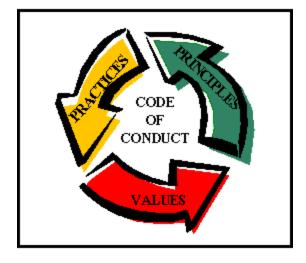
# Implementation: FASTBIZ



FASTBIZ-CLOUD vision





3. Subsistence and Emergence



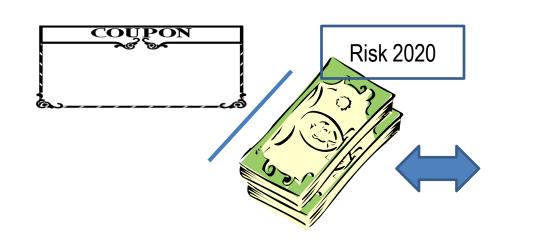




2. Purchase & Payment support



Team AOEC, Dec 22<sup>nd</sup> 2020





Mitigating System Inequalities
(Our NEXT steps to the current journey of a customer, that is to inquire, to ascertain, to purchase and to use or consume)

# 1. Subject for this challenge

## 2. Scope for this challenge

- Via this Hackathon we will focus on the following
- 1. Mitigation of system inequalities to help revive
- the purchase and payment sector in times of
- economic crisis and insufficient cash flow

Nationalism, Sustainable
Development and
Growth

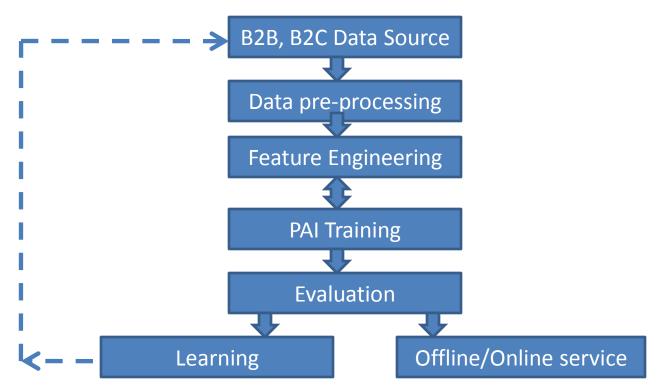
2. Extension of Debit Cards by connecting them to a FASTBIZ system, where this
permits a Debit Card holder to use funds from an account or to use coupons from
the FASTBIZ system to make payments

# Background for this solution

- Design a System that leverages efficiencies and benefits from data being written to and accessible from a FASTBIZ Cloud
- Like the Bitcoin framework, which it bases its problem solving on, it expects to include a solution that:
- Mitigates system inequality and connects "still to be clustered banks", B2B, B2C silos
- Makes it easier for B2B, B2C sectors to transact
- Makes it easier to operate across credit lines / systemic boundaries for businesses, organizations, and customers
- Enables customers to purchase & pay in a single way for business services from different businesses and organizations in times of cash insufficiency
- Improves systemic interaction across governments and government agencies like banks/endpoints in banking clusters
- Enables use of FusionFabric Cloud elements to systemically solve some of the implementation problems affecting financial transactions

### 3. How we will leverage machine learning

- The FASTBIZ solution (at the AI level)
- Highlights of the implementation using Machine Learning Platform for AI
- 1. Create a Project/Solution called FASTBIZ Cloud framework
- 2. Carry out Data Preparation (Create and Configure the B2B, B2C Data Sources or Data Set details)
- 3. Plan the Workflow using the FusionFabric Cloud and unified FASTBIZ Cloud

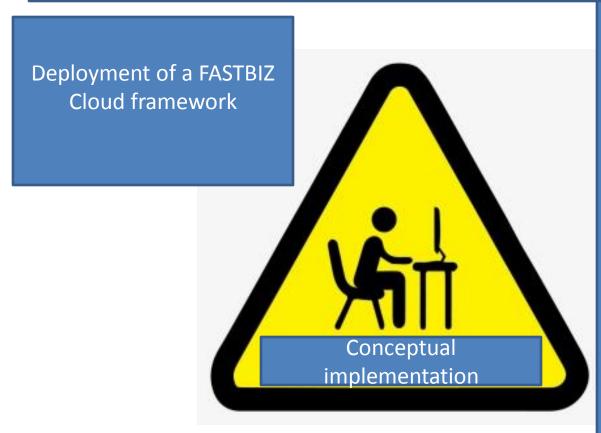


### 3. How we will leverage machine learning

- The FASTBIZ solution (at the AI level)
- Highlights of the implementation using Machine Learning Platform for Al
- (continued)
- 3.1 Data pre-processing: Pre-process the data (using SQL scripts with data type conversion, filter based feature engineering, normalization & split) to generate model training sets and model prediction sets
- **3.2 Data visualization**: Feature engineering (Statistical Analysis) to visualize the data to obtain information > Extend support for purchase & payment via FASTBIZ
- **3.3 Algorithm modeling**: Use model training sets (Binary Classification to Logistic Regression) to perform algorithm modeling and to generate a training model
- 3.4 Model evaluation: Use the trained model (Recommendation > Prediction and Evaluation > Binary Classification Evaluation) to make predictions of the model prediction sets, in order to evaluate the precision of the model

## 4. Implementation highlight

Vision to use the Machine Learning Platform for AI via Alibaba & FusionFabric Cloud enabled Workflows



#### Connecting the dots

- Django Architecture to create the web application framework
- 2. Use of Python for laas instantiation and bucket uploading
- 3. Use FusionFabric Cloud services & API(s) for B2B, B2C workflows
- 4. Availability using Alibaba's Cloud computing platform
- Frocessing and Feature engineering using Alibaba's Machine Learning platform
- **6. Reporting Bot** (using a Python library for Twitter)
- 7. AutoScaling of the FASTBIZ
  CLOUD (using concepts of
  the Apache Hadoop/Map
  Reduce Programming Model)

## 5. Conceptual implementation

- (Knowing that some parts of the implementation depends upon the privileges offered by FusionFabric and Alibaba)
- The FASTBIZ CLOUD facilitation can be done via stages that involve
- 1. Design & Development of "n" number of FASTBIZ CLOUD nodes for FASTBIZ systems (using the Django Architecture to create a web application framework)
- 2. Creating of a FASTBIZ-Stream or Client-ID for a FASTBIZ CLOUD node (using the Django Architecture and Python for launching an Alibaba/laaS/FusionFabric Cloud instance and thereon using this to upload information files into data buckets in the Cloud)
- 3. Registering and updating of (FASTBIZ framework/component) FASTBIZ-ID information for this FASTBIZ Stream or Client ID (using the Django Architecture and Python for launching an Alibaba/laaS/FusionFabric Cloud instance and thereon using this to upload information files into data buckets in the Cloud)

## 5. Conceptual implementation

- 4. Reading and publishing of FASTBIZ Coupon Information (FCI) from FASTBIZ systems and/or end nodes (that use FusionFabric Cloud services & API(s)) and sharing of this information (via Alibaba's Cloud computing platform)
- 5. Processing and Feature engineering of Purchase & Payment influencers for a Stream or Client ID/FASTBIZ-ID (via Alibaba's Machine Learning platform /FinAstra's FusionFabric Cloud and supported interpretation & learning of the uploaded data)
- 6. **Deployment of a FASTBIZ Reporting Bot** (using a Python library for Twitter to send simple and intelligent tweets to FASTBIZ systems/FASTBIZ-ID clients)
- 7. AutoScaling of the FASTBIZ CLOUD "n" nodes framework to meet the
  performance requirements and to scale down capacity when FASTBIZ-Stream or
  Client ID and FASTBIZ ID related Data or Purchase & Payment workload is less to
  save costs (using concepts of the Apache Hadoop/Map Reduce Programming
  Model)

### Bot messages for FASTBIZ

#### + FASTBIZ Stream or Client ID/details (for Alibaba/FusionFabric):

- + FASTBIZ ID/details:
- + Purchase & Payment indicators:

Need for Forward Lifetime services/ Extended debit or credit services, Need for secure transactions, Need for Remedial support, Need for Vectorized services

#### + Purchase & Payment support projections:

**For example assistance for** Non performance, inadequate capital and limited Sustainability or Extended Debit Card services

### + Associated FASTBIZ Coupon Information (FCI):

Details on Open coupons/Unique coupons/Specific coupons/Social cause coupons/Savings on purchase coupons/Relief and Rehabilitation coupons/Green Zone coupons

### + Associated Purchase & Payment influencers:

Memorandum of Business Association/Fast Track facilitation with Pulse trending/FASTBIZ Investment, Management and Consultation