

Agile Legacy Lifecycle



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Reducing legacy operating costs by over 35 percent is not enough. Without business agility and improved time-to-market, IT will fail to deliver against the business' aspirations. How long do you have to fix it?

Cost of operations, time-to-market and speed of innovation are all determined by an organization's application portfolio. Legacy systems are at the heart of most application portfolios and have proven themselves in practice. However, over the years, business operations have diverged from the processes embedded within these applications.

Ad hoc extensions and maintenance have taken their toll, resulting in applications that are neither scalable nor adaptable to changing business requirements. Although an organization's competitive advantage is based on the business processes and rules embodied by these applications, they have now become an impediment to business agility. Even though that heavily patched-up code from the last century is doing exactly what it was originally designed for, it is probably costing its owner market share.

No matter how well conceived your business strategy is, if it is underpinned by an aging application portfolio, your aspirations as a business are at risk.

While many IT leaders recognize the constraints such a portfolio creates, many are bound by either:

- A lack of room for significant investment (compounded by economic pressures and the escalating costs of simply “keeping the lights on”);
- The complexity and risk of change (made worse by the lack of an approach that gives IT leaders the confidence in their chances of success).

Key success factors

While the promise of a quick fix is appealing, Capgemini takes a realistic approach and acknowledges that any approach to Application Modernization must:

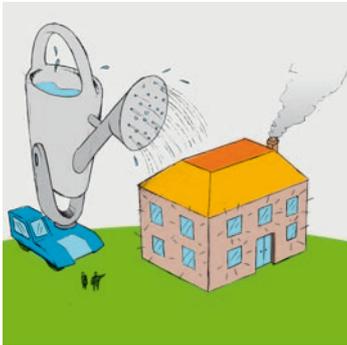
- **Negate the need for a major up-front investment** – with organizations typically spending up to 75 percent of their IT budget on “keeping the lights on,” it is critical to have an innovative, self-funding approach, with minimal up-front expenditure.
- **Do the right thing for the organization** – a “Rip and Replace” or package replacement of existing applications is not a ‘cure-all,’ as some organizational knowledge will exist only in the form of legacy code. Any approach must provide access to a comprehensive set of options, including remediation, enhancements, re-platforming, and migration that can preserve and reuse the value of your intellectual capital.
- **Go at a pace that suits you** – these applications will underpin some of your most critical business operations, and changes need to be carefully orchestrated at a time, and in a way that minimizes business disruption.

- **Engineer-in agility** – ensuring that you do not create tomorrow's legacy today by baking in flexibility, be it through SOA, exposing services, componentizing, and parameterizing those things that allow you to respond to evolving business demands.
- **Deliver on its promise** – go beyond just a paper-based exercise and be supported by a delivery engine that is credible, proven, and equipped with a scalable global delivery capability.
- **Focus on business outcomes** – provide demonstrable business benefits, including reduced time-to-market, quicker, more responsive changes, and a reduction in operational costs against a declared aspiration. An IT outcome alone is not enough.

With increasing pressure for austerity, doing more for less, and the demand for greater business agility, it is only a matter of time before IT leaders must face these challenges, before the business (or even the competition) does it to them. How do you modernize an aging application estate safely in a secure way without impacting business-as-usual?

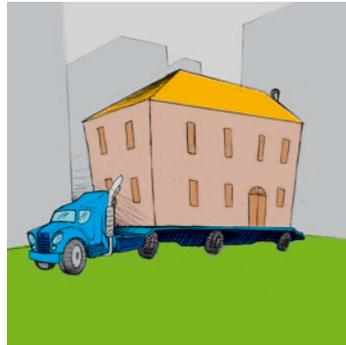
Doing what is right for you

Sustain



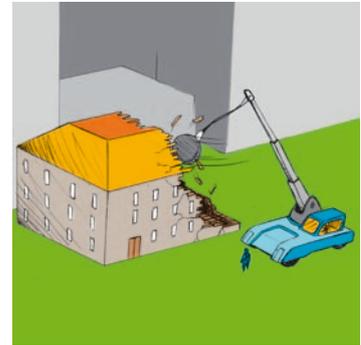
“Keeping the application fed and watered with the minimum effort and cost”

Re-platform



“Moving the application to a more modern hardware/ operating system”

Decommission



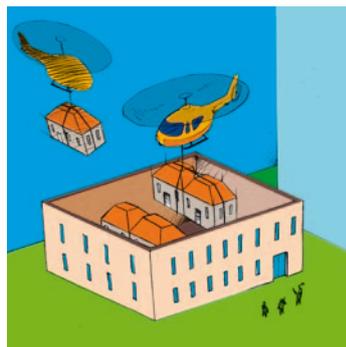
“Retiring the application in a controlled manner, preserving essential data”

Remediate



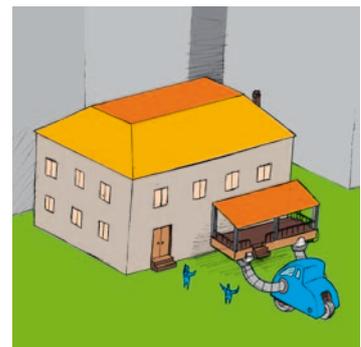
“Refactoring the application to a better structure to improve integration & flexibility”

Consolidate



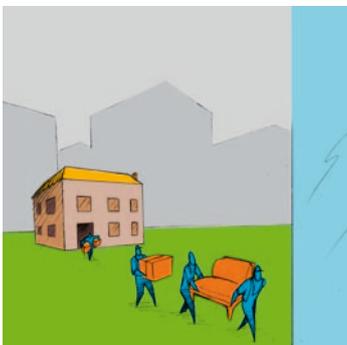
“Reducing duplication, reducing overheads and driving efficiency by consolidation of platforms”

Extend/Enhance



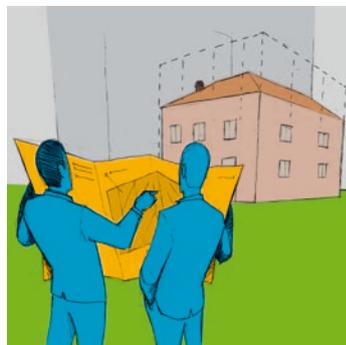
“Improve integration and flexibility through service enablement”

Migrate



“Translate to a new language or reuse the code in a modern environment”

Replace



“Mine the application for the essential rules and recreate in a modern language or package”

One size does not fit all

Capgemini Introduces Agile Legacy Lifecycle

This is our revolutionary legacy modernization service that unlocks the power of the investments you have made over the years in your mission-critical legacy applications and assures continuous improvement at predictable, industrialized cost.

With Agile Legacy Lifecycle, we have introduced a new and special way to deliver business functionality to our clients. We have replaced the old “one-shot modernize your estate and pay” approach with a “modernize to improve non-stop” service. It is designed to give our clients control over the cost and scope of their legacy estate.

Our service takes into consideration the challenges outlined earlier and is based upon an iterative approach, typically fronted with a results-oriented **WARP1 phase** (Wide-angle Application Rationalization Program).

With WARP1, we bring a unique set of analytical tools including IBM Rational® Focal Point™ and IBM Rational® System Architect to deconstruct and make sense of the complexity that is typically found in a legacy applications portfolio. But, unlike other approaches, we look beyond the technology and take a comprehensive, six-stream approach

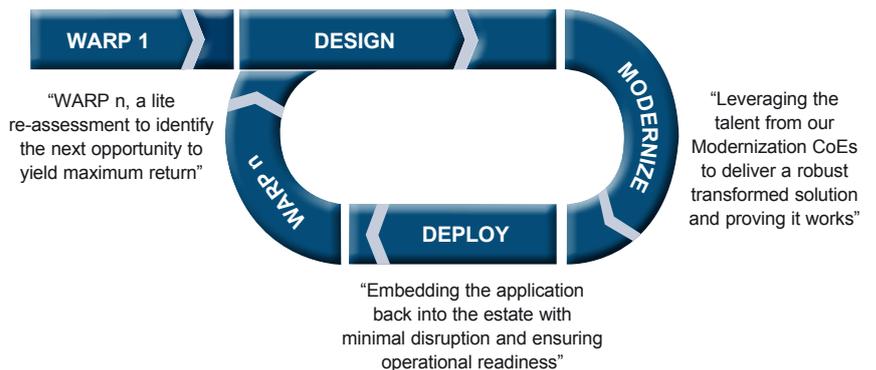
that touches all major success factors of application modernization. Because each organization is different, we recognize the need to do what is right for you, whether you are struggling with where to start, or you know where you want to be and need the confidence to make the journey without disrupting business-as-usual. WARP1 provides you with a design that fits your architectural direction, a solid business case you can believe in, and a transformation plan you can move forward with confidence.

Following the WARP1 activity, we move to the **Discovery** phase. Here, we take a deep dive into the defined scope of application(s). We bring a set of probing tools, such as Rational® Asset Analyzer, and specialist capabilities to unpick the complexity of the code base, unveiling the hidden pitfalls, logic, and challenges. We rapidly identify the dependencies, interfaces, and data issues that often cause organizations to recoil at the thought of undertaking modernization themselves.

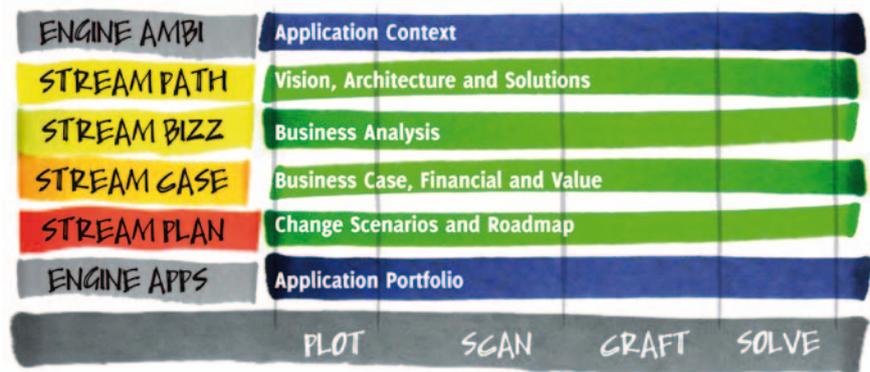
“Making sense of the portfolio of applications, providing a plan and business case you can be confident in”

“A deep dive in the application, getting behind the complexity and formulating a design that will deliver the business outcomes”

The Agile Legacy Lifecycle



WARP1 - WIDE-ANGLE APPLICATION RATIONALIZATION PROGRAM



The *Modernize* phase focuses on producing the detailed modernization design (in effect – how the appropriate ‘treatment’ will be applied to the candidate applications) and undertaking the modernization itself. While there is clearly an emphasis on Migration and Re-platforming, we acknowledge that there are instances where other approaches, such as Consolidation and Remediate are more appropriate. It is here that we make use of tools such as Rational® Business Developer and Rational® Developer for System z (RDz) to create innovative and agile solutions.

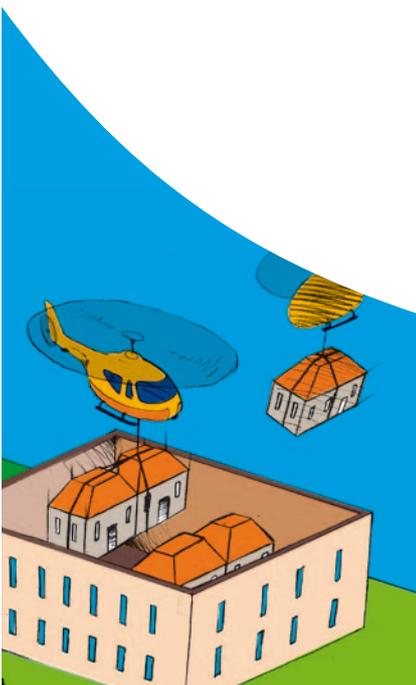
The Deploy phase builds upon a core value for our approach to Application Modernization, which is to minimize disruption to business-as-usual. Here, we bring over 43 years of successful technology deployment to achieve this. Because our approach is iterative, you can go at a pace that suits you, biting off as much as you can chew.

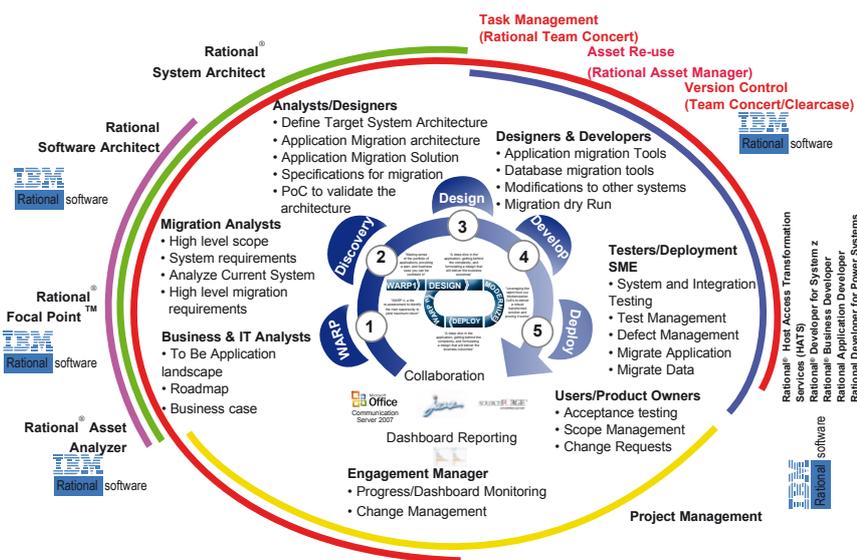
Why Capgemini and IBM?

Several things make Capgemini a natural legacy Application Modernization partner. Firstly, Capgemini has the breadth, experience and ability to not only define a Modernization program, but also to deliver against it. This means that you can not only rely upon us to commit and deliver on the promise of reduced operating costs, but also leverage a capability that has been proven to help organizations reduce their time-to-market/delivery by up to 25 percent.

Secondly, we bring a well-established Application Modernization practice to bear, with a range of accelerators and enablers:

- Our Wide-angled Application Rationalization Program (**WARP1**), method provides the highly industrialized scan of the application portfolio and context. It quickly identifies the areas in your legacy application portfolio with the highest potential for modernization.





- Our **Agile Legacy Lifecycle Centers of Excellence** are located within our global network of Accelerated Delivery Centers, equipped with the Rational tools to provide ready-to-roll environments as well as being close to you.
- Being part of Capgemini’s breakthrough **Application Lifecycle Services (ALS)** means that we can provide more than just ‘Modernization.’ We have designed our services to deliver productivity, flexibility, and business impact.
- IBM as our key **Alliance Partner** provides a comprehensive set of hardware and software assets that can be used to automate and assist the modernization of applications. We are working with IBM to help establish our Modernization Centers and facilities to demonstrate our Agile Legacy approach.

By capitalizing upon the global presence we have, we bring the economic and skills benefits Global

Delivery has to offer, undertaking Modernization at a very competitive price.

Finally, it’s about doing the right thing in the right way. By taking an innovative approach to modernization with IBM, we have developed Agile Legacy. It means that we are in a unique position where “Modernization” does not mean you have to get rid of your legacy application or platform investment.

We can now take what you consider to be a legacy application into 21st century tools, methods, approaches. For organizations, it means:

- Having the ability to move away from the reliance on scarce green screen development capability – **attracting/capitalizing on the modern skills available in the market.**



Legacy technologies we address:

COBOL

PLI

RPG

COOL:Gen

VAGen

Adabas/Natural

CA Ideal/Datacom

C/C++

Pacbase

Ada

Visual Basic

Visual C/C++

Delphi

Assembler

+Variety of Databases

- Merging the world of legacy and new technology development into one approach – **so legacy development is done in harmony with newer languages, through a single, common IDE, and toolset.**
- Opening new opportunities for technical agility such as “Service Enablement” and “web refacing” – **allowing you to expose those once buried legacy capabilities as true services for far greater utilization.**
- Being able to functionally decompose the legacy code base into a structure that can be easily manipulated – **so you can transform and migrate a piece at a time (be that functional areas for the purposes of extracting the business logic rules).**
- Having the ability to apply Agile practices, such as “Continuous Integration” and “Iterative Delivery” to your approach to Legacy development – **so regardless of your platform, you can realize the benefits of Agile and deliver a more responsive service to the business.**
- Being able to deliver Legacy Development through a global distributed delivery model –

allowing you to realize the economic and skills benefits this brings.

And just as importantly, it means you don't have to fall into the trap of a migrating code for the sake of it, or make a large capital investment. The “lifecycle” approach brings a culture of continuous evolution to ensure that your legacy environment never falls into disrepute again.

Capgemini calls this **Agile Legacy Lifecycle and it has been developed in collaboration with IBM®.**

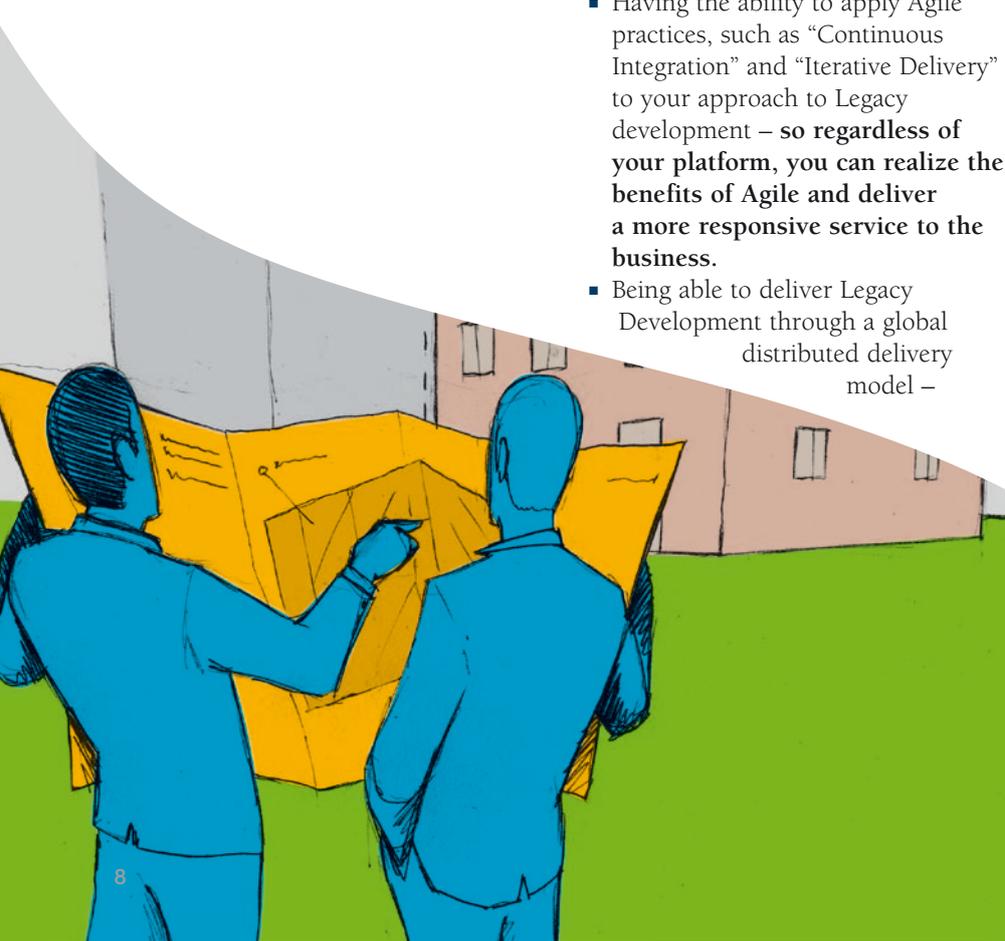
Benefits of the Capgemini approach

- We will commit to delivering you a tangible operational outcome (in some instances reducing operational expenditure beyond 35 percent).
- We won't settle for cost savings alone. We will engineer business agility into your legacy estate – reducing your time-to market/delivery.
- We have a proven approach with a credible track record that you can be confident of. This way we will help you modernize without disrupting the business and capitalizing upon your intellectual investment to date.

“Capgemini has the breadth, experience and ability to not only define a modernization program but also to deliver against it. We are delighted to be working with them on this compelling customer offering using award-winning software from IBM Rational®.”

Harish Grama

Vice President,
IBM Rational® Product Development,
Delivery and Customer Support



Our Credentials

- **VWS, the Dutch Ministry of Health, Welfare and Sport said:**
 “Capgemini recently helped us with a major migration project of over 500 programs, using the IBM migration tool, which ensured the ability of performing corrective and adaptive maintenance on our financial systems, implementing the migrated programs in a mainframe production environment. They also set up a new development environment (Rational® Business Developer), and tested the migrated programs. VWS was satisfied with the performance on this project.”
- A large financial organization wanted to modernize its entire approach to regulatory reporting, including the clarification and optimization of information provision and accessibility for many of its stakeholder groups. To meet these challenges, Capgemini developed a SOA-based mandatory electronic reporting solution. This solution provides a strategic data system for the automated collection, validation, and storage of regulatory reporting data, via a range of different technology options (web form, PDF file, web service, etc). This robust, secure, and highly scalable electronic data submission solution enables the client to implement future reporting changes without extensive system redesign and associated cost. The solution was rolled out to all 29,000 financial services firms in the UK during the latter half of 2008.

Capgemini’s unique Wide-angle Application Rationalization Program (WARP 1) is a breakthrough, accelerated approach that brings you up to full speed in rationalizing your application landscape and lifecycle. Taking only seven weeks, WARP1 helps you to make a quantum leap towards real results by providing you with three simple, yet powerful deliverables. A Rationalization Design, a rock-solid Business Case, and a pragmatic Transformation Roadmap not only show you the best opportunities for modernizing your application landscape, but also enable you to act on it.

What is unique about Agile Legacy Lifecycle?

Capgemini recognizes that our client’s legacy code has decades of investment in it, including embedded business rules that drive their core business today. We are sensitive to that fact and have built an offering that solves their legacy problem in a manner that is incremental, safe and secure, but transformational to their businesses.

This is really about bringing Agile Methods, Agile Tools, and Agile people to solve the legacy code related problems for our clients: whether it is Legacy Technology constraining business agility or Legacy Technology steadily increasing the costs of ownership or just dealing with the problem of Legacy skills not available in the market place to support business-critical systems.

*When we talk about **Agile Methods**, we mean “leveraging the pioneering work we have done on ‘Lean methods and processes’; especially on using Agile-RUP as our core software engineering method.”*

*When we talk about **Agile Tools**, we mean “a partnership with IBM that brings the benefits of an integrated tool set across the lifecycle and ongoing innovation.”*

*When we talk about **Agile People**, what we really mean is “Experienced people who have done this before, and who are now adept at using Agile Methods and Agile Tools to improve the business performance for our clients.”*

Legacy is a foundation to be built upon and not demonized. Capgemini can show clients how to build upon this incredible asset they have by making it Agile through Agile Legacy Lifecycle.

For more information about how Capgemini can become your legacy application modernization partner and help you to cut your costs and realize your potential, please contact: als@capgemini.com



About Capgemini

Capgemini, one of the world's foremost providers of consulting, technology and outsourcing services, enables its clients to transform and perform through technologies. Capgemini provides its clients with insights and capabilities that boost their freedom to achieve superior results through a unique way of working, the Collaborative Business Experience™. The Group relies on its global delivery model called Rightshore®, which aims

to get the right balance of the best talent from multiple locations, working as one team to create and deliver the optimum solution for clients.

Present in more than 40 countries, Capgemini reported 2010 global revenues of EUR 8.7 billion and employs over 110,000 people worldwide.

More information is available at www.capgemini.com

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