

- Emily Galt, Executive Sourcing Product & Solutions Manager at GE



Using Tamr, GE gained first-time visibility into spend across businesses

- 10x ROI In Year 1
- Unlocked hundreds of millions of dollars in cost-savings opportunities