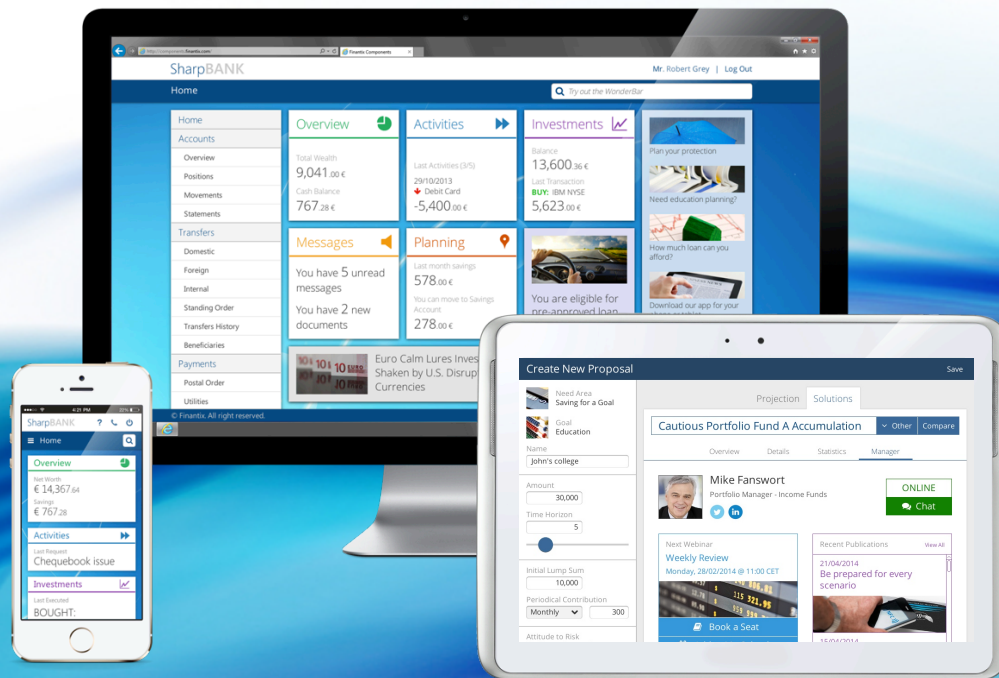


# Finantix

*Empowering digital financial services*

## Enabling Manulife Competence Centre for a new delivery model approach

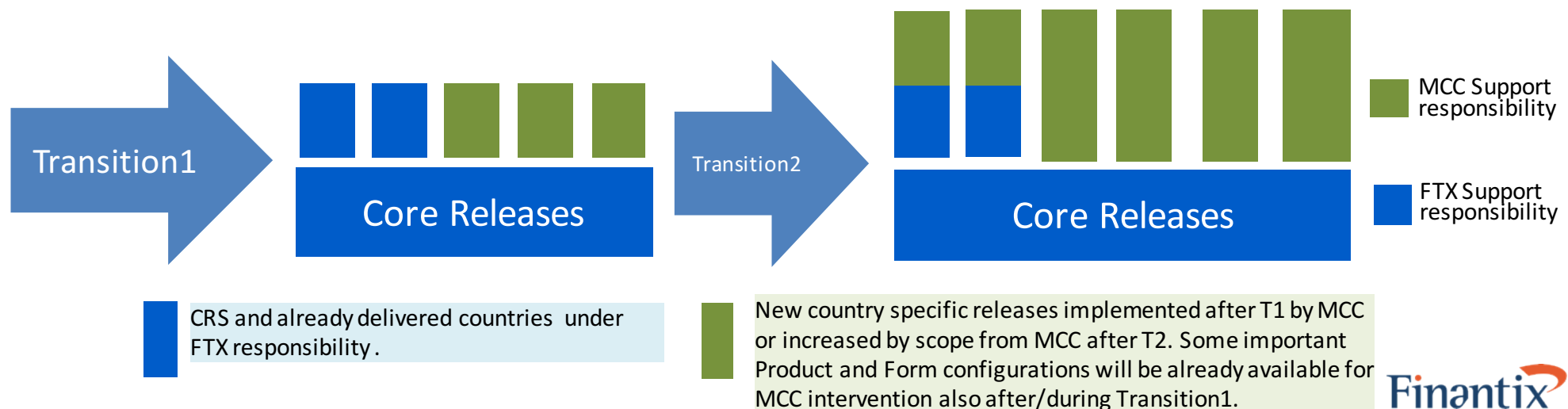


## Approach overview

Finantix will work on a transition activity (2 phases) during which will consolidate all work done into a Core Release(s) (CRS) in order:

- to guarantee a stable CRS version before activating MCC: mainly cleansing/reviewing/updating the API/SDK made available with such CRS after the customizations implemented for ML, inject applicable Finantix products upgrades, finalize
- document how to use Finantix toolkit with the Manulife CRS in order to extend and/or reuse full or part of such Core Releases in new Manulife streams and projects
- define the procedure, rules, approaches for coordinating future development, customizations, extensions that will be made by the parties to a specific country implementation and into each build
- train MCC resources on all different layers of the Core Releases, on the Toolkit/API approach and on any other tool that MCC will be use for their tasks

Finantix after such 1st transition period will continue to maintain as part of the contract SLA such Core Releases and the countries/stream already delivered with such CRS and facilitate the 2<sup>nd</sup> transition so that also or in case there is a need to extend a Core Releases already delivered in a specific country by Finantix the MCC will be enabled to extend also such preexisting countries



## Responsibility by layer before and after the transitions

Solution Dimension	Description and Examples	Current Resp.bility	Future Resp.bility	Enabling Technology / Required License
Build Procedures	<ul style="list-style-type: none"> <li>Build Procedure</li> </ul>	Finantix	MCC	Toolkit license After Transition1/2
Design, Configurations	<ul style="list-style-type: none"> <li>Apply: new form design and configuration (for already delivered and new countries)</li> <li>Quote: Product Parameters &amp; Configuration (once delivered in the next CRS for ePOS, not for DBS)</li> </ul>	Finantix	MCC	<ul style="list-style-type: none"> <li>Digital Form Designer Q42016</li> <li>Product Quotation Engine with Manulife extensions**</li> <li>Output Assembler (2017)</li> </ul>
Manulife Extensions, Customizations and Integrations <b>(after Transition1/2)</b>	<ul style="list-style-type: none"> <li>User experience customizations or extensions</li> <li>New Business Logic</li> <li>Development like the already delivered Union Pay integration (HK) and Alpha Search (JP)</li> </ul>	NA	MCC	Toolkit/API/SDK license <b>After Transition1/2</b>
Finantix CRS customizations <b>(after Transition1/2)</b>	Future customizations to the reference CRS for that cannot be executed by MCC (for complexity or criticality reason or because a modification of the original component is necessary e.g. data model)	NA	Finantix	
Finantix Core Releases	Finantix Components plus extensions/customizations/developments implemented (reference version will be either PH or SG)	Finantix	Finantix	
Finantix Components	<ul style="list-style-type: none"> <li>Financial Needs Analysis</li> <li>Life Insurance Application Template</li> <li>Position: Insurance Contracts &amp; Policies</li> </ul>	Finantix	Finantix	
Finantix Foundation platform	<ul style="list-style-type: none"> <li>Platform Server</li> <li>Replica Engine</li> </ul>	Finantix	Finantix	

(\*\*) Already licensed (See contractual documentation "Schedule A Appendix C" document for licensed component list)

## Manulife Solutions: dimensions and responsibility – AS IS

---

ePOS HK

ePOS JP

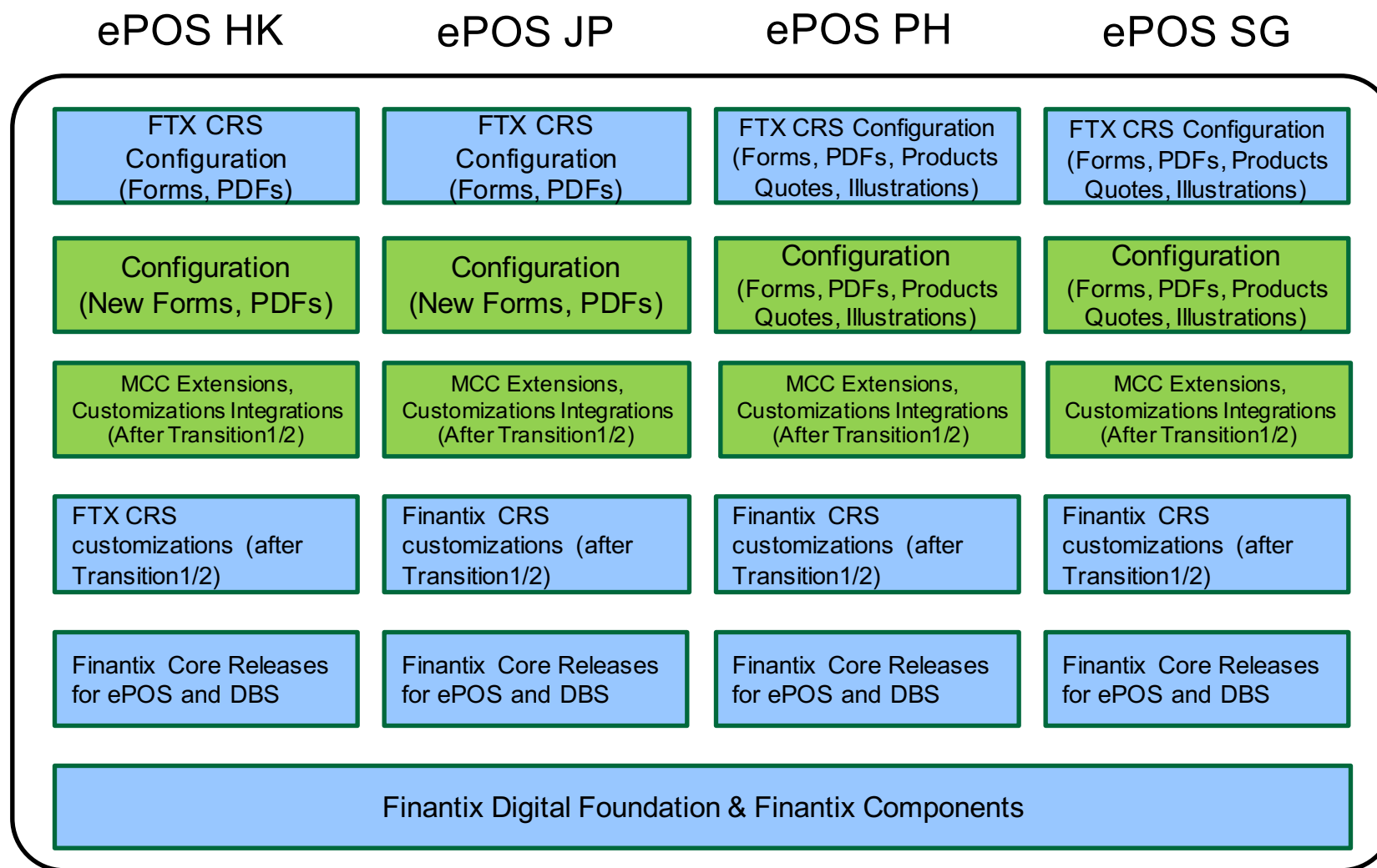
Configuration  
(Forms, PDFs)

Configuration  
(Forms, PDFs)

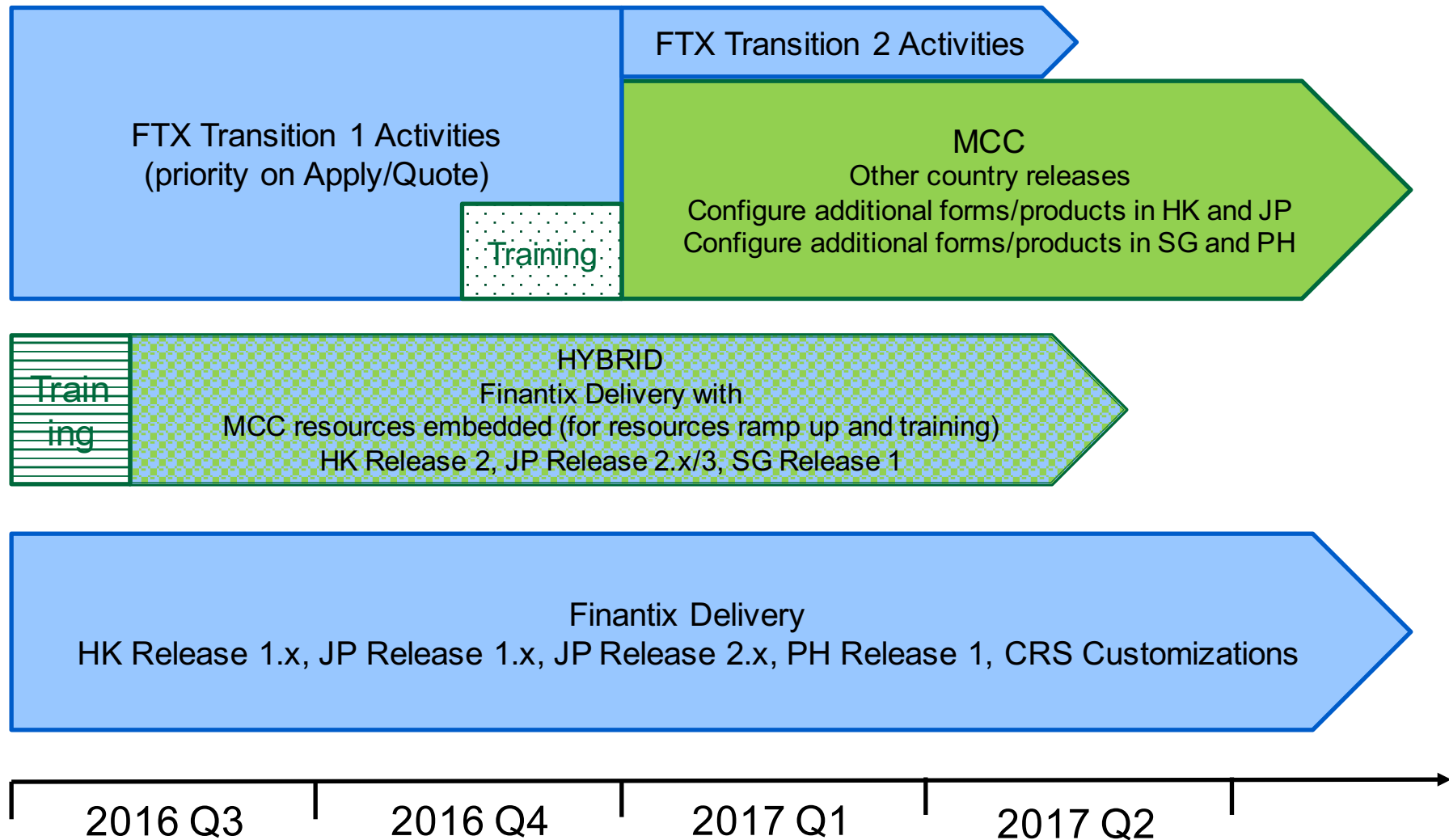
Customizations made for ePOS and DBS by Finantix

Finantix Digital Foundation & Finantix Components

## Dimensions and responsibility: before and after transitions

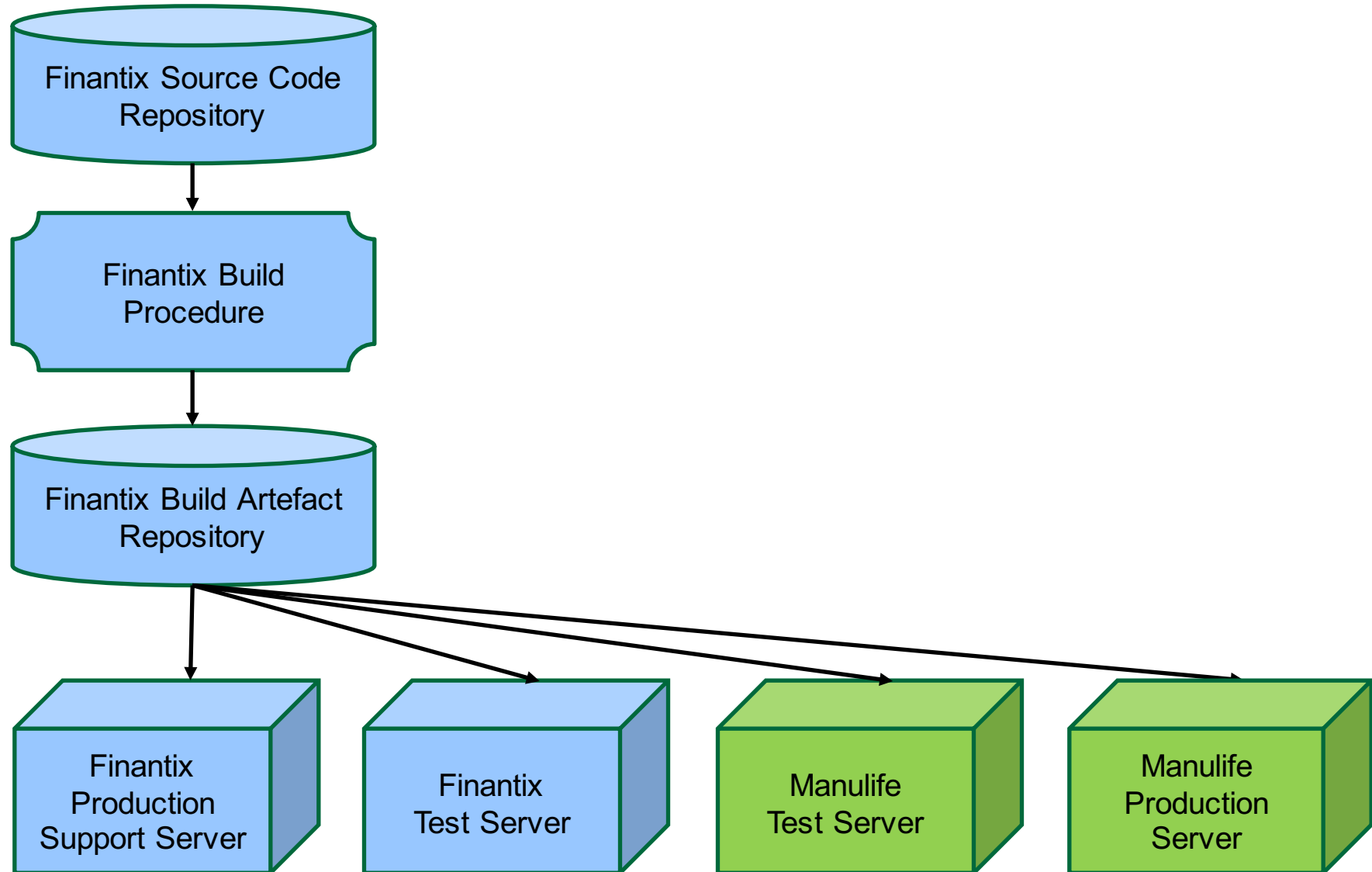


# Enabling MCC – Suggested Timeline

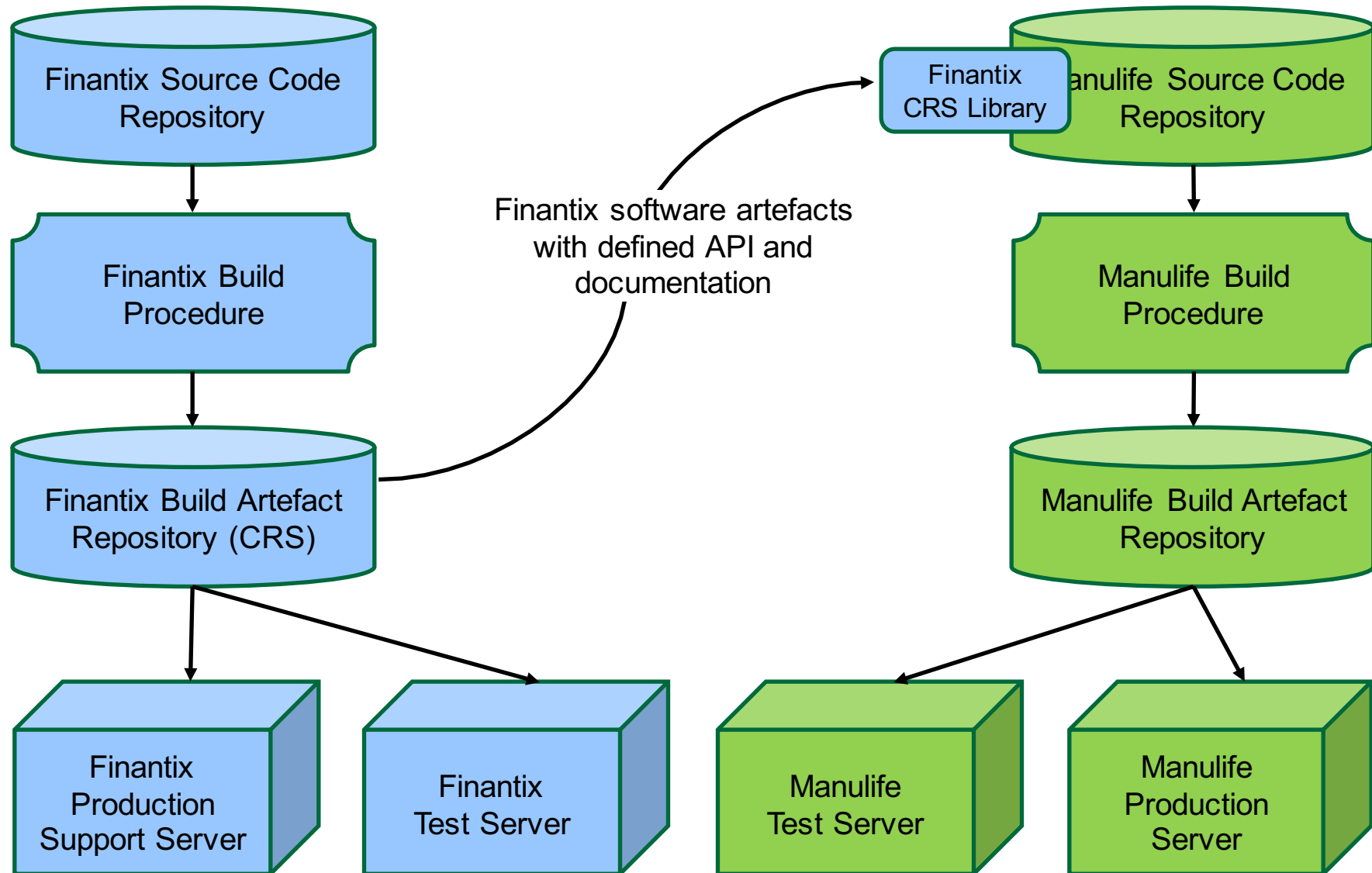


# Manulife Solutions: From Product to Solution – AS-IS

---



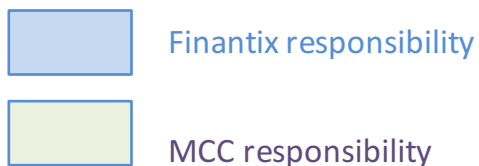
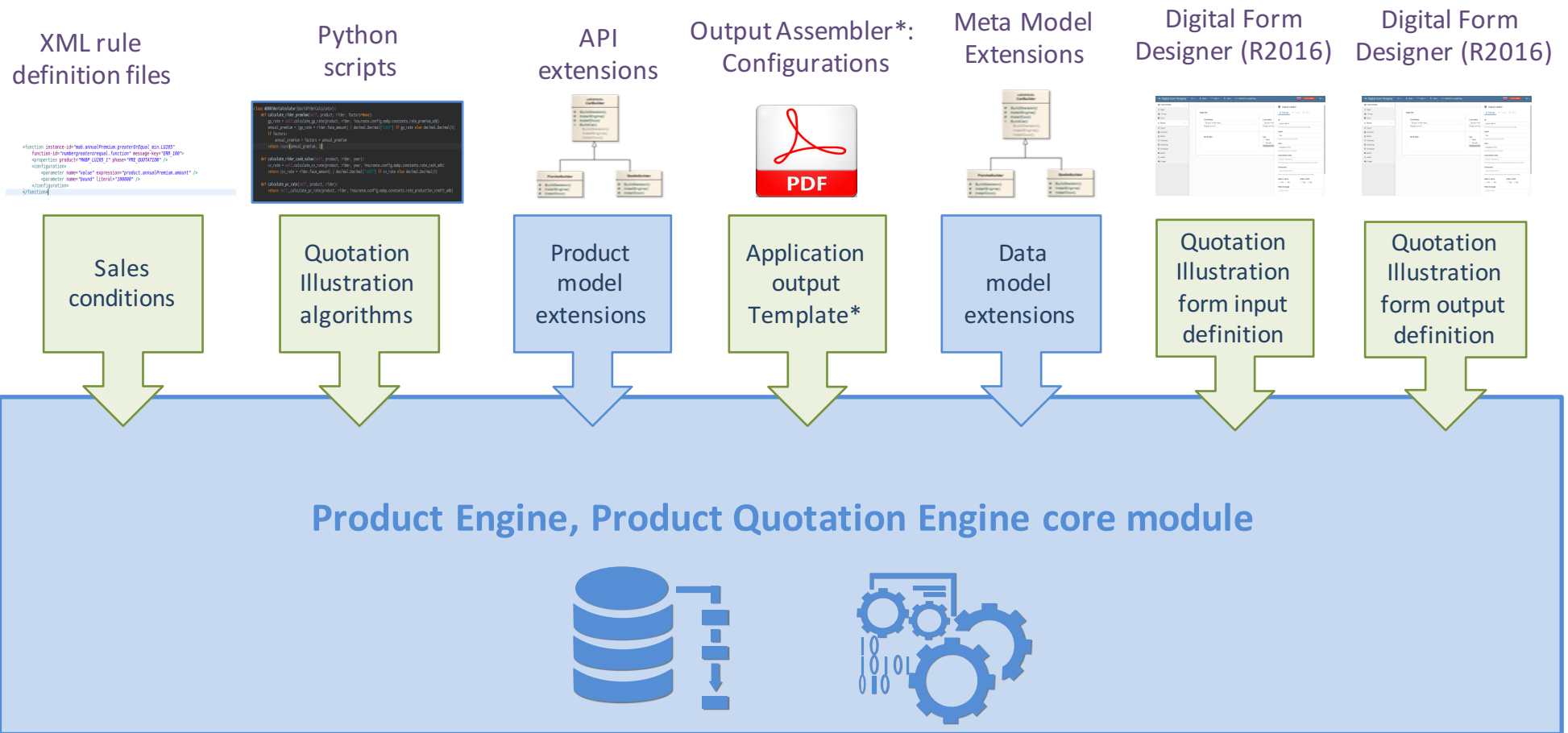
## Manulife Solutions: From Product to Solution – After transition 1/2





## Key Finantix Components for the new delivery model

# Product and Quotation Engine: an extensible architecture



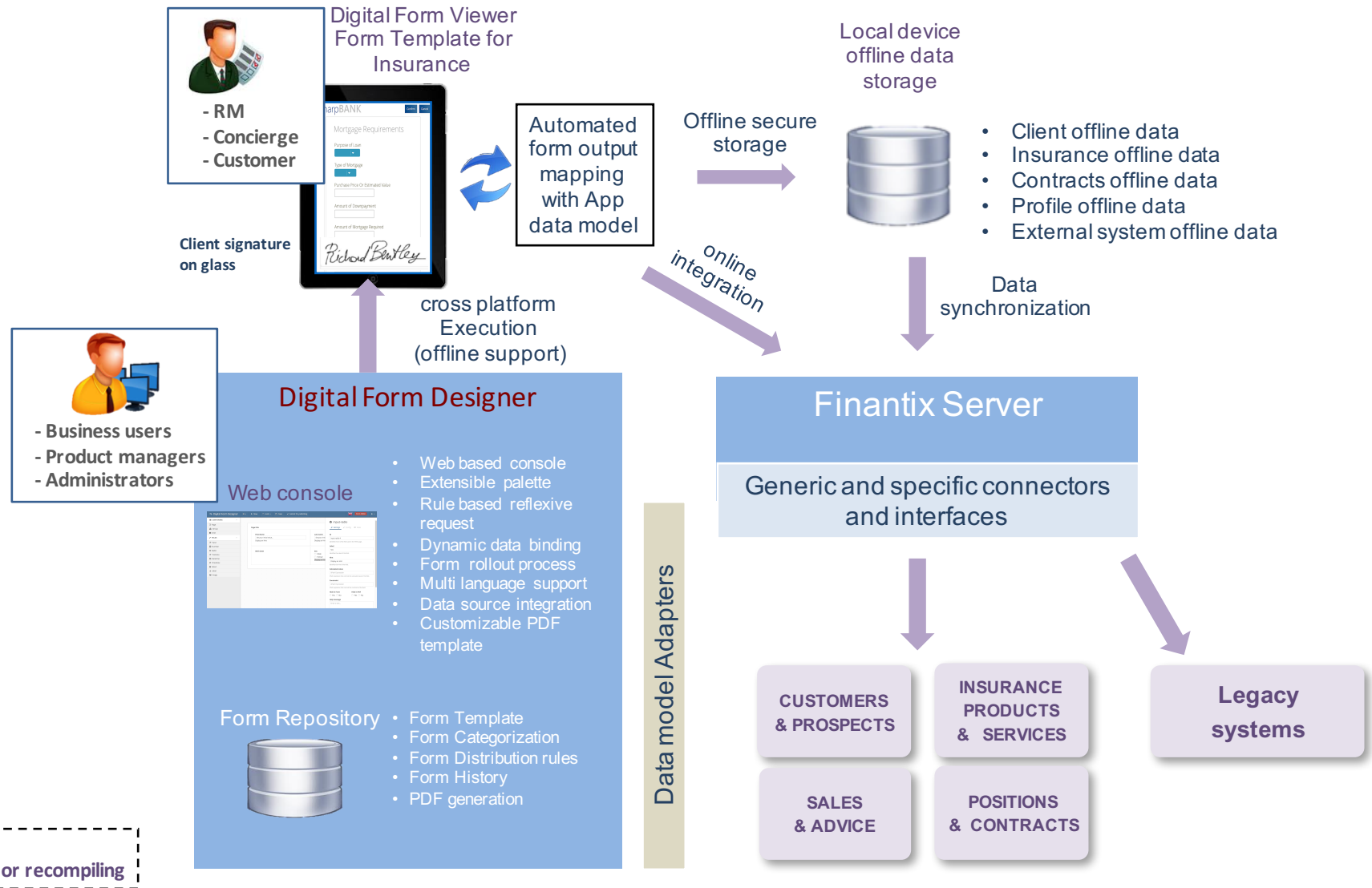
\*Requires Output Assembler module part of 2017 Finantix Components roadmap

## Product Engine and Quotation Engine: activities ownership examples

Ownership	Description
Finantix	<ul style="list-style-type: none"><li>• Product Engine core data model</li><li>• Product Engine product categories</li><li>• Product Engine technical extensible infrastructure support</li></ul>
Manulife Competence Center	<ul style="list-style-type: none"><li>• Business Rules definition</li><li>• Quotation algorithm</li><li>• Illustration algorithm</li><li>• Decision tables and rates data loading</li><li>• Input/output data definition</li><li>• Output PDF upload</li></ul>

Note: SG or Philippines will be the first country to activate the Finantix Product Quotation Engine. From such first activation also **already delivered** countries like Japan and HK will be able to use the PQE for the Quote area and potentially be managed by the MCC

# Digital Form Suite : architectural view



# Digital Form Designer: activities ownership examples

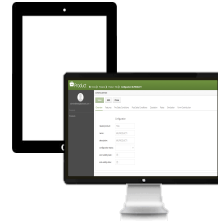
Ownership	Description
Finantix	<ul style="list-style-type: none"><li>• Digital Form Designer extensible Web tool</li><li>• Widget libraries</li><li>• Connectors</li><li>• Business entity data binding</li></ul>
Manulife Competence Center	<ul style="list-style-type: none"><li>• Form definition</li><li>• Pages</li><li>• Fields data binding</li><li>• Reflexive rules</li><li>• Field validations</li><li>• Theme customization</li></ul>

Note: SG or Philippines will be the first countries to activate the Digital Form Suite Architecture R2016 fully API enabled ( a product upgrade from current release in use). Also countries like Japan and HK will be able to use R2016 version of the DFD for the design and configuration of additional forms required on top of the already delivered ones in the CRS.

# PDF Output Architecture: definition and generation flow overview

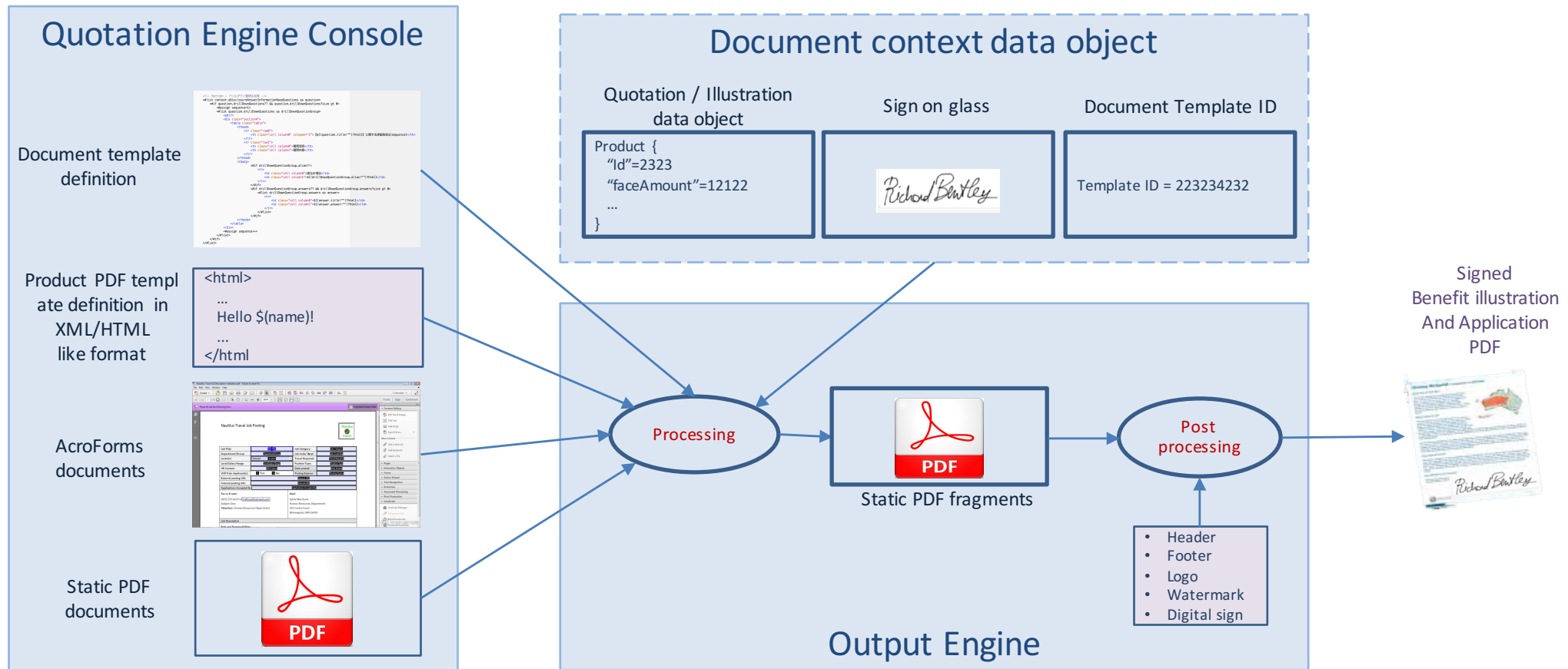
Support for different generation approaches:

- Dynamic PDF from HTML format file
- Static PDF as embedded PDF fragment
- PDF form filling (AcroForms)
- PDF form filling for static PDF



Web,  
Tablet  
(Offline support)

Quotation / Illustration / Apply Forms



# Output Assembler: activities ownership examples

Ownership	Description
Finantix	<ul style="list-style-type: none"><li>• Output Assembler extensible Web tool</li></ul>
Manulife Competence Center	<p><b>Document structure</b> Index, header, footer, logo, watermark, barcode, digital signature etc</p> <p><b>Document building blocks</b></p> <ul style="list-style-type: none"><li>• Static PDF parts</li><li>• Dynamic XML parts (freeMarker and BFO)</li><li>• AcroForms parts</li><li>• Pictures</li><li>• Fonts</li><li>• Etc.</li></ul>

Note: after Transition1/2 and until availability of the Output Assembler module PDFs output is and will be managed with the following responsibilities:

For already delivered countries:

- Finantix: maintain and configure PDF output for products already delivered (or planned) by Finantix
- MCC: design and configure PDF output for products not yet delivered by Finantix in HK and JP

For new countries

- Finantix: design and configure PDF output for initial products to be delivered by Finantix in new countries
- MCC: design and configure PDF output for products to be delivered by MCC in new countries

# Enabling MCC – Next Steps

---

- Agreement in Principle
  - Understand objectives of the delivery model change and agree basic principles
- Delivery Stream
  - Share current software architecture and delivery model
  - Formalise target software delivery model
  - Agree step-by-step plan to reach the target delivery model
- Contract Stream
  - Define contractual appendices for new delivery model
    - Licencing for Toolkit/APIs, for Digital Form Designer
    - Amend SLA and processes for support (CRS vs Manulife vs Hybrid)
    - Agree other contractual amendments based on new delivery model
- MCC Enablement Stream
  - Identify MCC knowledge / skills gap areas
  - Deploy MCC teams within Finantix teams (Hybrid)
  - Complete FTX transition activity and complete training of MCC teams when they reach sufficient maturity