



Empowering Business Assurance with AI Catalyst

Nice, 2018

Champions:



Participants:



Business Assurance for the digital eco-system

Digital transformation mandates Business Assurance to evolve in order to provide efficient support for the digital eco-system

Artificial Intelligence, Machine Learning & Big Data Analytics enables the evolution of business assurance

Smart Cities are used as an example to demonstrate this innovative Business Assurance approach

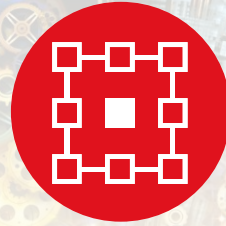


Enabling and supporting the digital eco-system

Catalyst Business values



**Mitigating Current
RA & FM Threats**



**Alignment with
Future Needs**



**Improving customer
satisfaction**



**Increasing Market
Share**



Increasing revenue

Eco-system key players, technologies and use cases



Empowering Business Assurance with AI Catalyst - details



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TM Forum Assets used

1. ABDR (BDA) – gb979-D
2. Fraud Management – GB969
3. Revenue Assurance – GB941
4. eTom
5. API's



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AI & ML Techniques adopted

1. behavioral analysis,
2. natural language processing,
3. sentiment analysis,
4. Unsupervised learning
5. Supervised learning

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New Use Cases Implemented

1. Prevention and correction orders of provision errors
2. Customer impersonation detection.
3. Establishing the ultimate customer feedback loop.
4. Identify anomalies highlighting manipulation of traffic for known types of bypass.
5. Proactive revenue assurance via customer sentiment analysis.
6. Customer acceptance and credit-worthiness assurance.
7. Dunning management: distinguish good faith debtor from a potential fraudster
8. Automation the rules' thresholds setting

Champions:



Participants:



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New Use Cases Defined & contributed (RA-GB941 / FM-GB954)

1. Early Detection of order failures
2. Avoiding Costly refunds to customers
3. Contract assurance
4. Retrieve a Customer's Risk Score
5. Retrieve a Customer's Order's Risk Scores
6. Retrieve an Order Type Risk Scores per a Customer
7. Retrieve Risk Score by Order Type



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ABDR Entities (BDA-GB979)

New Entity:

- Purchase Activity

Improved entities:

- Employee
- Dealer
- Supplier
- Point of Sale
- Payment



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New API's to Digital Platforms published

REST API definition for risk scoring was contributed,
<https://projects.tmforum.org/jira/browse/AP-1044>



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5 Catalyst Champions & 4 catalyst vendors

Champions:

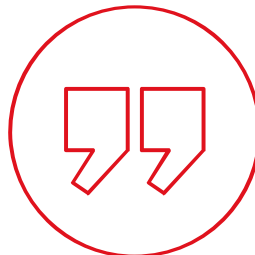


Participants:



▪ “The catalyst sets out the challenge in the industry to drive for new solutions utilizing machine learning & AI whilst at the same time providing an environment of collaboration with the various solution providers under the umbrella of the TMForum. Our desire is to have innovative solutions for the Revenue Assurance and wider Business Assurance remit that can be consumed by the whole industry. The utilization of these solutions will ultimately translate into enabling improved business processes and customer experience in line with continuous transformation in the digital world.”

□ Andreas Manolis, Group Head of Strategy & Risk, Group Revenue Assurance



“Digitization and Business Transformation force companies to increase the pace (time to market/ automation) while ensuring that products and processes are secure, providing the expected profit from day one and to orchestrate extensive ecosystems to keep it correct & simple for customers. Artificial intelligence and Machine learning in this Catalyst should help the RA&Fraud functions in Operators to respond to the new demands, to further optimize current practices, but also to step into new areas of responsibility.”

- Gjurgjica Gina Pesheva, Senior Manager Revenue Assurance - Deutsche Telekom



“This is our first TM Forum Catalyst. In a short time we had great results, and we are honored to share our experience in this open, innovation way, with other TM Forum members! This catalyst provided a fast way to grow our knowledge about using AI for our business assurance needs, and specifically with our Dunning use case. This new and innovative method, if compared to BI ones, delivered a **100X** reduction on the potential fraudsters to double check to reach the same goal!”

Andrea Cerritelli – Digital Innovation – Fastweb



In the ever-growing omni-channel sales environment and in ever-more virtualized networks, legacy revenue assurance and fraud management have to be adapted to face challenges of digital transformation and new digital services, in compliance with Global Data Protection Regulation to guarantee customer data privacy. And that is the ambition of Business Assurance. Introducing new data classes in customer facing business processes and in addition, Innovative technologies such as artificial intelligence, machine learning and data analytics empower Orange to move forward to this bright future. Sophie Nachman, Standards Manager, Orange sophie.nachman@orange.com



“This Catalyst contributes to the internal transparency and control, which are important for assuring our company’s business and customer experience in times of transformation. It uses new technologies and data centric focus on the customer, both end-customers and business partners. These solutions will increase the sharing of data centric and strategic insights across the organization, originating from cross-functional achievements”

□ Rene Felber, Head of Risk & Assurance, Telia Finland

