IBM Software

UKInnovate2010

The Rational Software Conference





**Application Modernisation** 

**Delivering Agile Legacy** 

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# Agenda

- Introducing Legacy Lifecycle
  - Why do we have a problem?
  - What is our approach?
- Delivering agile legacy
  - Leveraging the Rational toolset



# Introducing Legacy Lifecycle







## Understanding the drivers – it just got a whole lot harder

#### **Client situation**

- Legacy constraining business
- Difficult to change due to complexity
- · Little or no appetite to invest
- Huge business dependency for BAU
- Skills shortage
- Cost to change
- Business risk of old technology
- Time to market, compromised
- Intellectual Property embedded
- Escalating IT costs vs. Business expectations of reduced costs
- Etc...

Same old stuff, nothing new...



## The Business won't tolerate it – cost cutting alone is no longer enough.

Coming out of recession, harder, faster and qu than the competition is a must. ...but the combination of this stuff is "new"



### Less on KTLO, more to Innovate to compete.

Technology innovation is now within the domain of the business – and they demand it now. It's IT's responsibility to engineer the headroom for change.



### Computer says "no", is no longer acceptable.

The appetite to stomach wholesale change or major investment is not an option, but neither is doing nothing. It's just supposed to happen.



For the CIO and IT Departments, "how long have you got to fix this, before someone does it to you?"

Gartner rank "Legacy Modernisation" No.4, after BI, Enterprise apps and server consolidation.

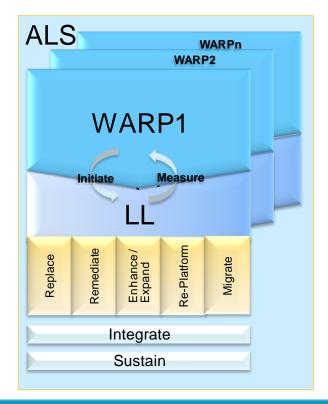
A Workable Application
Modernization Framework is Job
No. 1 Now

GARTNER PERSPECTIVE

IT Spending



# Introducing Legacy Lifecycle



The transformation of applications to a flexible and sustainable technology, driving business efficiency and reducing Total Cost of Ownership

#### LL is:

- ☐ Part of the Legacy lifecycle
- Evolutionary
- ☐ Minimal business disruption
- Drives innovation
- Controlled risk
- Maintainable and cost effective
- A Framework based on leading practice

#### LL is not:

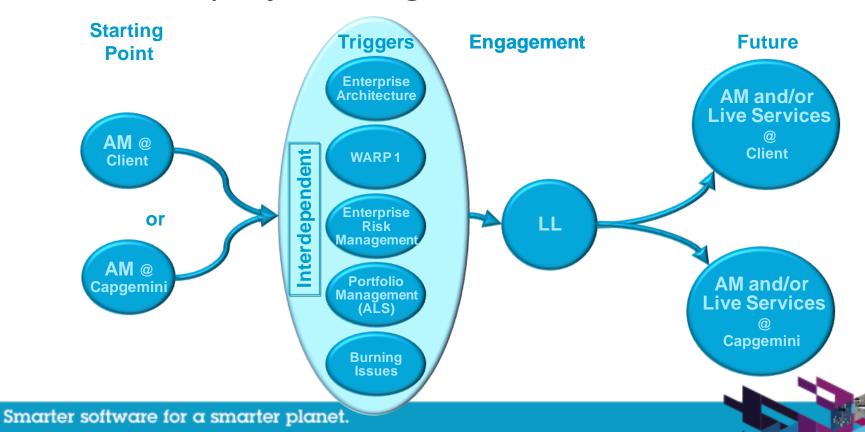
- Infrastructure consolidation
- A landscape transformation

Uses a set of moderniser methods and capabilities, based on those identified by Gartner, to retain, re-host or renew applications





## How do LL projects begin?







## Approach WARP1

### Wide Angled Rationalization Programme



AMBI – engine. Grinding through the application context, 27 areas of Productivity, Flexibility and Impact, as is and to be are benchmarked.



**CASE** - By quantifying value improvements using tailor-made techniques, we enable the program to visualize and quantify the value potential.



**PATH** - A bold, hypothesesdriven approach effectively narrows down on the choices and plots alternative rationalization scenarios.



**PLAN** – Here change dynamics are tackled and design results of the other streams synthesised into a pragmatic roadmap.



**BIZZ** - Changes scoped through specific hypotheses for processes and organizational change. Reference models provide a benchmark.



APPS – engine. Grinding through the application portfolio, factual insight into landscape metrics allow for intelligent decisions.

- **1. ACCELERATORS**: We don't start empty handed: we work from hypotheses and proven rationalization patterns, derived from 3by3 framework.
- 2. WIDE-ANGLE: We have a wide-angle approach we don't look at the applications only, but also at the context (ambiance) and the link with processes and data harmonisation
- **3. ENGINES**: We have two 'engines' that both help to develop the hypotheses and to substantiate or refute them.
- **4. COLLABORATIVE**: We warp the engagement to fit in 4-8 weeks and work in collaborative way with the client to get maximum support for the chosen rationalisation design, business case and roadmap

Targeted tools, and hypotheses – that provide robust business deliverables.

You get an informed business case and plan for change you can be confident in.





# The Legacy Lifecycle options ...

#### Sustain



"keeping the application fed and watered for the minimum effort and cost"

#### Consolidate



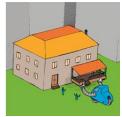
"reducing duplication, reducing overheads and driving efficiency by consolidation of processing"

#### Re-platform



"moving the application to a more modern hardware / operating system

#### Extend/Enhance



"improve integration and flexibility through service enablement"

#### **Decommission**



"retiring the application in a controlled manner, preserving essential data"

#### Migrate



"translate to a new language or re-use the code in a modern environment"

#### Remediate



"re-factoring the application to a better structure to improve integration & flexibility"

#### Replace

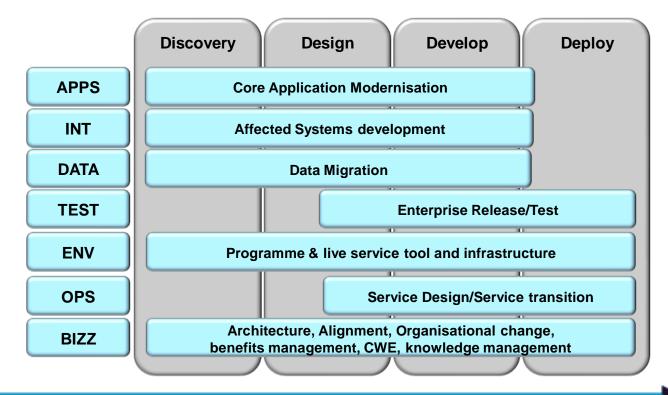


"mine the application for the essential rules and re-create in a modern language or package"





## Four phases, seven streams of activity ...







## The phases in context ...

# Discovery

The Discovery phase is focussed on the investigation of the existing system and visioning of the target system. Evaluation of the hypothesis used for the modernisation against a number of aspects and platform is made.

# Design

The Design phase concentrates on the definition and specification of the target system, platform and data. It specifies the migration tools and how they will be used and my incorporate a proof of concept to validate and demonstrate the modernisation approach.

# Develop

The Develop phase builds and configures the tools for modernisation, develops modifications to other impacted systems and sets up the environments for testing. Dry runs of the modernisation and migration are done and tested in preparation for the deployment.

# Deploy

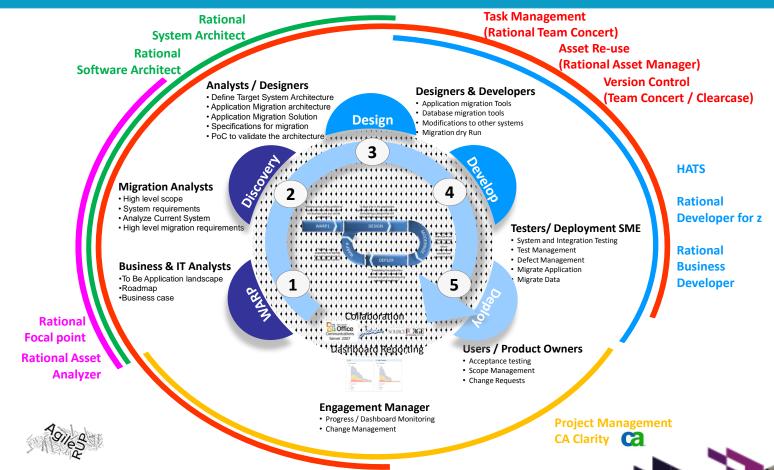
The deployment phase test and deploys the modernisation and migration of all components, hardware, software and data. The migrated system is acceptance tested before hand over to the client

**Delivering Agile Legacy** 



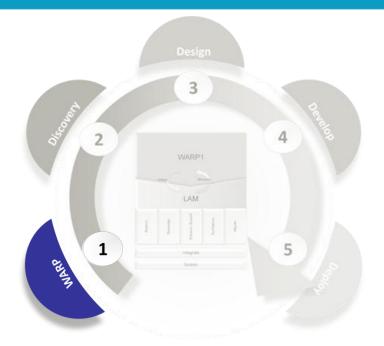












### WARP STAGE SUMMARY

- 1. Business Case Input (CASE)
- 2. Opportunities Identified (PATH)
- 3. Overall Complexity Uncovered (AMBI)







**Deliverables** 

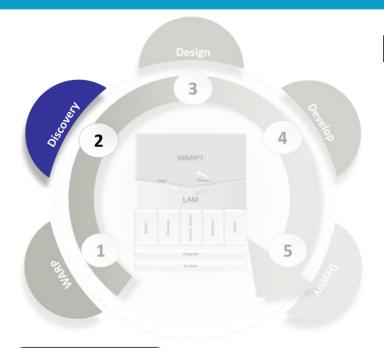
**Business Case** 

Transformation Plan

Target Architecture Roadmap Implementation Strategy Future Organisational Model



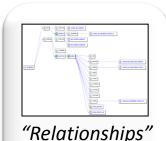


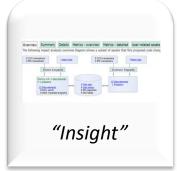


## **DISCOVERY STAGE SUMMARY**

- 1. Complexity Understood
  - 2. Risk Reduced
  - 3. Estimations Improved







**Deliverables** 

Target Architecture & Design

Non-functional Req. Specification

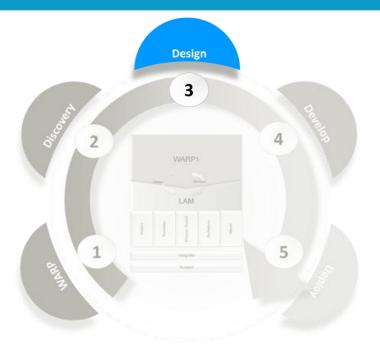
Other Impacted Systems Design

Cross Functional Supplementary Spec.

**Revised Business Case** 



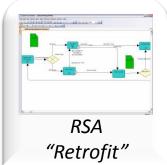




## **DESIGN STAGE SUMMARY**

- 1. Design Freedom
- 2. Business Alignment (BIZZ)
- 3. Scalability / Industrialisation







**Deliverables** 

Interface Design

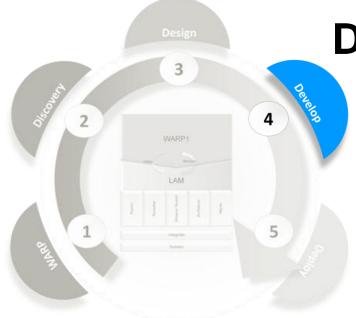
Data Migration Strategy Target Database
Design

**Test Strategy** 

Specification for Data Migration/Tools







## **DEVELOP STAGE SUMMARY**

- People Productivity
   Distributed Development
  - 3. Agile Legacy







**Deliverables** 

Test Plans

Unit Tests

**Code Artefacts** 

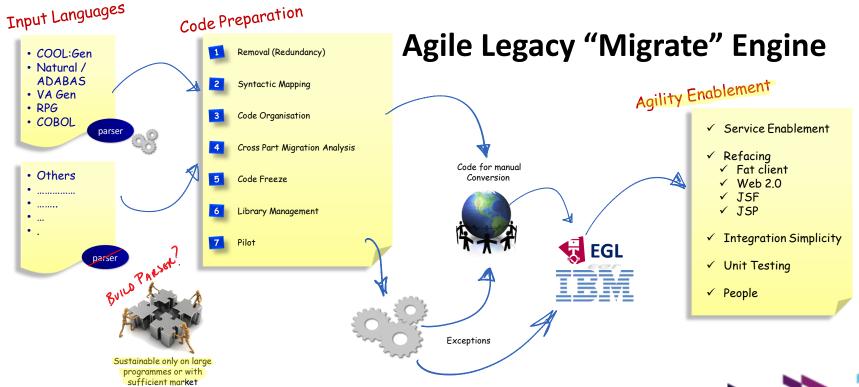
**Configured Tools** 

Continuous Build Environment





# The develop "engine" combines people and tools









Discovery / Clients Design 95%+ Offshore Modernisation CoE Client Code Front-Office Assets WARP1 90% Onshore



- Business case
- · Transformation Plan



Modernisation CoE **Demonstrators** 

Brings our capability to life







Rapid

Results

Front-Office

team



#### **Modernisation CoE**

CoE Team

India

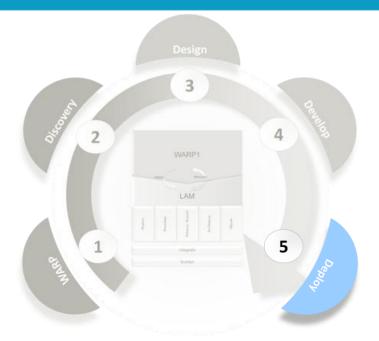












## **DEPLOY STAGE SUMMARY**

- 1. Test Plans/Scripts Created
  - 2. Test Cycles Enhanced
    - 3. Assured Deployment







**Deliverables** 

**Test Specifications** 

Test Scripts/Data

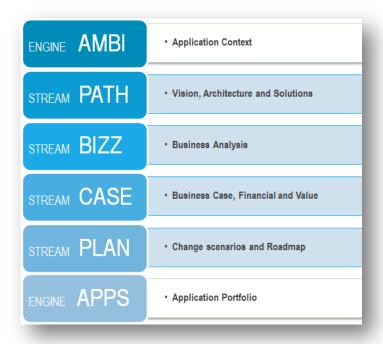
**Test Evaluation Report** 

UAT Plan / Script / Report Configuration Management





# WARP1 and Legacy Lifecycle delivers ....



The landscape in context ...





A robust roadmap ...

...and the business case









To see all this in action and to talk to our experts please come to our

## **Open Day**

Wednesday 3<sup>rd</sup> November

#### **Address:**

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#### **Contact:**

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