2018 Extent Conference

Post Trade Testing Complexity: By Design or by Choice?

20-06-2018
David Santais

Atos

1
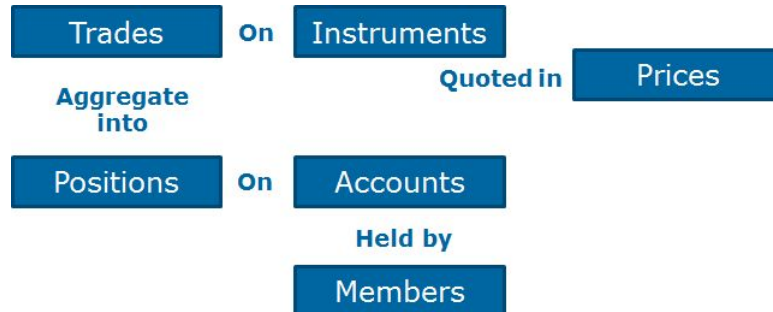
Post Trade Testing...
... Complex?

Post Trade Testing... Complex?
Business domain challenges

Why Post Trade Testing is complex...

▸ Plenty of **upstream and downstream** feeds in various **formats**

▸ **Many business objects** each one of them having its **own lifecycle**...

▸ spanning **different timeline** and **related to one another**

▸ ... All of them dependent on **the asset classes**

Trades	On	Instruments

Aggregate into

Quoted in → Prices

Positions	On	Accounts

Held by

Members

Post Trade Testing... Complex?
Testing scope

How to best test it?

▶ You cannot escape the whole set of tests: Unit Test, Component Test, Integration Test, etc.

▶ These tests can **validate a specific change or user story**.

▶ ...They can hardly ensure **regression testing** due to the specific nature of Post trade business domain.

▶ I don't know any post trade business that will sign off a change unless you run a full End to End (E2E) regression test.

▶ **E2E is the ultimate gatekeeper**...

▶ ... and the **most daring challenge**!

2

Complex...
By Design or by Choice?

By Design or by Choice?
System design choices have impacts…

Learnt the hard way…

▶ EDA oriented complex post-trade infrastructures with high number of components are efficient but come at a high price in term of testing

▶ Implementing a E2E framework after development is no easy task

Better think about it at design phase…

▶ After all **test automation is development**!

– Why not make it part of the core requirements?

– How can we include testing features?

– How can we help implementing "native E2E testing"?

3

The way forward…
… Designing for testing

Designing for testing
In a DevOps world, speed is the key

DevOps

▶ Let's face it: it is quite unfair to have remove QA from the picture…

▶ It is one of the core enabler of any DevOps approach

DevOps for Post Trade

▶ While is fairly easy to implement other types of tests (e.g. Unit or component level), E2E has its own challenges in post trade.

▶ **E2E being the ultimate gatekeeper**, it is **the main hurdle for a full speed DevOps approach**

▶ It can be balanced by investments made at the design and implementation phase of a post trade system.

▶ It should pay off in business agility… at a cost

Designing for testing
Design is a trade off
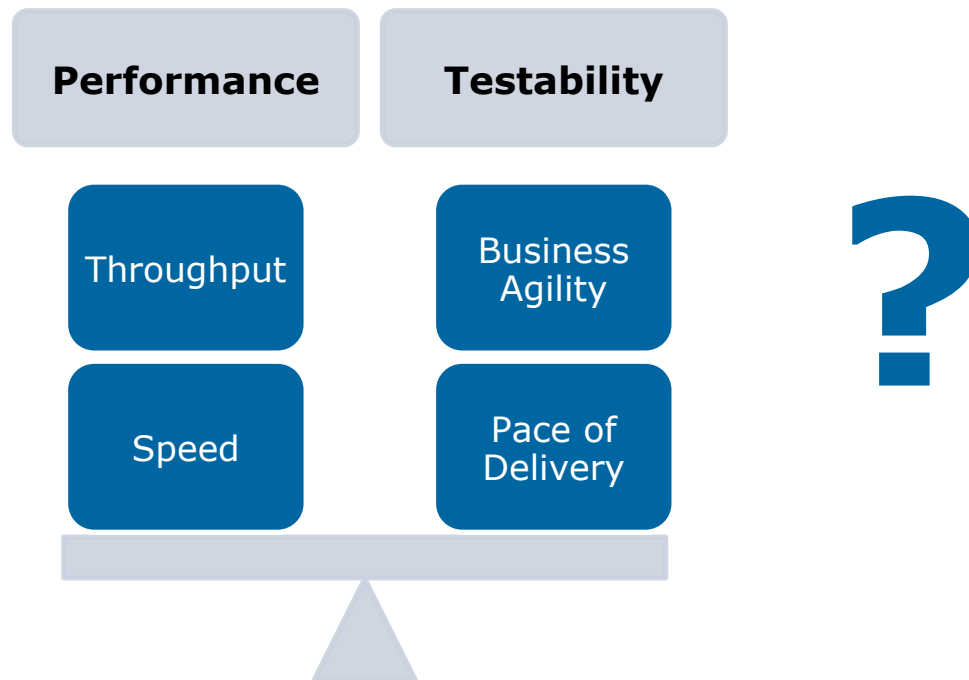
Learning is not compulsory…

… Neither is survival.

Thanks

For more information please contact:

David Santais

david.santais@atos.net

Atos

Atos S.E.
Website

About Atos

Atos is a global leader in digital transformation with approximately 100,000 employees in 73 countries and annual revenue of around € 13 billion. European number one in Big Data, Cybersecurity, High Performance Computing and Digital Workplace, the Group provides Cloud services, Infrastructure & Data Management, Business & Platform solutions, as well as transactional services through Worldline, the European leader in the payment industry. With its cutting-edge technologies, digital expertise and industry knowledge, Atos supports the digital transformation of its clients across various business sectors: Defense, Financial Services, Health, Manufacturing, Media, Energy & Utilities, Public sector, Retail, Telecommunications and Transportation. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and operates under the brands Atos, Atos Consulting, Atos Worldgrid, Bull, Canopy, Unify and Worldline. Atos SE (Societas Europaea) is listed on the CAC40 Paris stock index.

End of document

Atos