

# How the Massachusetts Department of Executive Education Earned an “A” in Analytics

**Customer:**



Massachusetts  
Department of  
Executive Education

**Solution:** Customer mastering

**Challenges:**

- Siloed, disparate data prevented EOE from obtaining a deep understanding of the people and organizations it works with
- A bad experience using a legacy, rules-based data mastering product that had a steep learning curve
- Different entities and lack of visibility of relationships across entities
- System workflow limitations that drove users to create duplicate records to achieve short-term goals

**Outcomes:**

- Establishing a data publishing service to supplement or augment Mass EOE application data based on the golden records
- Enabling analysts and researchers to make evidence-based policy decisions
- Micro-targeting populations to better allocate scarce resources
- Leveraging 360-customer views to anticipate and recommend services

**Overview**

The Massachusetts Executive Office of Education (EOE) oversees the provision of publicly funded education and care services and licensing for educators, families and children from infancy through higher education and into the education provider workforce.

EOE was created 13 years ago and supports four state agencies (the Children’s Trust, the Department of Higher Education, the Department of Early Education and Care and the Department of Elementary and Secondary Education) with various degrees.

The EOE uses Tamr to create golden records and obtain a 360-degree view of the people and organizations served across all agencies, over the entire course of their interaction with the department, allowing EOE to improve its services.

**The challenge**

Siloed, disparate data prevented EOE from obtaining a deep understanding of the people and organizations it works with to better serve them, a challenge similar to the one faced by private sector organizations.

In some cases, the same agency had various data management systems, making integrating data just from that agency difficult. One agency lacked a reliable way to determine the number of unique families and children it serves. Another agency dedicated staff to investigating duplicates identified by hierarchical matching rules to establish unique student records.

EOE was looking for a way to better link their child, student, educator and organization data over time as a childcare subsidy recipient may graduate from high school, become a college student and possibly join the workforce as a teacher. That teacher may also be a parent of children requiring



**Using Tamr provides the Massachusetts Executive Office of Education with a deep understanding of the people and organizations it works with using machine learning to do the heavy lifting and reduce manual effort.**

educational services. Obtaining golden records would provide EOE with the data necessary to drive analytics initiatives like suggesting additional services that may benefit its constituents.

Other data challenges EOE faced included:

- A bad experience using a legacy, rules-based data mastering product that had a steep learning curve, was expensive to implement, lacked the concept of data stewardship and involved calling schools to confirm information because the software could not accurately identify duplicates with existing data
- System workflow limitations that drove users to create duplicate records to achieve short-term goals

### **The solution**

Mass EOE deployed Tamr's mastering solution to create golden customer records for the people and organizations it serves. Tamr's cloud-native data mastering solution uses machine learning instead of rules to create a single customer view, substantially reducing manual development and curation processes compared to traditional MDM systems, making the ability to connect millions of customer records a reality.

Given the extensive manual effort previously required to identify and resolve duplicate records, Mass EOE wanted a solution that used machine learning to handle the heavy lifting around cleaning and curating data.

With Tamr, Mass EOE was able to:

- Create golden records for people, organizations and addresses by mastering hundreds of thousands of records
- Use machine learning to improve data quality by identifying duplicate and incomplete records
- Use Tamr's persistent cluster ID to create unique EOE IDs for people and organizations, replacing existing student and education professional identifiers
- Demonstrate fast time to value by establishing a repeatable pipeline six months into the project





**“Tamr has been a revolutionary tool to solve our tangled web of data across our many stove-piped applications. Tamr has allowed us to better understand how our various data sources intersect with each other. It provides the means to creatively experiment and iterate, rapidly deepening our understanding and pinpointing the source system data inconsistencies.”**

- Ed Anderson, Business Analyst, EOE

## The outcomes

Golden records allow Mass EOE to drive analytic outcomes that help the agency better serve its constituents while more efficiently using resources such as budgets and employees' time. Outcomes the Mass EOE is already achieving and aims to accomplish include:

- Establishing a data publishing service to supplement or augment Mass EOE application data based on the golden records
- Enabling analysts and researchers to make evidence-based policy decisions
- Using Tamr mastered data as a central component of their Secretariat data hub for consistent reporting
- Micro-targeting populations to better allocate scarce resources
- Leveraging 360-customer views to anticipate and recommend services
- Optimizing delivery and enhancing subsidy management

**To find out how Tamr can help you turn your B2B customer data into a ready-to-use business asset, contact one of our experts for a meeting.**

**SCHEDULE A MEETING**

## About Tamr

Tamr is the leading data mastering company, accelerating the business outcomes of the world's largest organizations by powering analytic insights, boosting operational efficiency, and enhancing data operations. Tamr's cloud-native solutions offer an effective alternative to traditional Master Data Management (MDM) tools, using human-guided machine learning to do the heavy lifting to consolidate disparate data sources and generate curated, analytics-ready datasets. Tamr is the foundation for modern DataOps at large organizations including industry leaders like Toyota, Santander, and GSK. Backed by investors including NEA and Google Ventures, Tamr is transforming how companies get value from their data.

To find out more, visit [www.tamr.com](http://www.tamr.com)