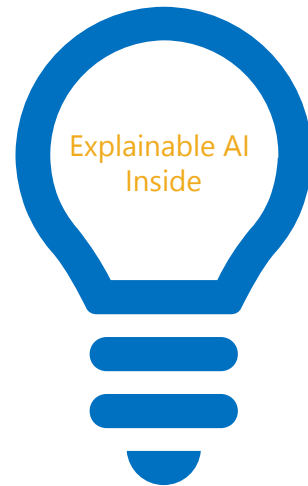
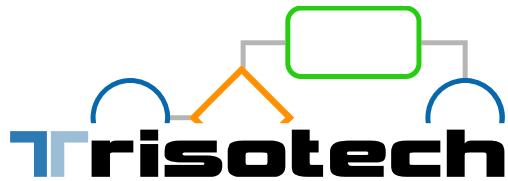


# Decision as a Service Platform



The DMN Platform Revolution



Denis Gagné  
CEO & CTO

Chair BPMN MIWG at OMG  
Co-Chair BPM Health Workgroup at OMG  
DMN RTF Member at OMG  
BPMN RTF Member at OMG  
CMMN RTF Member at OMG  
Chair BPSWG at WfMC  
XPDL Co-Editor at WfMC

# *Digital businesses are insights driven*

*To turn insights into actions, they rely on their ability to make the right business decisions*

## *Decision Making:*

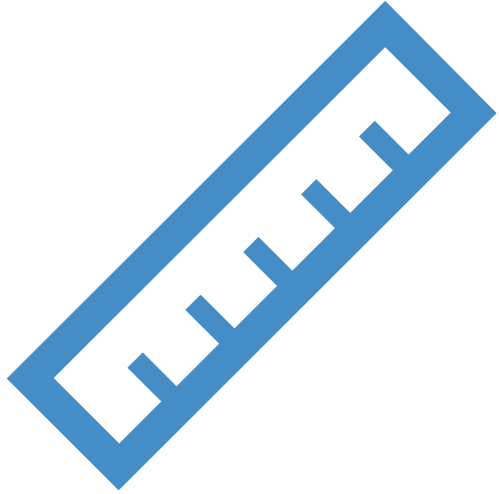
Informed decision-making comes from a long tradition of guessing and then blaming others for inadequate results.

Scott Adams



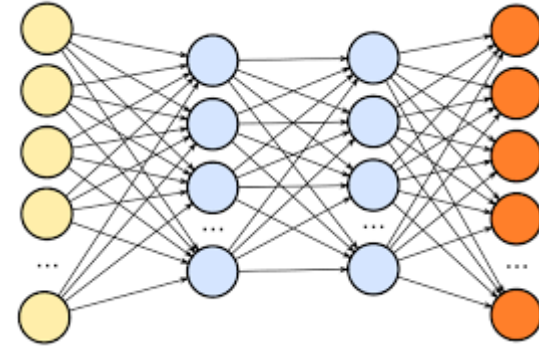
*The challenge is that complex business decisions require real-time processing of hundreds of factors and data sources*

## Business Rule Management Systems (BRMS)



Box full of Rules

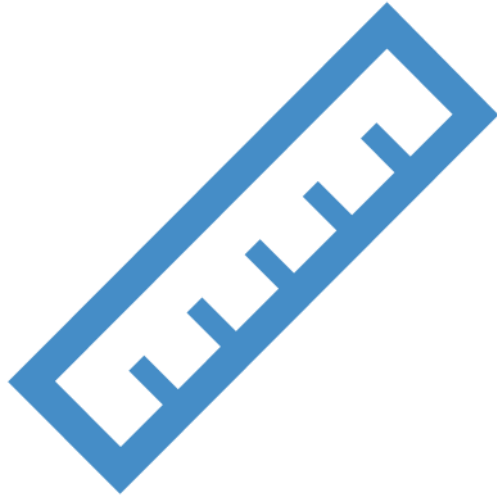
## Current AI Resurgence: Deep Neural Nets



Box full of Nodes

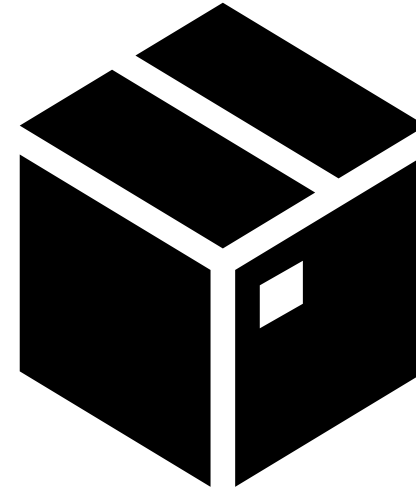
*Today's Decision Automation Solutions*

Rules are continuously changing



Decisions side effects

Black Box AI



Unexplainable decisions

*Do not meet current Decision Automation Needs*



# Explainable Decisions

- *Explainable AI is required if not mandatory*
- *A Black Box solution will not cut it*
- *Transparency, Provability and Explainability are mandatory requirements of today's business decisions automation*

Article 22 of the GDPR requires that companies be able to explain to their customers how machine decisions are made.



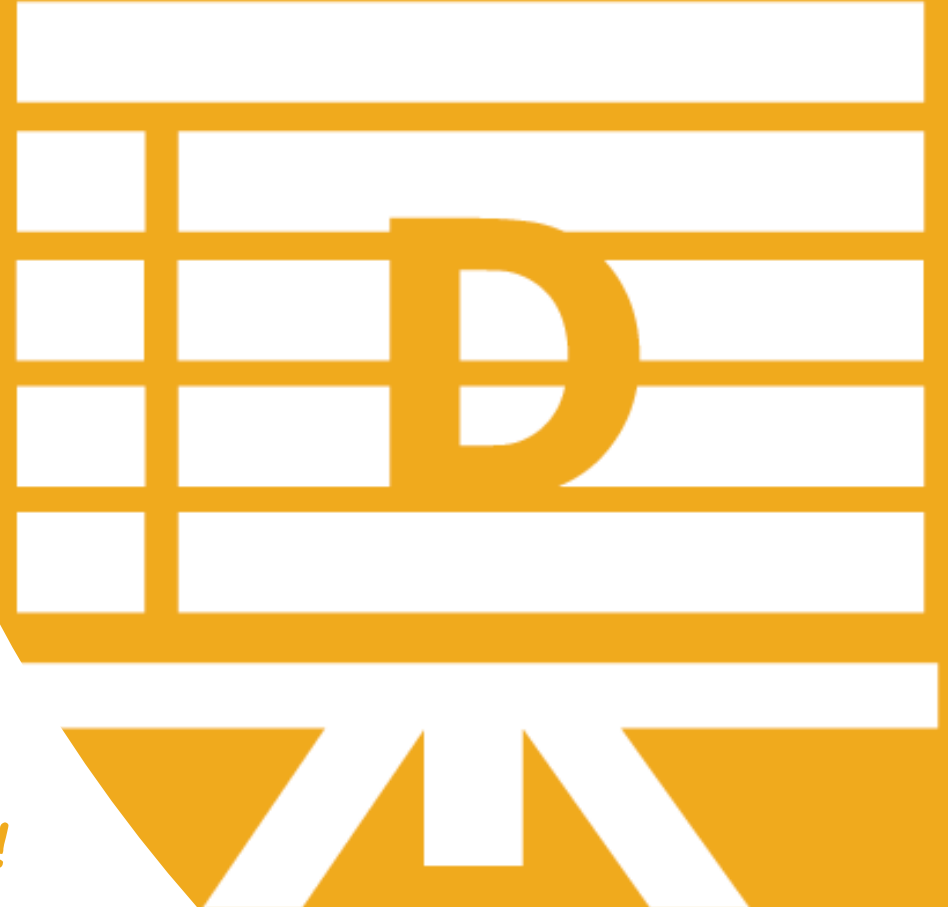
# *Decision Automation based on DMN*

*Decisions as first class citizen*

*Visual representation of decisions*

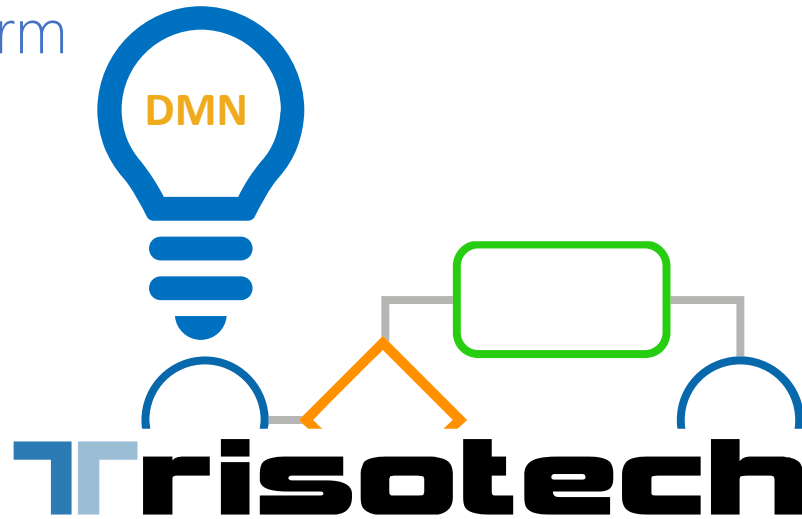
*What you model is what you execute!*

*Completely explainable decision automation*



# Decision Management Suite

Decision as a Service  
Platform



The Trisotech Decision Management Suite is the  
premier Decision as a Service Platform based  
on DMN

Complete with Modeling, Execution,  
Governance and Testing

Trisotech is  
making the  
DMN vision  
for decision  
automation a  
reality

# Decision Management Suite

Decision as a Service  
Platform



## DMN Decision Services

- Creation
- Packaging
- Testing
- Management



# Decision Management Suite

Decision as a Service  
Platform



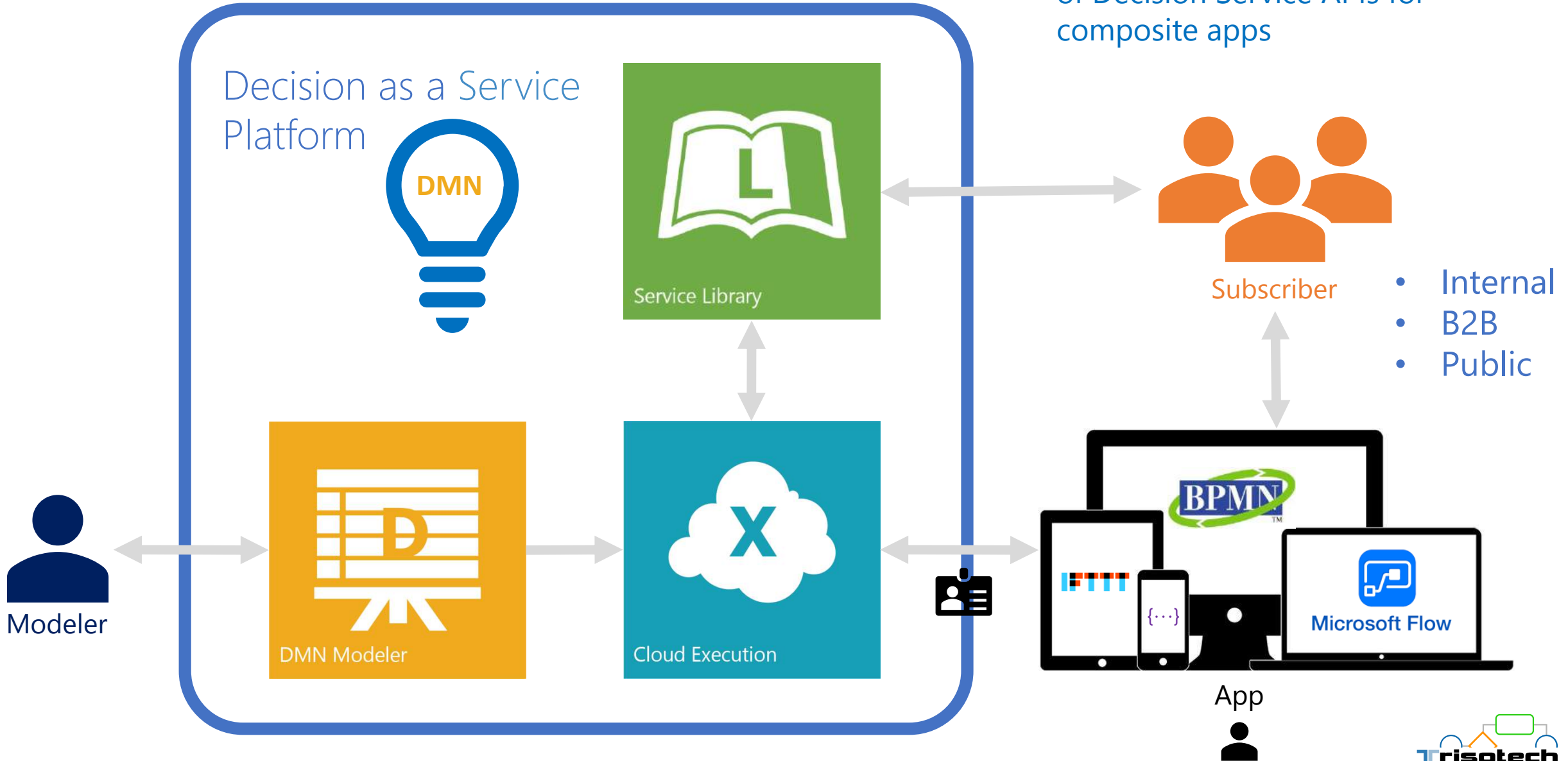
## Why use it

As a launch pad for:

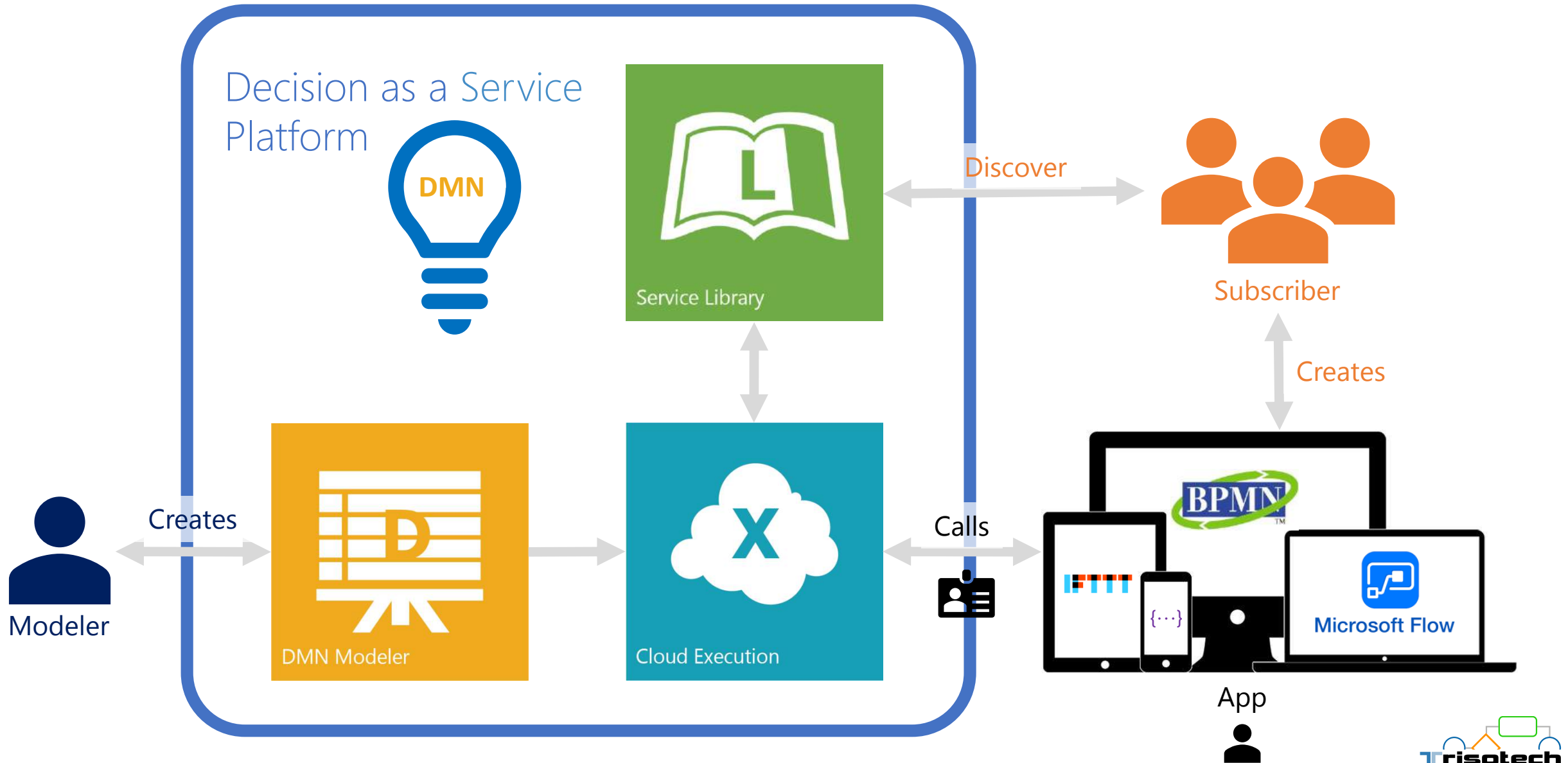
- Composite apps
- Knowledge distribution
- Microservice Architecture
- Business automation
- New revenue models

# Decision Management Suite

Full lifecycle management platform of Decision Service APIs for composite apps

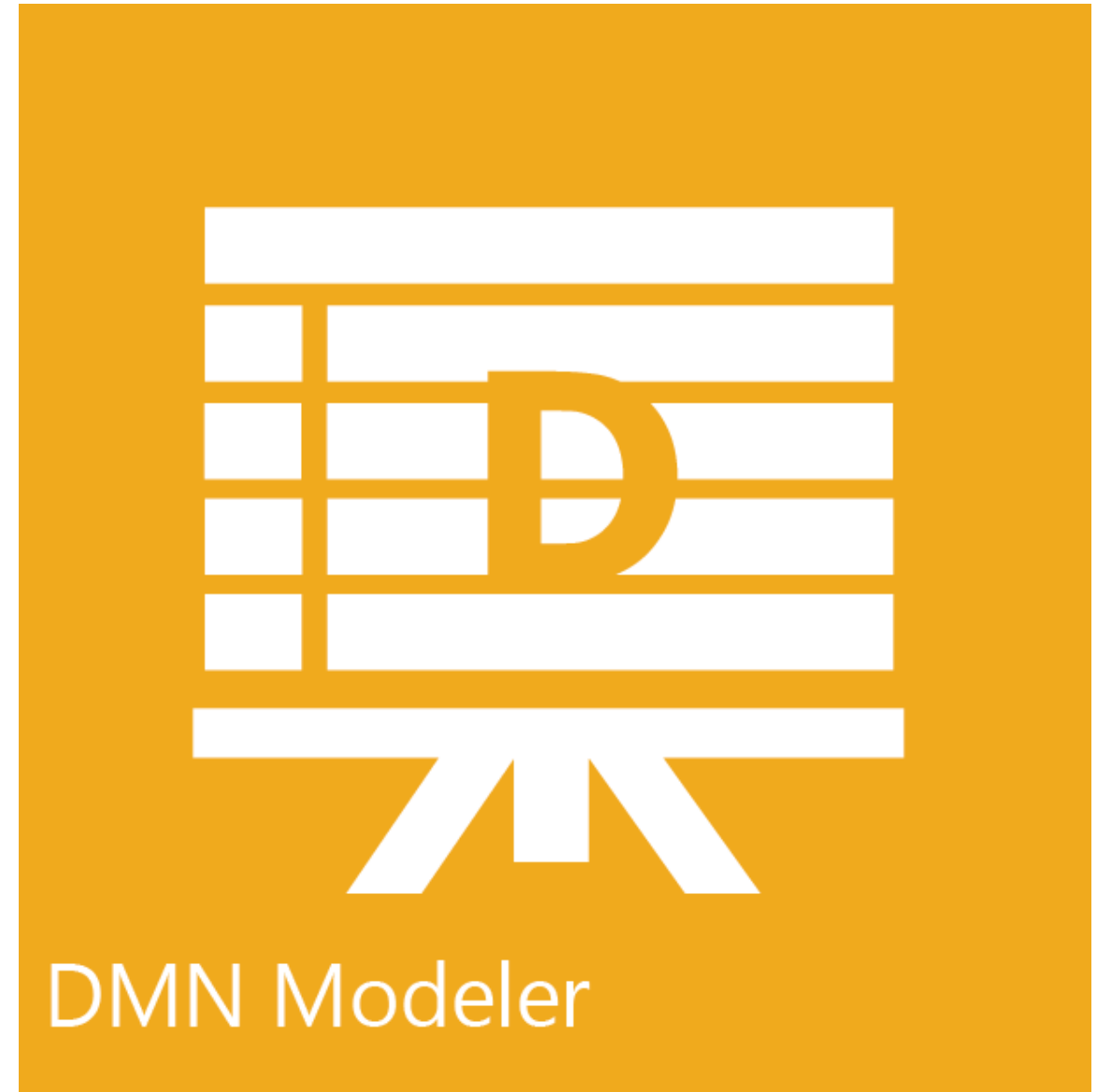


# Decision Management Suite



# Modeling Capabilities

- Decision Requirement Diagrams
- Decision Tables
- Complete FEEL (Level3)
- Complete Boxed Expressions
- Decision Services
- Test Cases
- Import/Re-use
- Dictionary





Cloud Execution

# Execution Capabilities

A fast and scalable Decision Engine that fully supports :

- Decision Service Execution
- Decision Service Documentation
- Decision Service Testing
- Decision Service Usage Audit



Powered by Red Hat Technology



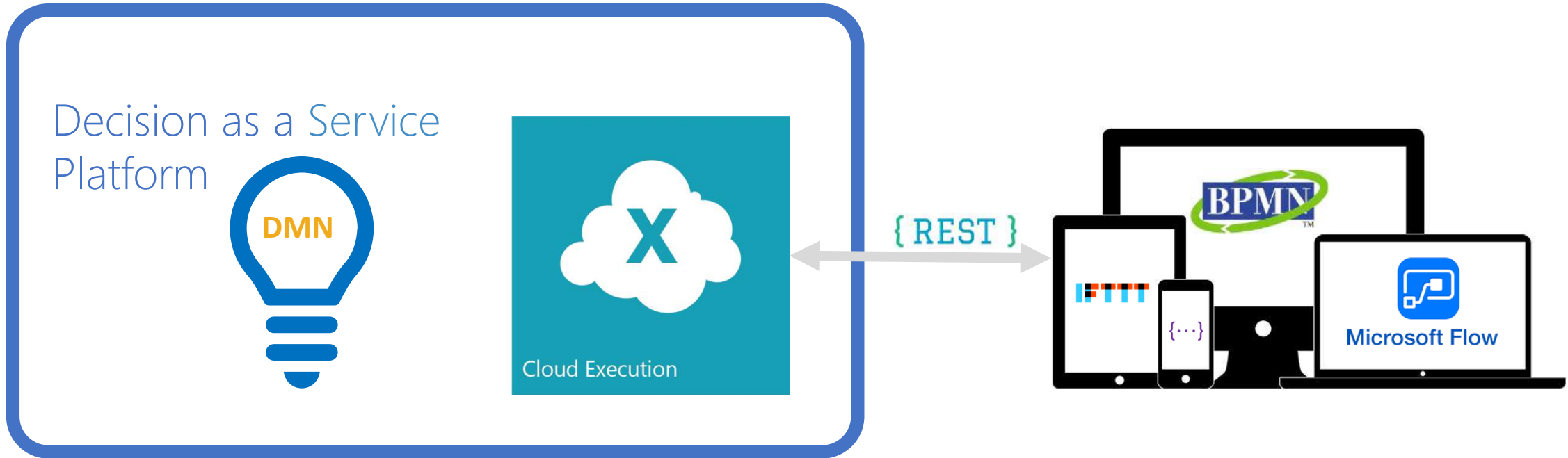
# Library Capabilities

Offers a simple to navigate Services Catalogue where:

- Define Execution Environments
- Select API options
- Select API versions
- API Invocation Template
- API Invocation Test



# Decision Service Execution



DMN Decision Services can be orchestrated by external applications using a REST API

Supports 3 input mappings:

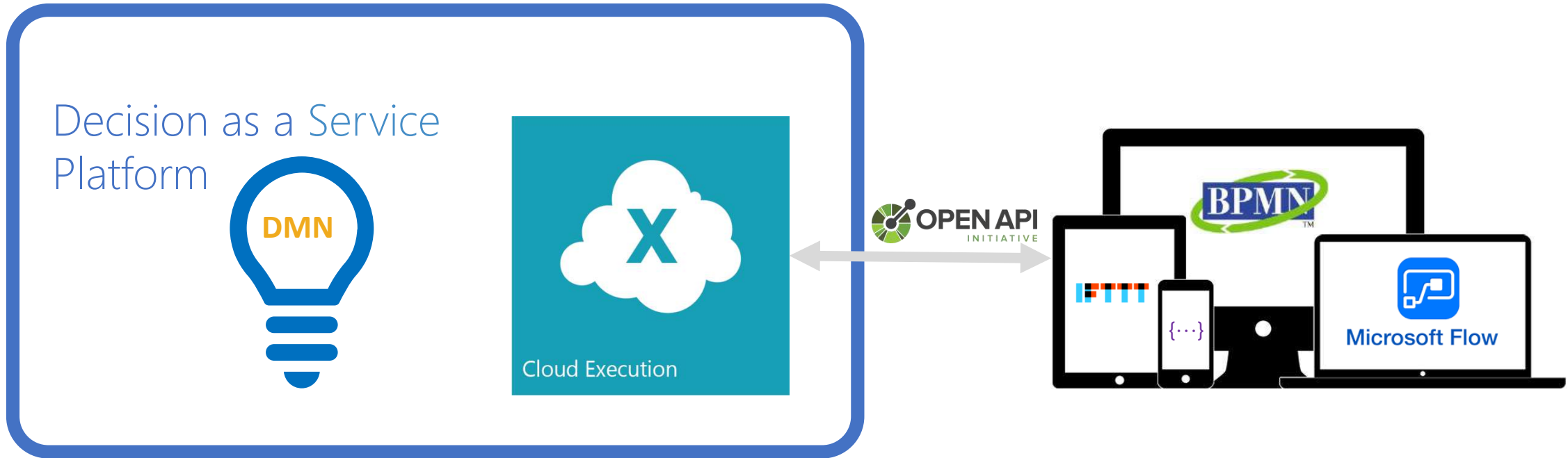
- JSON standardized input
- XML standardized input (based on the DMN TCK)
- XML Custom Schema (using best guess mapping)

2 output mappings:

- JSON standardized output
- XML standardized output (based on the DMN TCK)

Also returns execution exceptions

# Decision Service Documentation



Provides a description of the REST APIs using the OpenAPI v2.0 (Swagger)

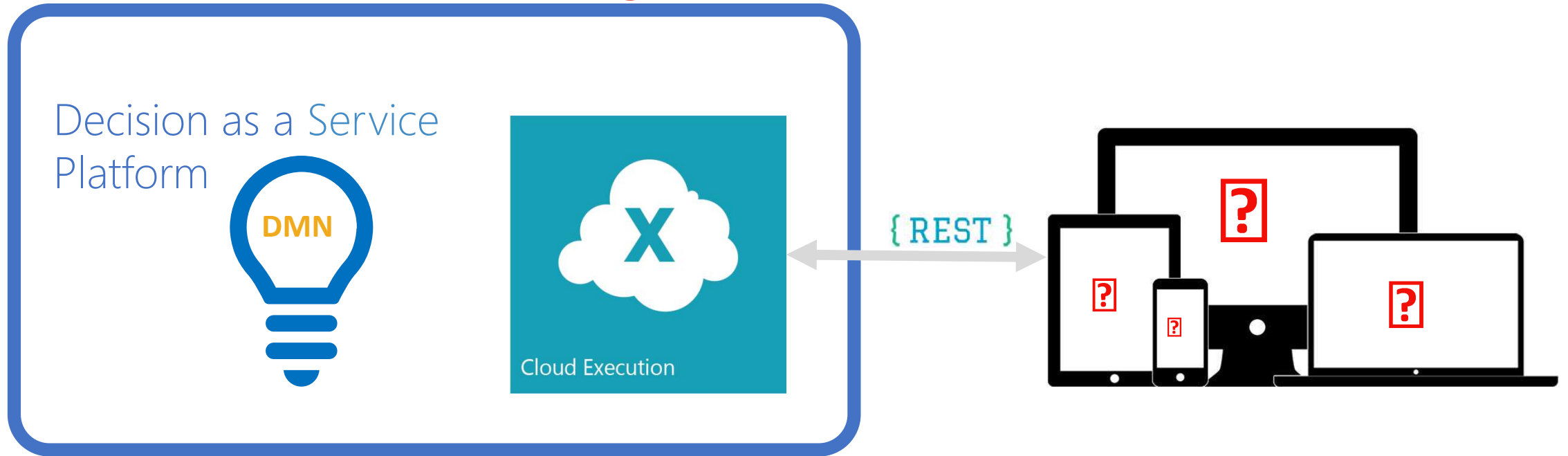
- JSON Format



OpenAPI is vendor-neutral, portable, and open specification for providing technical metadata for REST APIs



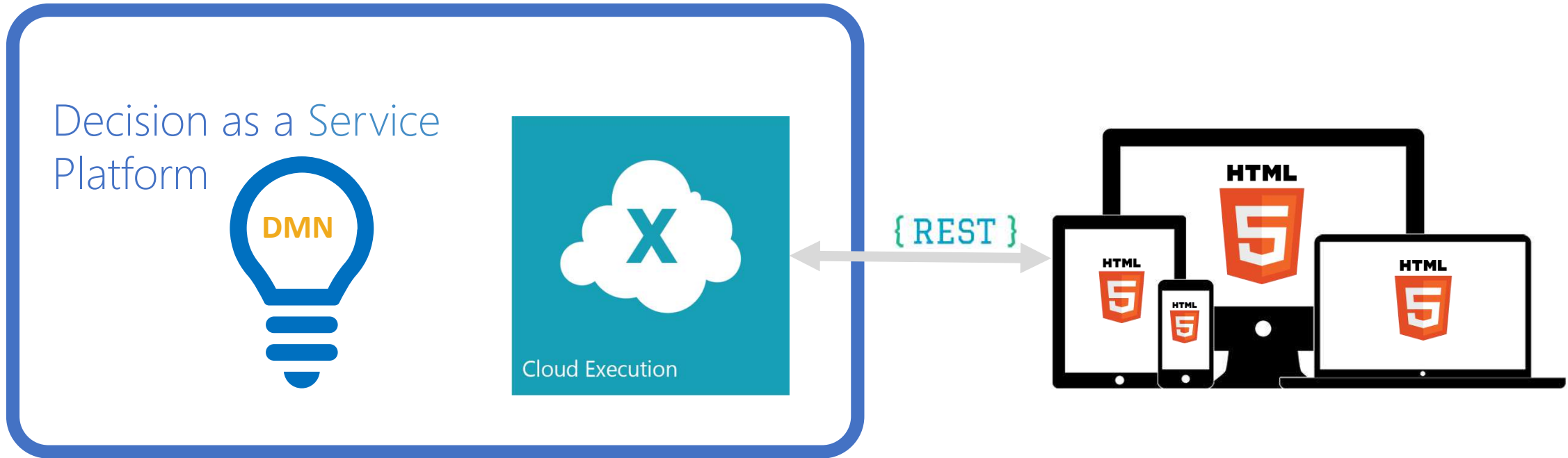
# Decision Service Testing



Decision Service Testing is based on the DMN TCK format

- Two potential source for the test cases
- Serialized in the service definition (internal)
  - Provided on the REST call (external)
- Return a pass/fail for each of the test cases evaluated.

# Decision Service Execution via Rich HTML Form

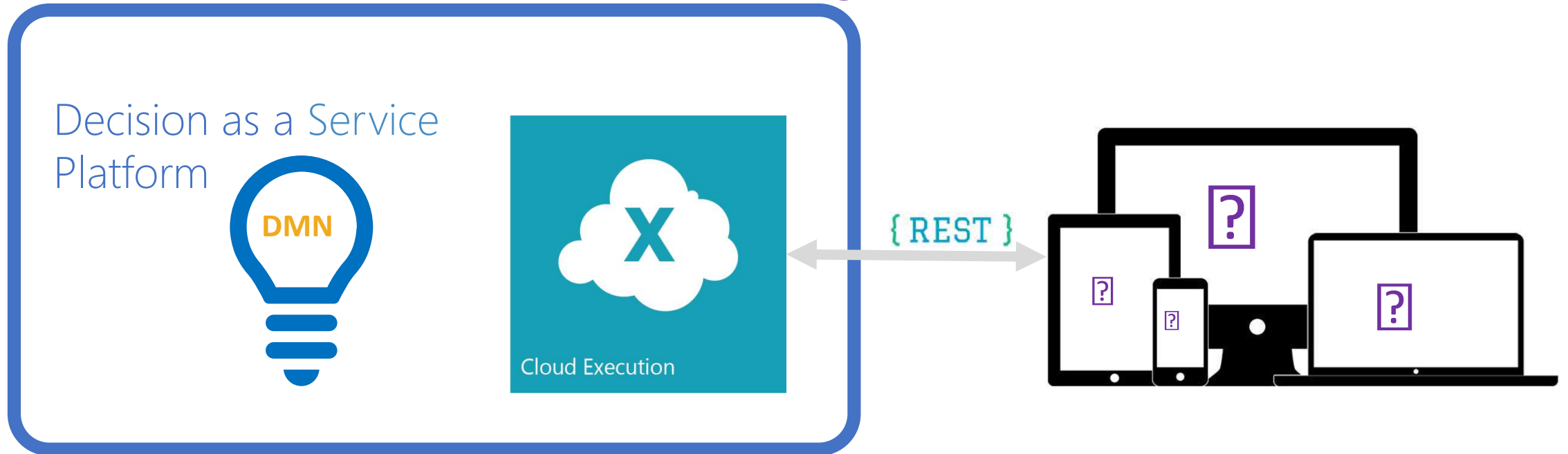


Offers a Rich HTML form for all defined Decision Services.

This interface displays a form to provide the decision service inputs and displays the decision results in return.

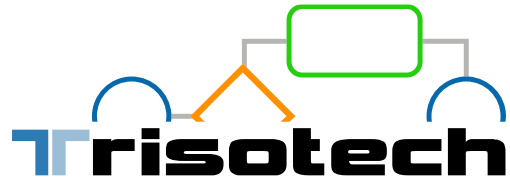
- Supports inputting all FEEL types
- Supports Excel Import of Collections

# Decision Service Execution Usage Audit



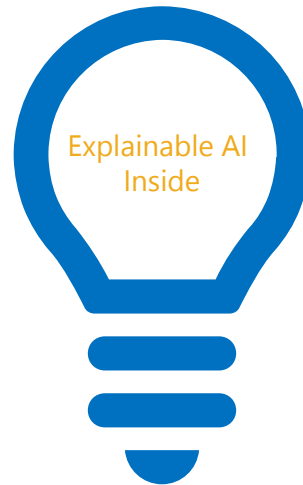
Provides the usage statistics of decision services

- Number of invocations by period per decision service
- Invocation details for a period per decision service
  - User who did the invocation
  - Date/time of the invocation
  - Error messages
- Collected audit data



# Decision Management Suite

Decision as a Service  
Platform



- One click UX
- Centralized Dictionary
- Validation and Testing
- Complete Governance of both  
Design time and Execution time
- Decision Services that can be orchestrated  
by any apps

**The DMN Platform Revolution**