

Democratization of data
science: Using machine
learning to build credit risk
models



Hello!

I AM Moto Tohda

I am the Vice President of Information Systems @
Tokyo Century (USA) Inc.

■ Tokyo Century (USA) Inc.

Who we are

- Established: 1985
- Private

Tokyo Century Corporation

- Established: 1969
- Tokyo Stock Exchange
- 37 Countries

OUR 1st STEP



How did we start our journey on Big Data

1.

Perception

How do you change people's perception of running the business using **TECHNOLOGY**?

Technology = “Unknown”

Disrupt The Comfort

- Unfamiliar product or process
- New learning curve

Disrupt The Business Flow (System Flow)

- Somehow the current system flow became the business flow
- New process will/should not bring efficiency

■ Zero2Hero Stack from Bardess:

cloudera

Storage & Processing

Hadoop, Big Data processing framework

Cazena – SaaS Data Lake on Microsoft Azure

Qlik 

Visual Analytics

Visualize the credit risk model in real-time.

Connects DataRobot, Cloudera, and our SQL servers.

DataRobot

Advanced Analytics

Built the credit risk model
Run the prediction through Qlik, give the answer back quickly

Proof of Concept “POC”

-Microsoft Azure/Cloudera/Trifacta/Qlik/DataRobot

Customer 360 Model

- Know your customer
- Learned to visualize using existing data
- It can be used for target marketing, customer service, etc.

Credit Risk Model

- Used our existing data only
- Tested to see what DataRobot will bring
- Surprisingly good result!



or



HARD TRUTH

What happens when technology is way over people's head

2.

Change Management

How do you convince the business side to **GET IT?**



HOW DO WE **Use** DATA ?



■ HOW CAN WE **Compete** USING DATA

Reactive

See what happened, and try to remedy the situation.

Proactive

Forecast the future and plan an action ahead of time.

■ HOW CAN WE **Share** DATA

“Hunch”

People “KNOW” what to do.

Cannot explain, because this comes from the years of experience and the knowledge.

“Quantify”

Use DATA to put numbers to all the indicators.

People can speak the same language, because of consistency.

“Top-Down” or “Bottom-up”

Top-Down

- Strong leadership
- Uncomfortable surprises
- May not be fully convinced

Bottom-up

- Educate first
- Include in the process
- No surprises

■ PRODUCE **Fast**

RAW is good

- We cannot and should not wait for perfection.
- We can always “fail fast” and revise.

VISUALIZE

- Users will have to see it to believe.
- More examples, the better.
- Small Qlik applications can go a long way.

3.

Democratize

How do you empower **PEOPLE** with data?

■ Giving “Tools & Data” = “Democratize”



Traditional Way

- IT or Reporting specialist work on data
- Users confirm requirements
- Go live

Democratized Way

- IT make the data available
- Users will proactively create their own application
- Creativity

■ Create **Champions**

- Qlik Training for business users
- Analytics Day
- Create a common dataset for users to access

Bring in business users to experience, and **VISUALIZE**.

Summary

- Make the 1st Step
- Digital Transformation or disruption is **NOT** IT-only projects
- Increase Data Literacy for the entire organization, change the perception

THANKS!



Any questions?

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■ CREDITS

- 09/24/19 FinData Day @ Strata Conference 2019 NYC
- Presentation template by [SlidesCarnival](#)

Rate today's session

Cyberconflict: A new era of war, sabotage, and fear See passes & pricing

David Sanger (The New York Times)
9:55am-10:10am Wednesday, March 27, 2019
Location: Ballroom
Secondary topics: Security and Privacy

Rate This Session

We're living in a new era of constant sabotage, misinformation, and fear, in which everyone is a target, and you're often the collateral damage in a growing conflict among states. From crippling infrastructure to sowing discord and doubt, cyber is now the weapon of choice for democracies, dictators, and terrorists.

David Sanger explains how the rise of cyberweapons has transformed geopolitics like nothing since the invention of the atomic bomb. Moving from the White House Situation Room to the dens of Chinese, Russian, North Korean, and Iranian hackers to the boardrooms of Silicon Valley, David reveals a world coming face-to-face with the perils of technological revolution—a conflict that the United States helped start when it began using cyberweapons against Iranian nuclear plants and North Korean missile launches. But now we find ourselves in a conflict we're uncertain how to control, as our adversaries exploit vulnerabilities in our hyperconnected nation and we struggle to figure out how to deter these complex, short-of-war attacks.

David Sanger
The New York Times

David E. Sanger is the national security correspondent for the *New York Times* as well as a national security and political contributor for CNN and a frequent guest on *CBS This Morning*, *Face the Nation*, and many PBS shows.

Session page on conference website

✓ Attending Notes Remove

Cyberconflict: A new era of war, sabotage, and fear

9:55 AM - 10:10 AM, Wed, Mar 27, 2019

Speakers

David Sanger
National Security Correspondent
The New York Times

📍 Ballroom

Keynotes

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SESSION EVALUATION

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