

# IBM Z and AI

## SOLVING FRAUD SCENARIOS IN REAL TIME

### Highlights



- Achieve low latency inferencing with first-in-industry IBM z16™ integrated accelerator



- Achieve high throughput while analyzing real-time transactions with IBM z16's on chip AI accelerator

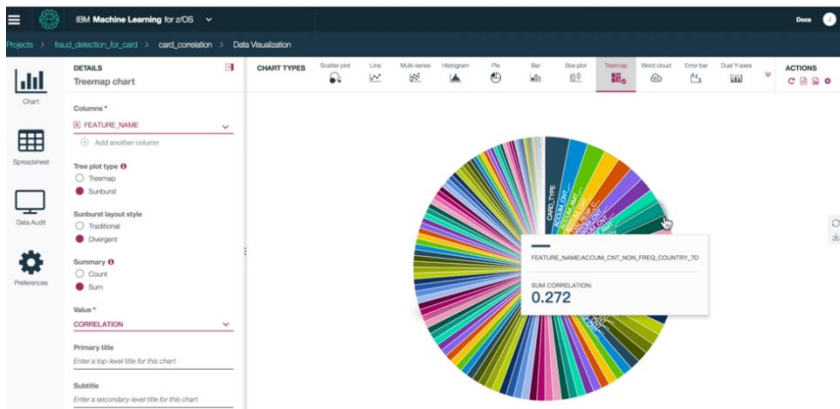


- IBM z16 with its real-time inferencing capabilities is designed to help prevent fraud

Fraud poses a significant risk to businesses and end customers. Fraud can occur across various industries including but not limited to Credit Cards, Healthcare, Payments, Financial services, Government, Insurance. Using a scalable and consistent AI solution to detect, prevent and address fraud can help reduce this risk. Determine business insights during transactions using IBM Z®, harnessing the scalability and speed needed to address these challenges.

The cost of fraud continues to grow and impact businesses. Global Credit Card fraud is expected to reach \$35 billion by 2025. Since the beginning of the COVID-19 pandemic, 40% of financial services firms saw an increase in fraudulent activity. COVID-19 has also worsened the false positive cases for over two-thirds of the institutions

## See Fraud, Stop Fraud



- Quick-start solution templates – IBM Watson® Machine Learning on IBM Z (WMLz) comes with a Fraud model template which can be customized and deployed
- Train anywhere deploy on IBM Z – Train the model on Public Clouds, Private clouds, On-Premises but deploy them on IBM Z platform

- Enhanced Model Accuracy – Schedule periodic re-evaluations of new data to monitor model accuracy over time and receive alerts when performance deteriorates
- Enterprise-ready AI model deployment- Operationalize models within transactional applications to enable real-time insight. Choose from several scoring approaches, including RESTful APIs, Java™ and CICS® integration, optimized for the highest performance.

| Account Information                                     | Operation Information  | Lag Attributes   |
|---|--|--|
| 100 **** 2222<br>Account balance<br>Transaction History | Country: United Kingdom<br>Channel: Business Online<br>Interchange organization: VV<br>Card type: Magnetic | Transaction amount in high risk country in last 1 day: 1284.3<br>Transaction count in high risk country in last 1 day: 5<br>Number of failed transaction in last 1 day: 2<br>Number of failed transaction in last month: 3<br>Average transaction amount in last month: 90.6 |

## Advantages

- Flexible and scalable platform to deploy fraud models and data
- Score all transactions and leave none behind yet meet all stringent SLAs
- Detect fraud, adapt more dynamically to all types of fraud and deter fraud in real-time
- Proven customer stories of detecting more fraud resulting in cost savings



Watson Machine Learning for z/OS



ONNX &



IBM Deep Learning Compiler (DLC)

### Watson Machine Learning for IBM Z

No compromise approach to Machine Learning on current transactional data

### AI on IBM Z fraud solution

Infuse AI into every business transaction with SLA < 5 ms and > 10K TPS

**Real-time fraud detection on IBM Z**

### Deep Learning Compiler and ONNX

Enables multiple Deep Learning Frameworks

### TensorFlow on IBM Z

Delivers acceleration in an industry standard serving environment

Help prevent Credit Card fraud, payment fraud, healthcare fraud, Government fraud and many more.

Want to know more? Contact [aionz@us.ibm.com](mailto:aionz@us.ibm.com)

**Disclaimers:** Cited by a third-party industry analyst.  
AI on IBM Z supports PyTorch, TensorFlow, Keras, Anaconda, Spark, and others