


# Testing LIXI 2.0 End-to-End

**Innovation  
Agility  
Speed**



*Dare to deliver better...*

Presenter:	Ian Charlton
Venue:	2015 LIXI Forum Sydney
Date:	26 November 2015
Version:	v1-0

*PinnacleQM proudly working with* The logo for pnbank, with "pn" in red and "bank" in grey.





## Agenda:

- 1) LIXI Proof of Concept
- 2) End-to-End Testing
- 3) LixSim Services
- 4) How Does It Work?
- 5) Setting the Scene
  - a) *Simpology - LIXI*
  - b) *LIXI*
  - c) *LIXI - LendFast*
- 6) Key Takeaways
- 7) In Summary





# LIXI 2.0 Proof of Concept

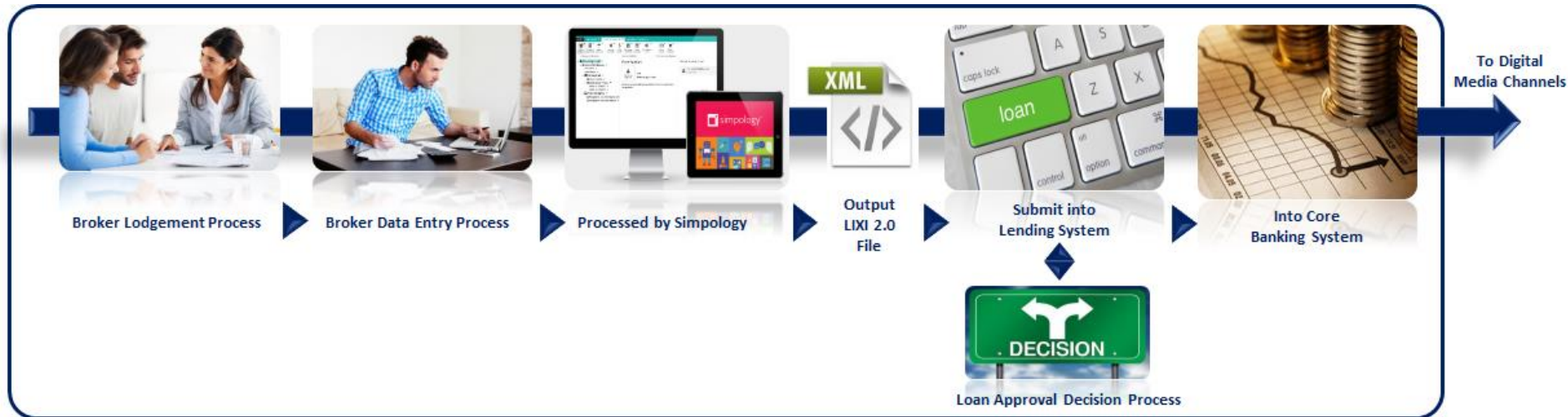


## Background

- P&N Bank is already testing Lending and Core Banking automatically with a roadmap to include digital media channels

## Objective

- P&N Bank asked for a proof of concept to extend the automation platform to test LIXI 2.0 transactions end-to-end



## Completion

- The Proof of Concept is complete and this presentation is intended to show you the actuals results of Broker Lodgement to Loan Origination





# End-to-End Testing



- ✓ Verifies the complete business process
- ✓ Mitigate production risks
- ✓ Detects upstream/downstream issues
- ✓ Executes multiple System Tests and Integration Tests concurrently
- ✓ Enables User Certification Models to shorten UAT cycles and lessen impact on Users
- ✓ Ideal for regression testing, technical upgrades, security testing and performance baselines
- ✓ Perceived to be difficult to set-up and maintain
- ✓ Typically not automated end-to-end
- ✓ Challenges to align environments and data





## Automated Validation of LIXI 2.0 Files



### Innovation

- ▶ Automated Validation Processing of LIXI 2.0 Files
- ▶ Real-Time Status Reporting of errors

### Agility

- ▶ Service Subscription tailored by LIXI Membership
- ▶ Validation Rules are Customisable

### Speed

- ▶ Dynamically Accept, Reject & Return LIXI 2.0 Files
- ▶ On-Demand, Scalable Processing





## End-to-End Testing



### Innovation

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## LIXI 2.0 Compliance

## Migration & Verification

### Innovation

- ▶ Auto Validation for Digital Guidebook Changes
- ▶ Test Packs for Lending and 'What-If' Scenarios

### Agility

- ▶ Support for Multiple Mobile Devices & Browsers
- ▶ Defined Test Pack Sizes tailored by LIXI Categories

### Speed

- ▶ Performance and Throughout 'Baselines'
- ▶ Tools Included to Run End-to-End Pack in 1 Day

### Innovation & Speed

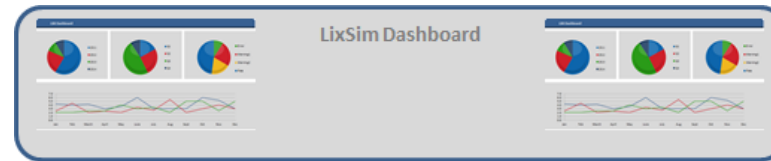
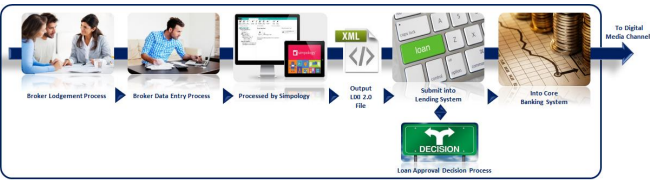
- ▶ Automatically validate files are LIXI 2.0 compliant
- ▶ Automatically verify LIXI 2.0 field data is valid

### Innovation & Agility

- ▶ Automated Regression for Any Initiating System  
– Any LIXI Message Version – Any Lending System



# How Does it Work?



- Warnings
- Errors

Secure Folder Location

LIXI 2 xml files

```
<?xml version='1.0' encoding='UTF-8'>
<Lixi2 xmlns="http://www.pinnacleqm.com/Lixi2" >
  <Header>
    <Version>1.0</Version>
    <FileNumber>123456789</FileNumber>
    <FileDate>20231027</FileDate>
    <FileTime>10:10:10</FileTime>
    <FileUser>PinnacleQM</FileUser>
  </Header>
  <Data>
    <Lixi2Data>
      <Lixi2DataItem>
        <Lixi2DataItemKey>LIXI2DataItemKey</Lixi2DataItemKey>
        <Lixi2DataItemValue>LIXI2DataItemValue</Lixi2DataItemValue>
      </Lixi2DataItem>
    </Lixi2Data>
  </Data>
</Lixi2>
```

Validation Rules

LIXI 2.0  
Tech Component  
PinnacleQM  
Core Engine

LendFast  
Test Script

Service Platform / Test Environment

LendFast



Simpology



Production Environment

LIXI 2 xml files

```
<?xml version='1.0' encoding='UTF-8'>
<Lixi2 xmlns="http://www.pinnacleqm.com/Lixi2" >
  <Header>
    <Version>1.0</Version>
    <FileNumber>123456789</FileNumber>
    <FileDate>20231027</FileDate>
    <FileTime>10:10:10</FileTime>
    <FileUser>PinnacleQM</FileUser>
  </Header>
  <Data>
    <Lixi2Data>
      <Lixi2DataItem>
        <Lixi2DataItemKey>LIXI2DataItemKey</Lixi2DataItemKey>
        <Lixi2DataItemValue>LIXI2DataItemValue</Lixi2DataItemValue>
      </Lixi2DataItem>
    </Lixi2Data>
  </Data>
</Lixi2>
```

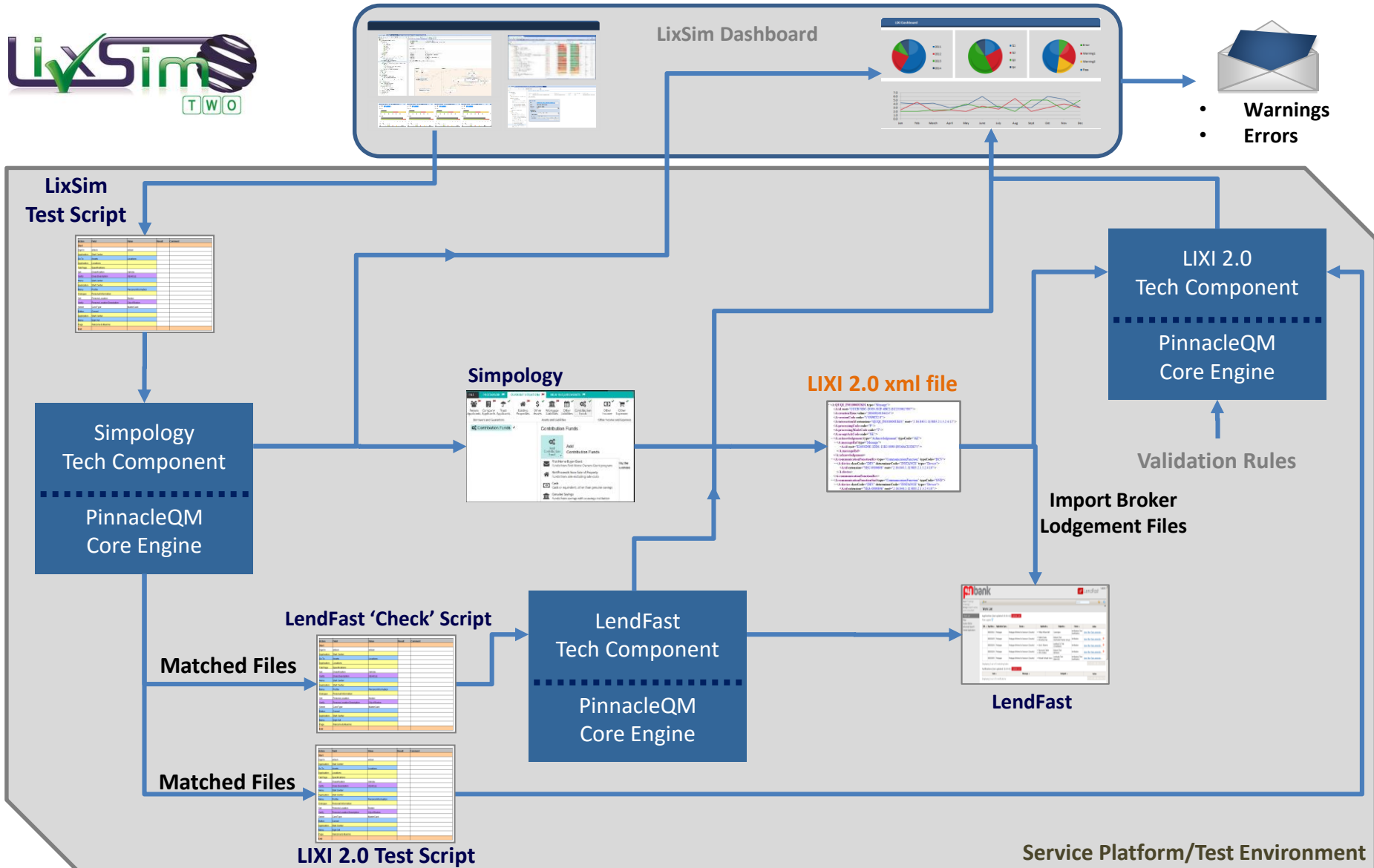
Import Broker Lodgement Files

LendFast





# How Does It Work?



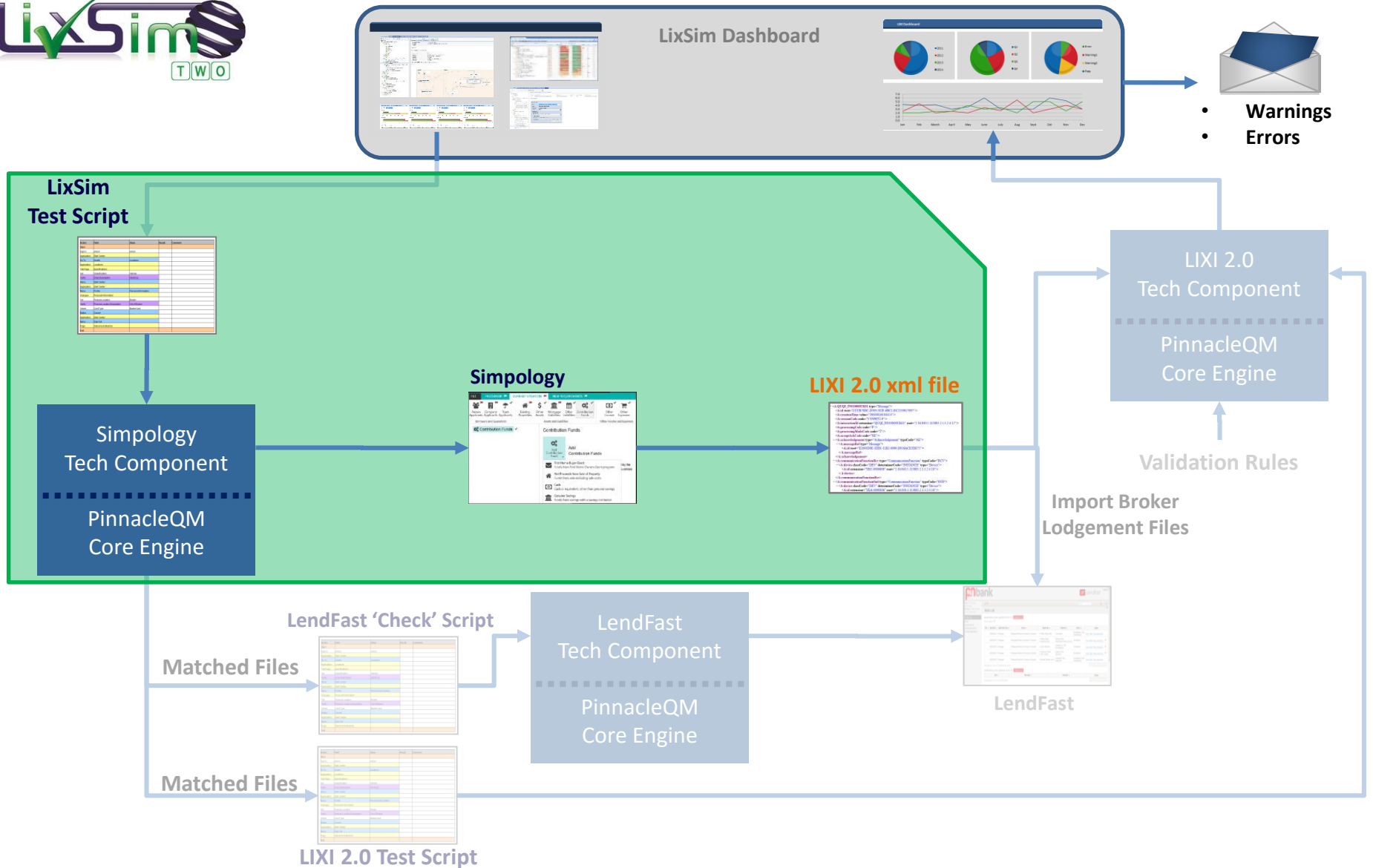


# Setting the Scene...the Videos



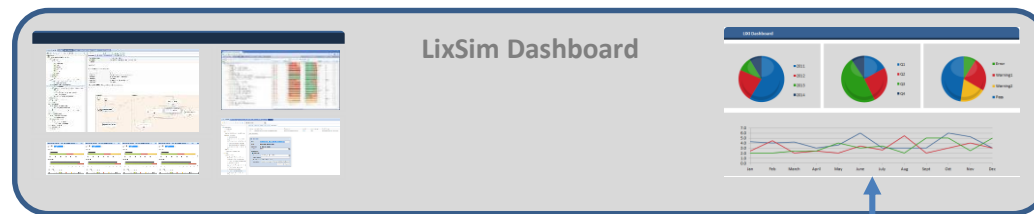


# Video 1 – Create LIXI File





# Video 2 – Validate LIXI File



- Warnings
- Errors

LixSim  
Test Script

File	Size	Time
1	100	100
2	100	100
3	100	100
4	100	100
5	100	100
6	100	100
7	100	100
8	100	100
9	100	100
10	100	100

Simpology  
Tech Component  
-----  
PinnacleQM  
Core Engine

Simpology



LIXI 2.0 xml file



LIXI 2.0  
Tech Component  
-----  
PinnacleQM  
Core Engine

Validation Rules

Import Broker  
Lodgement Files

Matched Files

LendFast 'Check' Script

File	Size	Time
1	100	100
2	100	100
3	100	100
4	100	100
5	100	100
6	100	100
7	100	100
8	100	100
9	100	100
10	100	100

LendFast  
Tech Component  
-----  
PinnacleQM  
Core Engine



LendFast

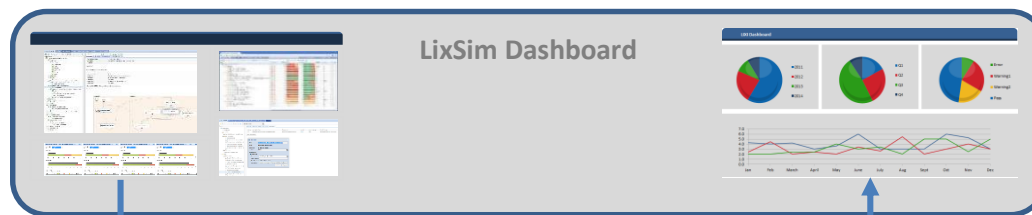
Matched Files

File	Size	Time
1	100	100
2	100	100
3	100	100
4	100	100
5	100	100
6	100	100
7	100	100
8	100	100
9	100	100
10	100	100

LIXI 2.0 Test Script



# Video 3 – Verify LIXI in LendFast



- Warnings
- Errors

LixSim  
Test Script

Simpology  
Tech Component  
-----  
PinnacleQM  
Core Engine

Simpology



LIXI 2.0 xml file



Import Broker  
Lodgement Files

Validation Rules

LIXI 2.0  
Tech Component  
-----  
PinnacleQM  
Core Engine

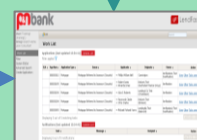
LendFast 'Check' Script

Matched Files

Matched Files

LIXI 2.0 Test Script

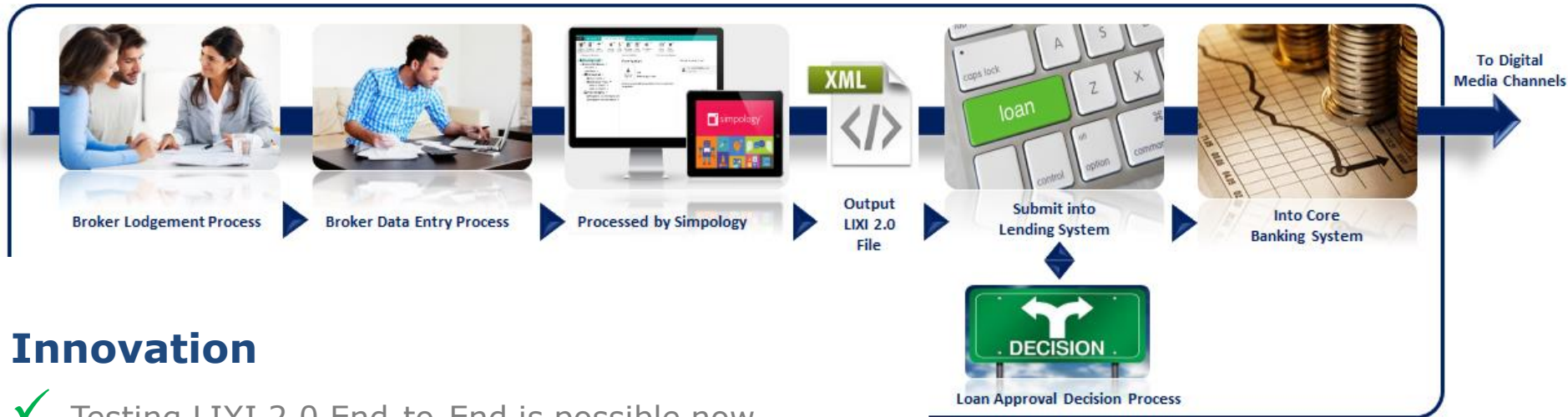
LendFast  
Tech Component  
-----  
PinnacleQM  
Core Engine



LendFast



# Key Takeaways



## Innovation

- ✓ Testing LIXI 2.0 End-to-End is possible now
- ✓ Automatically generate test scripts from LIXI 2.0 files

## Agility

- ✓ Absolute known quality across the business process
- ✓ Test the entire process, or part of it, automatically

## Speed

- ✓ 16 man-weeks of regression testing in under 4 hrs
- ✓ Proven scalable platform

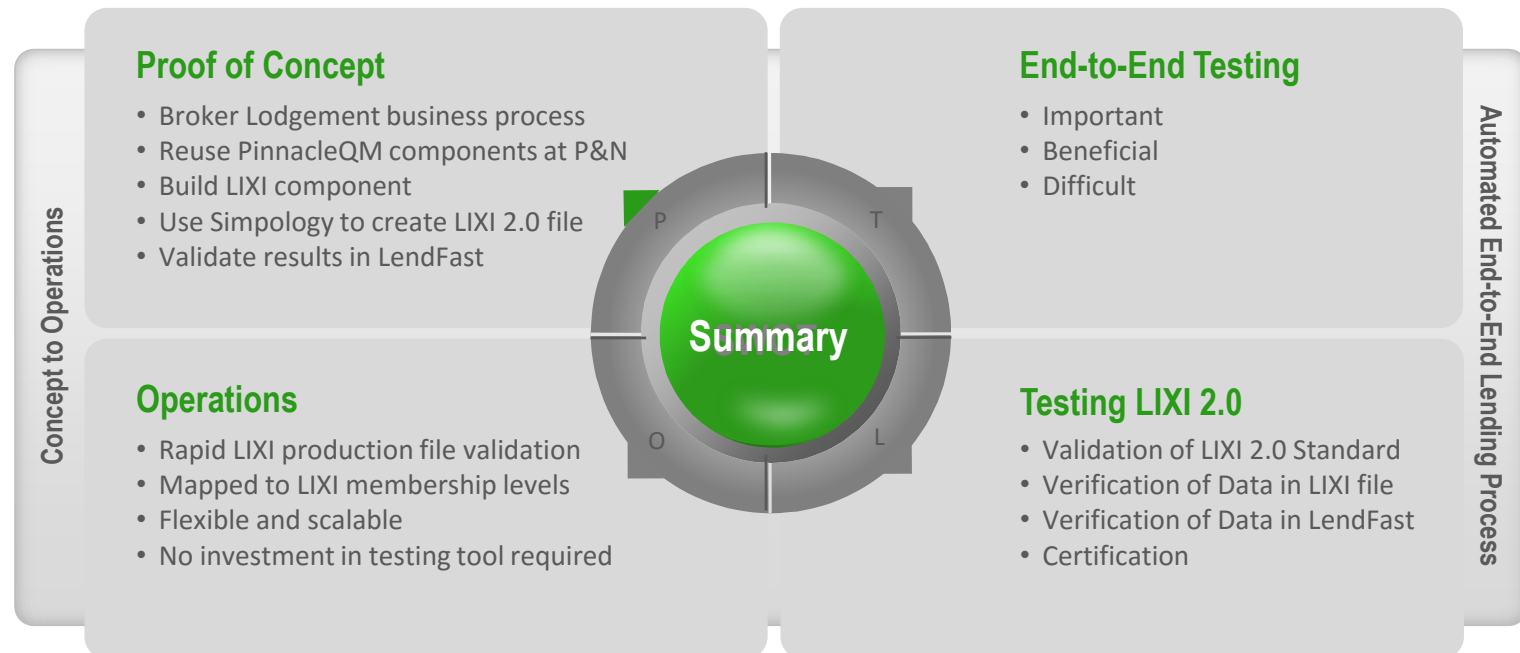
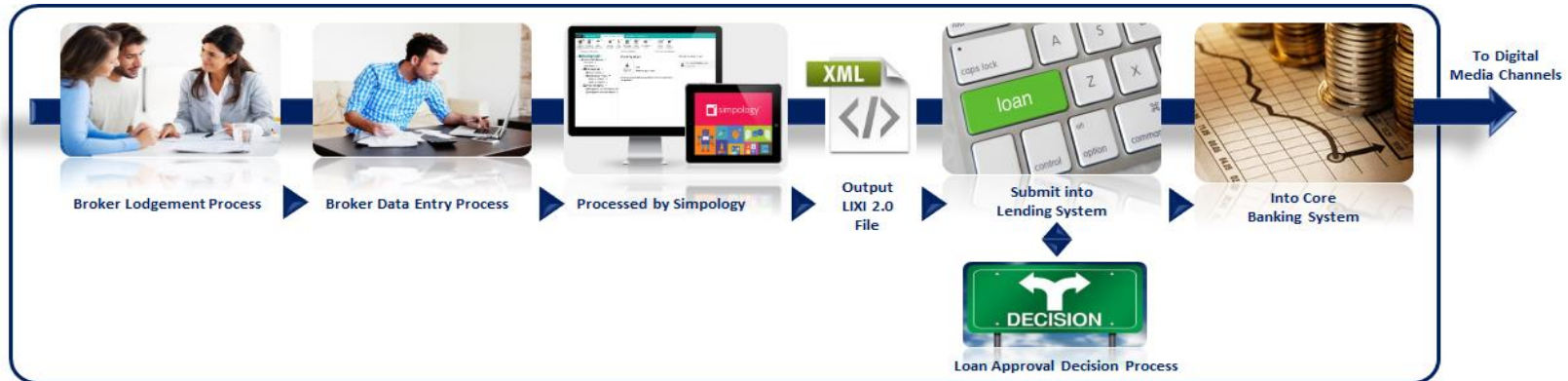
Any Broker System

Any LIXI 2.0 Transaction

Any Lending System



# In Summary





# Questions



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