Machine Learning: Driving Financial Industry Transformation

A conversation with

Aidar Orunkhanov
Solutions Director
Tamr

Walid Kara
Sales Engineer
Tamr
Moderated by Mike Meriton
Co-Founder & COO, EDM Council

- Joined EDM Council full-time 2015 to lead Industry Engagement
- Former CEO GoldenSource (2002-2014) – an original IBM Global MDM Company
- Former President of CheckFree CFACS (Compliance & Reconciliation Solutions)
- Former Executive for D&B Software and Oracle
- FinTech Innovation Lab – Executive Mentor (2011 – Present)
Walid Kara
Sales Engineer, Tamr

• **Walid** brings domain expertise in the financial services sector to Tamr and provides technical support to the sales cycle.

• Throughout his time at Tamr, Walid has consulted Tamr customers at every stage of the sales cycle - from business development to solutions deployment and has gained a deep understanding of the common pain points in the industry.
Co-hosted with Aidar Orunkhanov
Solutions Director, Tamr & Adjunct Faculty, Boston University

- **Aidar** helps our clients in financial services, fraud and compliance tame their data and become lean data-driven organizations.

- Prior to Tamr, he led audit and AML analytics enablement for a global bank, for which he was recognized as IIA’s Emerging Leader.

- Aidar serves as Adjunct Lecturer at Boston University, teaching graduate level Business Analytics courses.
Agenda

- Bad data drives bad business outcomes
- Fixing our data debt
- How mastered data can fuel decisions
Bad Data Drives Bad Business Outcomes
Bad Data Drives Bad Business Outcomes

Number of Distinct Customers Before
160,666

Number of Distinct Customers After
100,235

High Value Customers ($1,500+) Before

High Value Customers ($1,500+) After

Top 10 Customers Before

Name of Customer ID
Jean Montgomery
Rolf Graham
Wanda Hicks
Clarence Leah
Richard Black
Sara Reyes
Edgar Martin
Jessie Kennedy
Marco Warren
Aron Harvey

Sales
$0K
$1K
$2K

Top 10 Customers After

Cluster Name
Allyn Berry
Dianne Arnie
Pattie Thompson
Jerri Sims
J Coleman
Randy Grant
Jean Montgomery
Roger Montgomery
Ryan Flores
Harold Ward

Sales
$0K
$1K
$2K
$3K
$4K
$5K
$6K

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2020 Result Themes

Tamr surveyed 300 executive at financial organizations with $1B+

The survey identified that digital transformation initiatives needed the data to be:

- Accurate (64%)
- A driver for clear insights into informed decision
- Sourced from making (64%) key systems (61%)
Key Weaknesses Preventing Success

- Constant data changes over time (75%)
- Existing data management practices don’t scale (55%)
- Unifying hundreds or thousands of data sources from across the org (47%)
Fixing Our Data Debt
Mastering and Limitations of Traditional Systems

ETL

- ETL is a highly-programmatic approach. It usually requires writing some SQL code or other types of rules to normalize data.
- Works well on small projects - e.g. loading data into a warehouse with a dozen different sources of the similar semantic type.

- Scalability is proportional to the number of exceptions over resources used.
- Traditional approaches do not scale as long as scalability is dependent on manual review of exceptions.

Mastering

- Collapses a collection of records representing an entity into a “golden record” with trusted values.
- Similarly to ETL, this process is mostly based on rules - works great on straightforward problems that can be addressed by the rule system technology in current products.

ETL: A process that moves data to a target location and transforms it into a normalized form

Mastering: A process that deduplicates data and creates a single version of the truth
Consistency of Data is Key

From chaos...
Unsorted data lakes, warehouses, systems...

...to order.
Mastered Data Sets
This calls for a modern solution

**Scalable**: Human-augmented machine learning allows scale without sacrificing accuracy

**Faster**: Results delivered in days vs. months or even years using traditional approaches

**Better optimized**: When experts aren’t spending endless days on data prep, they can focus on more specialized efforts

**More flexible**: Teams can respond to the unexpected, faster and more effectively than ever before

**It opens new opportunities**: With cost-to-know reduced, projects shelved for “high costs and risk” can finally get the attention they deserve.
How Mastered Data Can Fuel Decisions
Data Can Help

- Analyze and categorize spending to effectively identify opportunities for cost saving
- Evaluate spending on maintenance at now-empty physical locations
- Re-evaluate internal budget allocations quicker and more accurately
- Identify alternative or duplicative supplies that we weren’t sure what we are buying
- Customer service costs - identify and analyze the surge of calls and make data-driven decisions to automate or offload certain services
Current news examples

**Examples**

**Take care of your customers**

Customer 360 view for customer retention

- Use current customer data, deposits and customer spending to identify current status of the customer base
- Drive data-driven “customer relief” programs to show empathy to your customers

**Mortgage relief**

Find most efficient ways to handle mortgage forbearance

- Foreclosures are costly and traumatic experiences for customers and mortgage servicers
- Use a data-driven approach to rapidly find the best method of mortgage forbearance payback options for each customer.

**Customer onboarding**

Use external sources to speed up onboarding

- Rapidly onboard external data sources to help with customer identification and due diligence
- Deploy new risk rating calculations and speed up customer onboarding
- Process applications faster and more accurately by having accurate golden records
A real-life example

A Canadian Top 5 Bank

KYC and Corporate Customer 360 Projects were part of a bigger company wide big data initiative involving internal teams and consultants

Challenges

- Customer data in 100+ systems
- Changes to customer data scattered and inconsistent
- Required expensive remediation process to cleanse
- Early MDM successful early on, but could not scale
- Complexity rose exponentially with each new system

Results

- Unified 35 systems within 6 months. ~ 4 days per new source
- Unified customer visibility - deduplicated (40%), with clear legal holdings
- Continuously refreshed to support real-time compliance, risk, analytics applications
- Lower risk - operational, regulatory, reputational
- Lower compliance IT costs
Solving the Toughest Challenges in Financial Services

Reference Data Management
Master external reference data for customers, securities and other entities (e.g., LEI issuers, data aggregators) with internal sources to drive data-driven decisions.

AML and KYC
Streamline beneficial ownership identification during customer onboarding. Enrich customer records with internal and external data to uncover suspicious activity and lower risk.

Privacy, GDPR, CCPA
Identify all internal systems that contain customer data and maintain a mapping of customer references and uncover enterprise data sources that contain PII.

Customer 360
Drive a consistent customer experience and support up-sells and cross-sells by creating a single view of each customer, including transactions, interactions, and products.

Regulatory Reporting
Master risk data from across data silos and automate significant portions of the regulatory reporting process, like CCAR, ALM, and more, to streamline operations.

Spend Analytics and Procurement
Optimize procurement policies, streamline category strategy development, discover the best suppliers, and reduce costs by identifying dormant or duplicate suppliers.
Thank You For Joining Us!

To learn how data mastering can help your organization or to request a custom demo, please contact Tamr at info@tamr.com
Questions?
FOR MORE INFORMATION:

Aidar Orunkhanov
Solutions Director, Tamr
aidar.@tamr.com