



# Payment Engines as Business Process [μ]Services

*Towards a new normal?*

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## What we'll be discussing today

as observed in the world of payments...

The tragedy thy name is SOA - really?

Microservices - Where are we in the Hype cycle?

Payment Engines - Can the Distributed Monolith be transitioned to Microservices?

Why/How Business Process [Micro]services?

Q&A

The tragedy thy name is SOA - really?

Did SOA ever make it out of the “Trough of Disillusionment\*”??



### SOA - Standards Obsessed Activities

Too many standards, too less implementation

### SOA Architects - State of Armchair Architects

That dreaded world of Governance gatekeepers

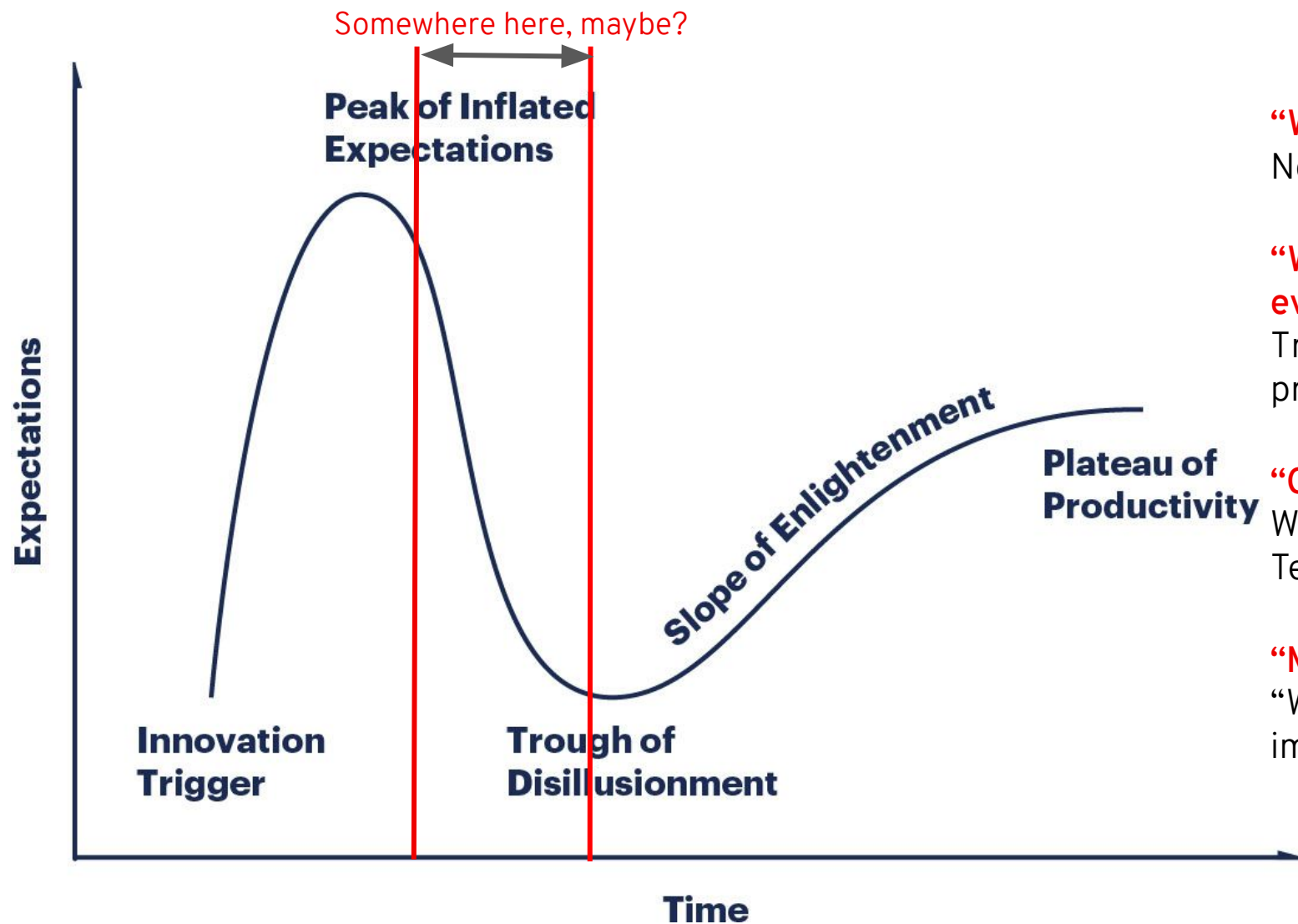
### SOA - Salt over Agony

Transition to SOA was supposed to deliver on a promised ROI

### SOA - SOA on Attic

“We’ve implemented SOA; but that’s legacy. Let’s modernize”

# Microservices - Where are we in the “Hype cycle”?



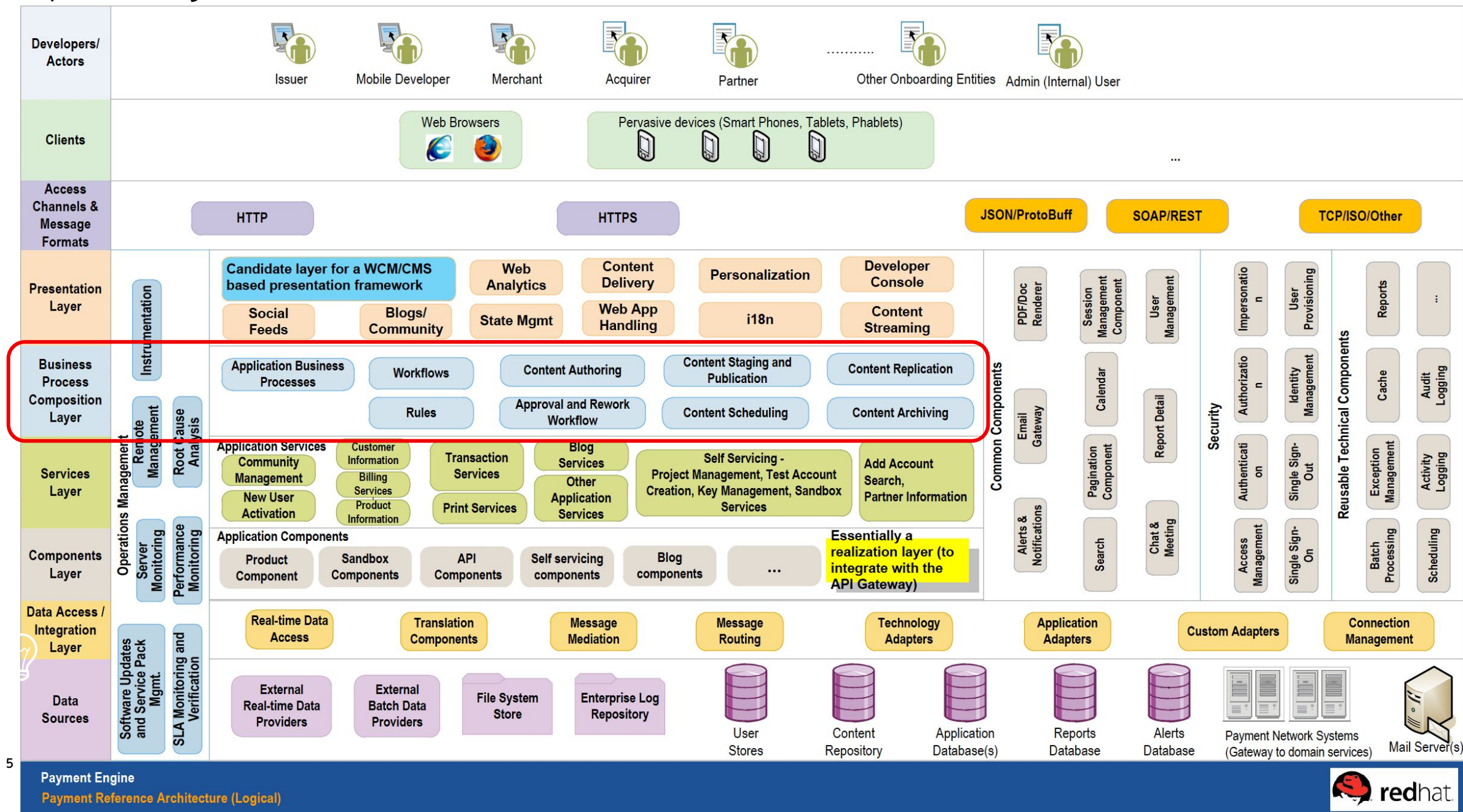
**“We’ve tabled our Microservices journey”**  
Not modernization; but greenfield evaluations - yes.

**“We have more than *nnn* Microservices. We’re evaluating between Istio and linkerd”**  
Trying the best way possible to manage Service proliferation

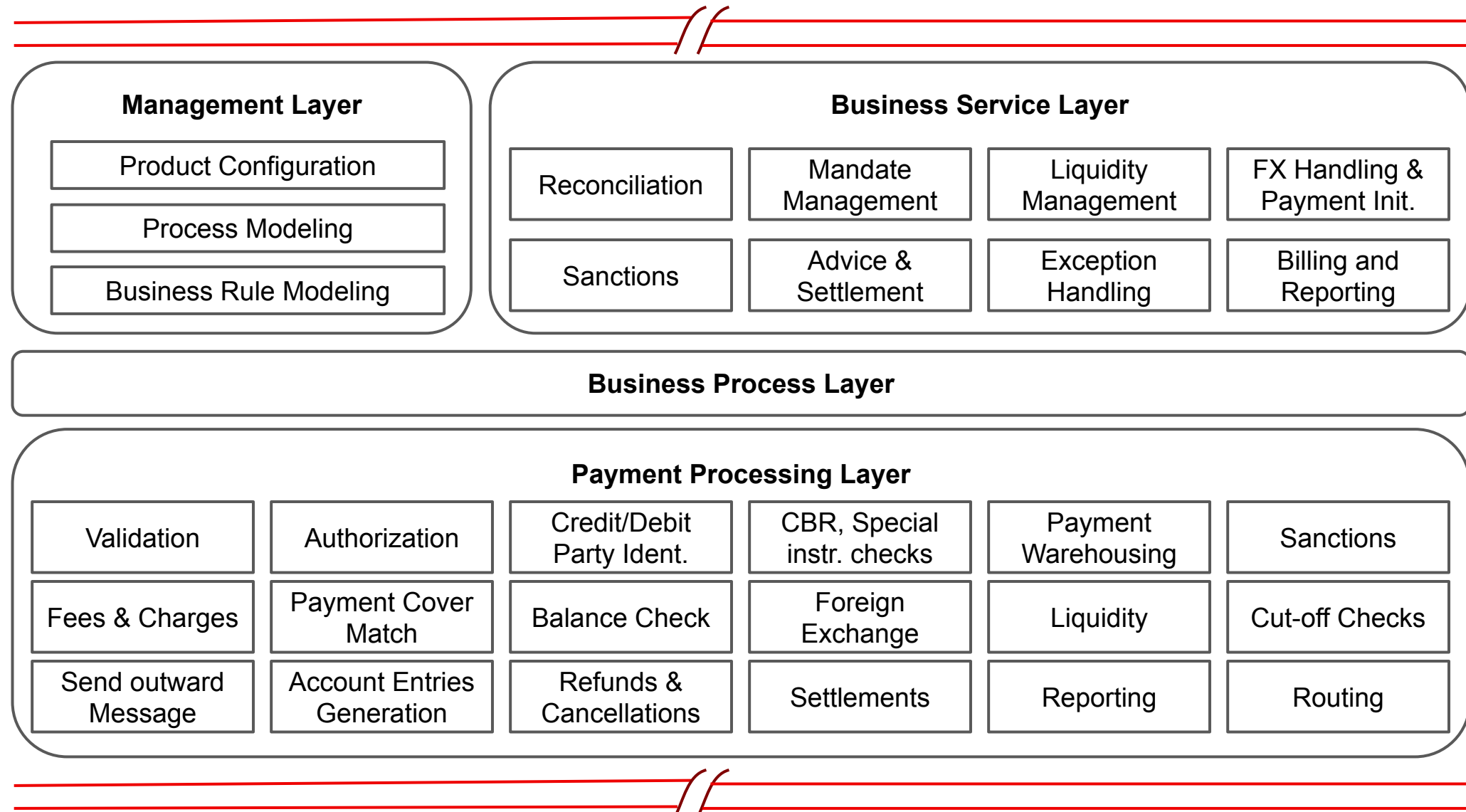
**“Containerization - Yes. Microservices - Not yet”**  
We’ve piloted using OpenShift, Mesosphere, Tectonic, PCF and others. We will decide soon.

**“Microservices - Yes. Containerization - Not yet”**  
“We’re fairly mature with our Microservices implementation; but it’s all on VMs”

# Payment Engines - Can the 'Distributed Monolith' be transitioned to Microservices?



# Why Business Process Services?

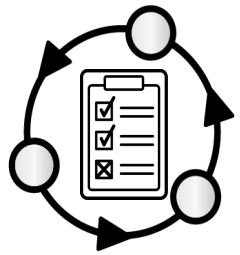




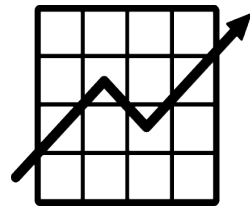
# “How” as Business Process [Micro]services?

## Red Hat Process Automation Manager

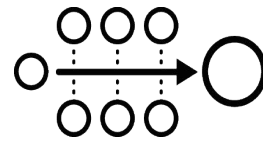
### Decision Manager



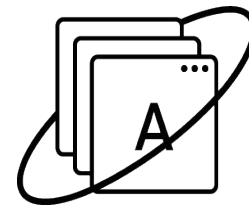
Decision  
Management



Business Optimizer



Process  
Management



Application Management



Entando Application  
Builder

### DevOps Ready

Business Process SDLC has now matured to be pluggable in highly mature DevOps CI/CD Pipelines

### Containerized Ecosystem

Business Process Services can be deployed as containers, allowing you to reap the benefits of Containerization

### Elastic Scalability

With containerization also come the benefits of Elastic scalability - powered by the Red Hat OpenShift PaaS/CaaS

# Thank you

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# Red Hat Process Automation Manager

RED HAT  
PROCESS AUTOMATION  
MANAGER

BUSINESS CENTRAL  
*Authoring and Management*

Data Modeling

Rules Authoring

Process Modeling

DMN Authoring\*

Business Asset  
Management

Pages

Administration

Process and Task  
Management

Decision Tables

Managing Decision  
Servers

Server Provisioning

Reports

PROCESS SERVER  
*Runtime Execution*

Process Execution

jBPM

Business Rules  
Execution

Drools

DMN Execution

FEEL

Full Compliance

Planning Problem  
Solving

OptaPlanner

Realtime Planning

Case Management

Complex Event  
Processing (CEP)

PMML

Multithreading  
Strategies

SMART ROUTER

- aggregator
- load balancer
- hides complexity

CONTROLLER

- manages server configurations
- maintains deployment units

ENTANDO APP  
BUILDER

- builds end-user applications
- provides process and case widgets

TEMPLATES

- Employee roster
- Sample Case Mgmt App

DEPLOYMENT OPTIONS

Embedded

Java / JavaEE

Spring

Deployed on an  
Application Server

ON PREMISE  
OR CLOUD

public  
hybrid  
private

OpenShift

Azure

AWS

 **Red Hat**  
Process Automation  
Manager

\* provided by our partner, Trisotech

 **Red Hat**