

Capgemini's response on Integration Delivery Capability To ANZ Bank New Zealand

Date: 22nd April 2014

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1. Executive Summary

Capgemini appreciates this opportunity to participate in this request-for-information to assist ANZ's initiatives in the Integration related services. We have a strong competence and experience in integration space and are pleased to present a high-level view to ANZ through this response document.

ANZ is Capgemini largest and most strategic client in both New Zealand & Australia. Hence it enjoys the highest executive sponsorship, management attention, priority and investments to enable high success for all ANZ initiatives. We are confident that Capgemini is ideally placed to support ANZ's initiatives and respond with agility to ANZ's dynamic business environment.

In line with the stated ANZ objectives, Capgemini provides a strong, compelling overall proposition to meet ANZ's expectations and objectives:

- Deep expertise in the middleware tools used by ANZ coupled with experience in banking environments. Further elaborated through different sections of this response document.
- An established ANZ strategic partner with a large dedicated office & team-setup in Wellington for any local escalation point. Capgemini has a state-of-art dedicated office set-up in Wellington and currently more than 40 skilled staff (rapidly-growing) is permanently based out of Wellington. We believe a strong local management team and support set-up is crucial to assisting any strategic journey with a large strategic client like ANZ.
- Capgemini has an established support model (on-site/off-site) in place for ANZ in the testing space, and is in an ideal position to leverage the learning & experience from it to support ANZ's Integration initiatives successfully.
- We have a functional and large offsite in Bangalore India, which can be adequately utilised to support this journey as well. We have already established processes to maximise productivity by ensuring key off-site resources align their working hours as closely to NZ working hours and enable a seamless experience.
- Good understanding of ANZ standards/guidelines and governance processes.

In line with ANZ's instructions, we have provided only a crisp, high-level response to the details requested by ANZ and we hope that this would be sufficient to enable a short-list. Capgemini would be glad to provide any clarifications or details needed, and hope to subsequently present a detailed view of these topics as well.

2. Capability in Integration related services

2.1 Integration capability snapshot

According to IDC, Capgemini is established as a market maker in SOA Professional Services which in our view comprises a broad spectrum of integration related solutions and services covering SOA, EDI, B2B and EAI domains. Capgemini has strong capabilities and project experience in these segments and our clients base are spread across the America, Asia-Pacific, Europe & Middle-east.

We have provided a complete suite of integration services, including integration strategy, governance, design, build, operate and on-boarding for multiple global clients. Our integration capabilities are closely aligned with our service offerings in application development and application maintenance, since in today's technology world, strong integration architecture is vital to enable a multi-faceted, agile application services to diverse business stakeholders. Capgemini has unique capability in helping its strategic clients build a Core Integration Framework (CIF), which provides a suite of tools, standards, design patterns and foundational services to support Enterprise integration needs. Capgemini key service offerings include:





- Enterprise SOA Maturity Assessment
- SOA Strategy Definition
- SOA Architecture Blueprint & Roadmap
- SOA Governance Model consulting
- Enterprise SOA/Integration Project Implementation
- Enterprise SOA/Integration Application Management & BAU-support

At a high-level, Capgemini's overall capabilities within Integration services are captured below:

Parameter	Capability Brief
Global Practice	Capgemini has strong SOA/ EDI/ B2B/ EAI/ ETL capabilities with over 7,000 integration practitioners and client-project experience spread across Asia-Pacific, America, Europe and Middle-East.
Full Integration Lifecycle Experience	Capgemini has provided a complete suite of integration services, including integration strategy, governance, design, build, operate and on-boarding for multiple global clients
Integration Express	Our integration project toolkit that combines a Capgemini standard step-by-step approach for executing any integration project with best-practice templates, utilities, tool and technique knowledge.
IAF	For larger enterprise integration projects, Capgemini has an architecture content framework and toolkit, consisting of large number of methods, techniques, tools and best practices/patterns to support any kind of architecture design work called Integrated Architecture Framework (IAF) . The Framework has been adopted by Microsoft for the development of their WSSRA framework and incorporated into the TOGAF Enterprise Architecture Framework.
Frameworks	Capgemini has ready-to-use Core Integration Framework (CIF) Solution including integration error management and data integrity monitor modules leveraging J2EE or SAP Platform. We also have frameworks based on IBM, TIBCO, SAP & Oracle, etc.
Pre-built Tools	Capgemini has built out tools to support integration projects, including code deployment, hub health monitoring, data synchronization, etc.
Industry Standards Experience	Capgemini has implemented industry specific solutions which require deep content knowledge of the corresponding standards, such as OAG, UCCNet, X.12, EDIFACT, H7, CIDX & RosettaNet

2.2 Capability across integration tools and vendors

Provided below is a tabular representation of Capgemini's capability in integration services across different tools, technologies and product vendor.

Product Vendor	Tools / Applications	Years of Relation	Relationship Status
 TIBCO The Power of Now™	BusinessWorks	12+	Premier System Integrator
	WebSphere suite of integration tools. Also covers Datastage & BPM	12+	Strategic Global Tier 1
	webMethods Fabric	9	Global System Integrator
 INFORMATICA The Data Integration Company™	Informatica	9	Global
	Fusion Middleware	10+	Certified Advantage Partner
	Netweaver, XI, PI	5	Global Alliance Partner
	BizTalk	8	Gold Certified
	Java CAPS & eGate	9	Titanium

2.3 Select client list

Capgemini provides services to a long list of clients globally, which includes marquee names as below (excludes several clients under Non-disclosure pacts):

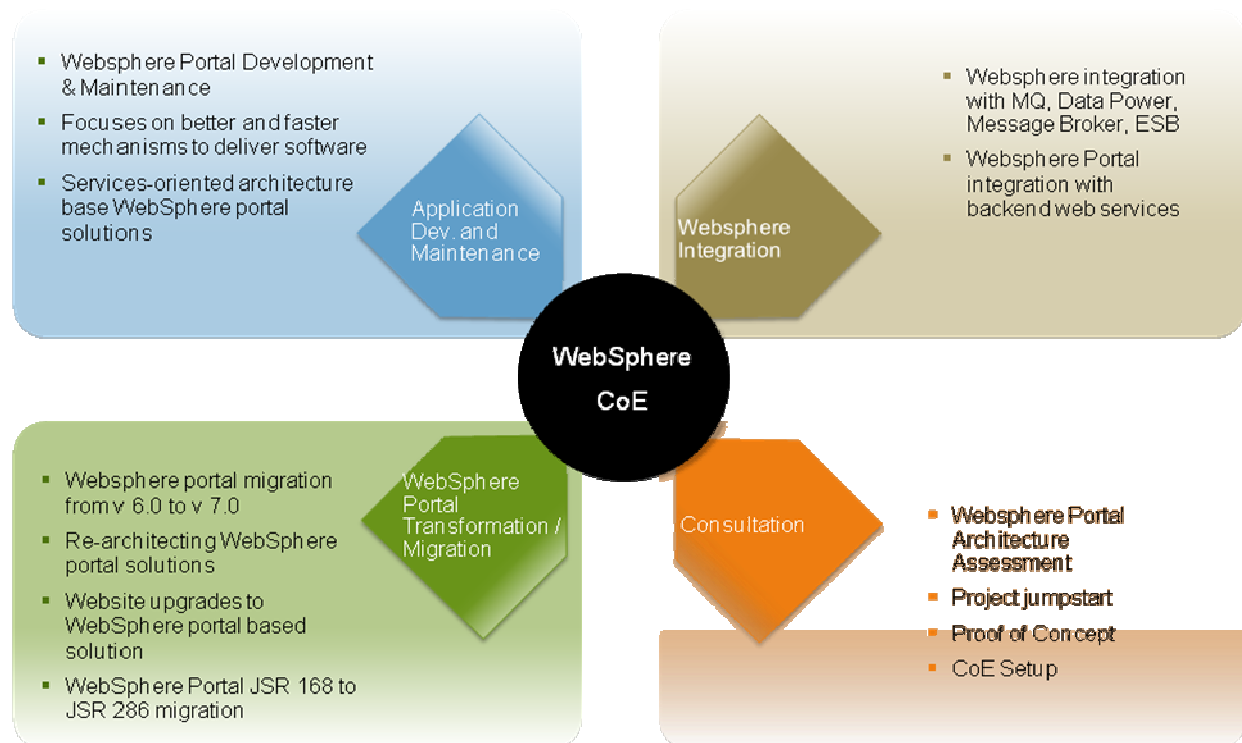


3. Capability in middleware tools used by ANZ

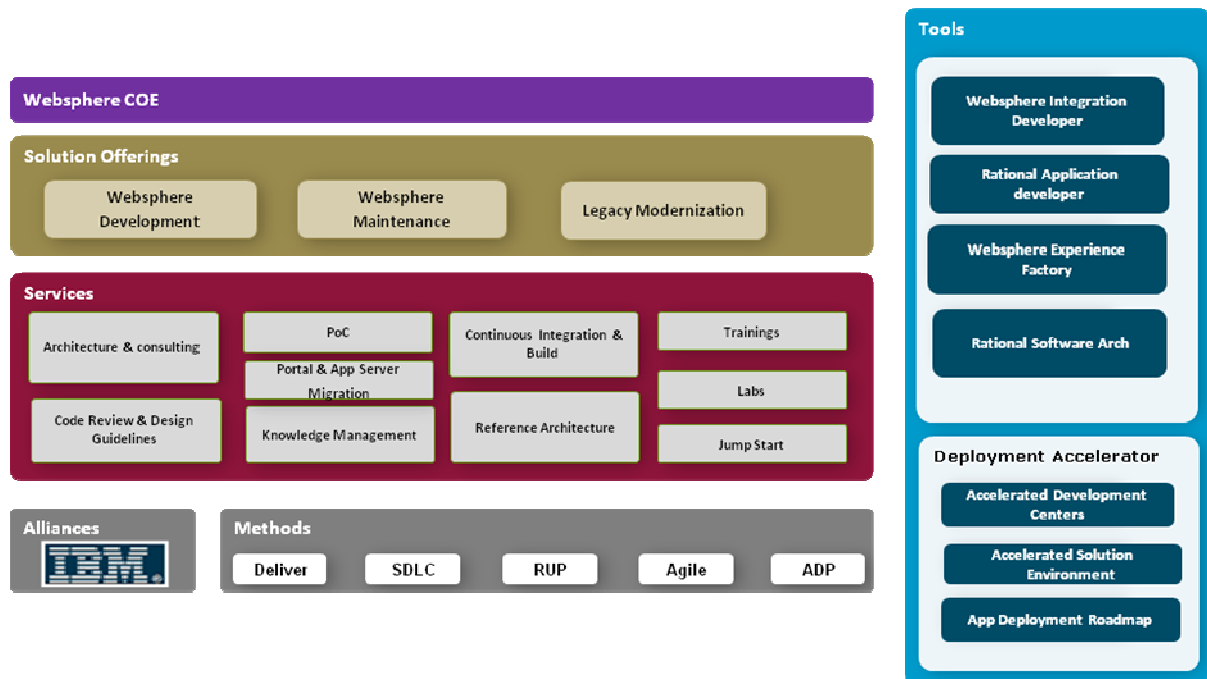
Out of the list of integration related tools utilised by ANZ, WebSphere appears to be the most critical one covering a suite of tools like WMB, WMQ, WDP, WTX and WAMC. Capgemini has a strong track-record of capability, skills and experience in the WebSphere suite of tools for many years, and this got boosted in the past 10 plus years through a strong global alliance with IBM Inc. (Capgemini has a Strategic Global Tier 1 status with IBM globally).

3.1 WebSphere Center of Excellence

Apart from providing integration related project, upgrade and support services, Capgemini also houses a WebSphere Center of Excellence (CoE) which provides innovations & capability development with a dedicated focus towards WebSphere suite of tools for projects within the Financial Services industry (Banks, insurance, wealth-management clients). The services offered by this WebSphere CoE include:



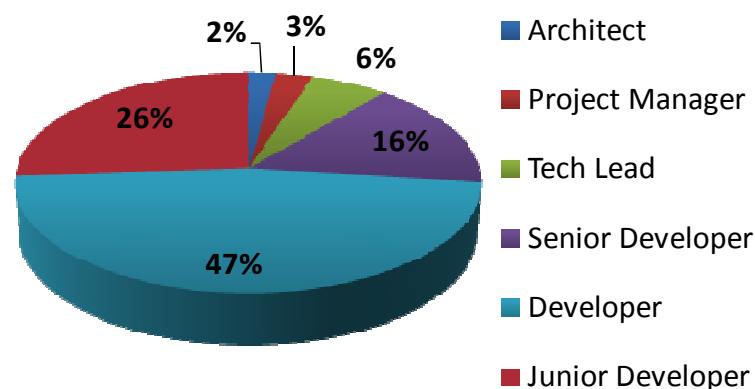
The SOA CoE has developed a Business Process Management (BPM) demonstration which showcases integration with legacy enterprise systems. The demonstration leverages WebSphere Business Modeler, WebSphere Integration Developer, WebSphere Process Server, and WebSphere Business Monitor. Recently, their focus has also included Lombardi and Process Server for modeling Financial Services process



3.2 WebSphere skilled resources

While Capgemini globally has more than 7000 resources working globally in the integration services, who are spread across different integration technologies and also across different geographies. From a WebSphere perspective, Capgemini has a total practice of 798 resources which also includes the earlier mentioned WebSphere Center of Excellence which has 70+ resources dedicated towards innovation, solution & accelerator development, and overall capability upliftment (more than 30% of them being IBM WebSphere certified).

While ANZ has termed the required roles as Delivery Manager, Design Lead, Data Modeller, etc.; Capgemini has a different model for classification of resources and skill sets and the below charts provide a break-up of the same:



Role-wise Distribution of resources

4. Integration / SOA capabilities (Continued)

4.1 Event-driven Architecture

Globally, Capgemini has implemented numerous integration platforms using event driven architectures successfully for industry leading clients. Below are some of them for credentials.

- **FedEx** - *Supply Chain Services enabling customers' real-time, secure info on shipping and tracking in order to reduce cycle times, eliminate order inefficiencies, and improve customer satisfaction.*
- **HP** - *Procurement Hub providing end-to-end support for shipment, forecast and inventory data between suppliers and HP's back end ERP system.*
- **Disney** – *"Tomorrowland Project" enterprise wide messaging framework to support Disney's overall integration needs. Approximately 70% of Disney's business processes and transactions are supported by SOA technologies now, ranging from financial, logistic to human resources, supporting the entire Disney enterprise.*
- **Johnson & Johnson** – *Capgemini implemented an enterprise integration backbone and has developed a framework for how to conduct, design, and implement any integration project. Some projects delivered include: global demand planning, consolidation and elimination of redundant business processes, consolidated financial information, global eBusiness gateway.*

4.2 Integration Express

Capgemini project teams have access to Integration Express, our proprietary integration toolkit. Integration Express gives an instant boost to any project that has integration as a component of the business or technical architecture. It is a browser-based collection of templates, utilities, processes, reusable frameworks (code) and useful links and whitepapers constructed around the Rational Unified Process (RUP) approach to software development.

By selecting one of the major phases in RUP – Inception, Elaboration, Construction, Transition – our team members step through the major activities that should be accomplished in each phase and are given a sample document or template to complete. For example, in the Inception phase, teams have access to sample work plans, EAI governance documents, integration strategy and other requirement gathering documents.

4.3 Core Integration Framework (CIF)

Core Integration Framework (CIF) provides a suite of tools, standards, design patterns and foundational services that even supports the Event Driven Architecture. This Framework can be used for designing and implementing applications and systems in which event transmits between decoupled software components and services. Following are some of the patterns that comes out of the box in the framework.

- Decoupled interactions
- Many-to-Many Communications
- Event based Trigger
- Asynchronous

The ESB layer in the CIF combines the event driven and service oriented approach to simplify integration of business units, bridge heterogeneous platforms and environments. Common services built in the framework are categorized to the below type of services.

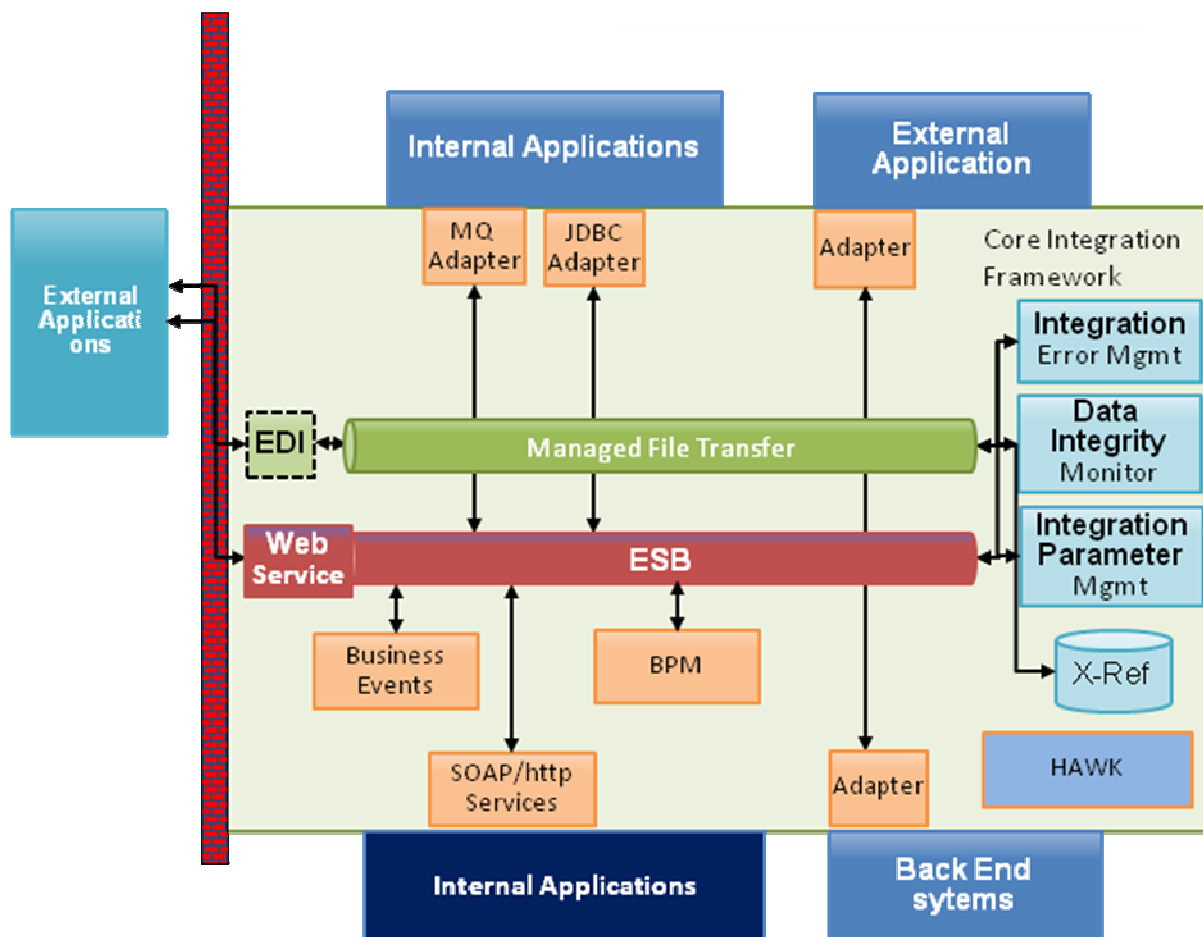
- Event Services
- Transport Services

■ Mediation Services

These services give us an opportunity to develop an Service Oriented Architecture which can pass data from one service to another using event driven architecture and standard based Messaging engine for the reuse of business applications and an ability of Applications to grow and adapt over time to the changes in numbers of end users and number of transactions processed. The module developed based on the loosely coupled architecture so that changes in a single module would not impact the design of the other modules in the system.

Core Integration Framework (CIF) provides a suite of tools, standards, design patterns and foundational services to support:

- Service Orchestration
- Process Orchestration
- Message Orchestration
- Batch Data Movement
- B2B Orchestration
- Composite Application Development



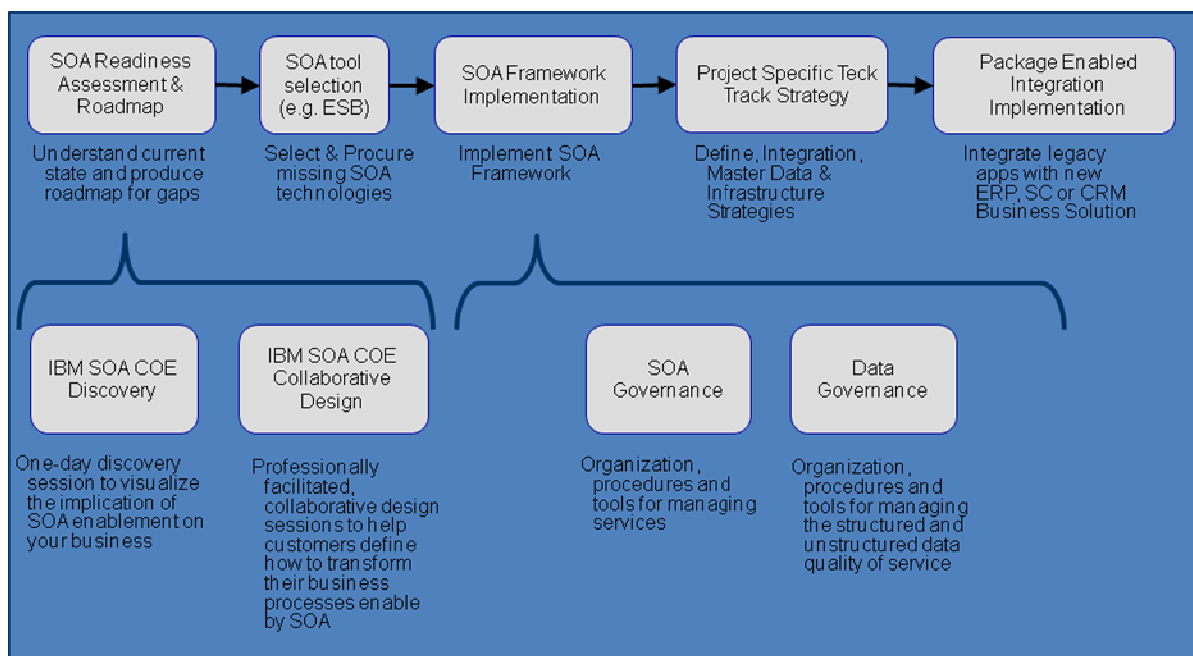
Capgemini's Core Integration Framework Components:

- Standard Integration Toolset - including Messaging (ESB/SOA), Batch/Data Integration (ETL/ELT), B2B/EDI – EDI & Managed File Transport (MFT)
- Integration Guiding Principles

- Decision Trees to select the proper integration tools and adapters
- Integration development standards
- Implementation Integration Patterns – Reusable objects based on the given toolset and end point technology
- Standard Integration Error Management Module
- Standard Data Integrity Monitor Module
- Standard Integration Parameter Module
- Standard Cross Reference Module

4.4 SOA / Integration offerings and Roadmap

Provided below is a complete representation of the Capgemini offerings specific to IBM-tool based SOA and Integration services.



4.5 Our best-practices in SOA / Integration development

Like all other areas of IT services delivery, Capgemini has also developed some unique best-practices in the Integration & SOA space, which include:

Using a common business object

Reuse comes from using the same data structures in the data bus over and over. Standards organizations (IFW, Rosetta, OASIS, OAG, UCC, etc) are the place to start when choosing a standard.

Use out-of-the-box adapters first

Whenever possible, use the vendor supplied adapters first as these tend to already provide good transactionality, error-handling and often transformation rules.

Architect to prevent failures	Implement your frameworks for exception handling and monitoring first so you have consistent ways to handle problems/outages. Perform connectivity POC early, before you start development (i.e. can the adapter actually connect to the application/database in your environment?)
Architect for true transactionality	Your integration environment should also capture the results of the target transaction (i.e. did the receiving application successfully insert/delete/update the record.?)
Use products with integrated development environments.	Too many development environments (e.g. part done in AIX, part on Solaris, part on NT) or development products create issues during development that are hard to overcome including confusing the developers. Try to limit the development tools and look for products that have a limited number of kits.
Use Business Process Automation	This is the effort to automate workflow, either technical or business process. Don't just build connectors, use the tools to create true service oriented processes that are well managed.
Use an Operational Data Store in the EAI environment	...to give your hub the 'memory' it needs to give context to the messages (e.g. a payment maybe detected as late in the hub and broadcast to multiple systems simultaneously).

5. Experience in IFW & Banking

5.1 IFW Experience

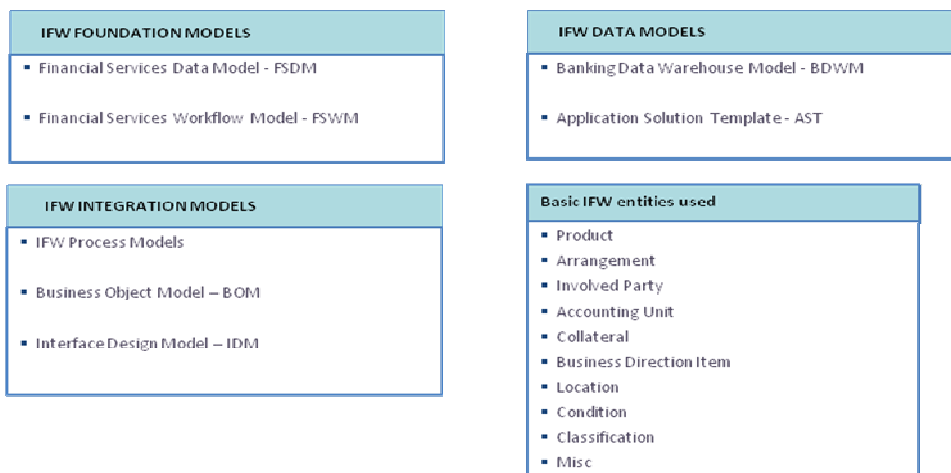
Capgemini has significant capability & experience in the IFW standards and our teams have worked on several integration projects involving this global standard. While globally we have hundreds of resources that have IFW skill & experience, we also have IFW experience within our Australia team where we have 12+ local resources with good experience in implementing IFW standards. Capgemini's overall experience in IFW Standards includes:

- Wealth of knowledge and understanding of IFW process models, data models and its building blocks.
- Extensive data modeling expertise including Industry Standard data model IBM's IFW Financial Services Data Model (FSDM).
- Internally hosted an IFW knowledge repository that comprises of commonly used entities and attributes categorized by domains used in the banking industry. Example: Arrangement, Product, Product Arrangement, Proposed Arrangement, Arrangement Negotiation, Involved Party, Mandate to name a few.
- Proven experience in adapting IFW process model and data models in multi channel retail-banking environment.
- Expertise in designing and tweaking IFW models using XML Spy to provide an easy to use plug-and-play framework of data model for the consumers of the IFW process models.
- A strong governance framework in the form of change control board for any updates in the IFW data model.
- Good experience in tying up IFW standards to the underlying banking platforms as well as legacy applications data model to provide seamless integrations across the enterprise.
- Established IFW Process Implementation framework to manage the lifecycle of IFW implementation starting from Identifying -> Verifying -> Establish -> Maintain -> Service.
- Multiple Business Data Ware house (BDWM) implementation across major banks in Australia.

Case Study

Capgemini has executed significant work for a large Next-Generation Transformation Program for a leading bank in Australia using the IFW standards. A high-level view of the IFW related components of this program can be viewed below, further elaboration and details can also be provided to ANZ.

Case Study - IFW implementation NextGen Program – Redstar Release 1 Project



5.2 Banking experience

Capgemini believes that this section may not need elaboration as Capgemini has proven capability & track-record in Financial Services and Banking projects. Capgemini has more than 20+ years of experience in delivering services to banking clients and currently have more than 21,000 Financial Services professionals, dedicated through a global network. We serve more than 900 clients in financial services which include:

- 7 of the top 10 banks
- 6 of the top 8 consumer finance companies
- 6 of the top 8 insurance companies
- 13 of the top 15 asset finance companies

Out of the 7000+ resources in the overall integration space that Capgemini has, more than 20% of them have significant experience in banking & financial services industry.

6. Mainframe integration

6.1 Capability & Offerings

Mainframe based systems always pose a challenge for any SOA/Integration focused transformation, due to their unique challenges. Legacy systems (Mainframes) have high TCO, could be bottleneck for agile IT portfolio, satisfy mission critical operations and are often considered not viable to replace. The SOA-based integration modernization in such cases is further challenged due to lack of consistency in architecture, overlap in functionalities and consolidation of multiple legacy assets due to M&A.

Capgemini has unique service offerings to help its banking clients during their mainframe-integration journey which includes:

Methodology	<ul style="list-style-type: none"> ■ Comprehensive method to guide the legacy to SOA transformation enriched with the architectural Strategies such as Componentization, Service Enabling, Re-engineering and SOA. ■ SOA using web services to interconnect disparate applications
Tools	<ul style="list-style-type: none"> ■ Capgemini Integrated Architecture Framework (IAF) – Comprehensive set of tools & methods; addresses aspects of a fully integrated architecture, Business, Information, Information Systems, Technology Infrastructure, Governance and Security with built-in interfaces to software development lifecycle processes (i.e. RUP, Agile, etc) ■ Technical Analysis tools covering Data, Code, Interface and Infrastructure ■ Unique Effort Estimation Tools
SOA enabling partners	<ul style="list-style-type: none"> ■ IBM – EGL, HATS, CICS TG ■ Data Direct - Shadow ■ GT Software – Ivory ■ Attachmate – Verastream ■ Hostbridge
Value Proposition	<ul style="list-style-type: none"> ■ Reuse & leverage existing assets. ■ Protect huge investments made in legacy applications ■ Improve value of core apps ■ Uses SOA methods and technologies to unlock value ■ Cost Optimisation ■ Risk managed process for change
Key clients	<ul style="list-style-type: none"> ■ A Financial banking conglomerate in Europe ■ One of top 5 credit card issuers in the world ■ A processor of several private-label credit cards

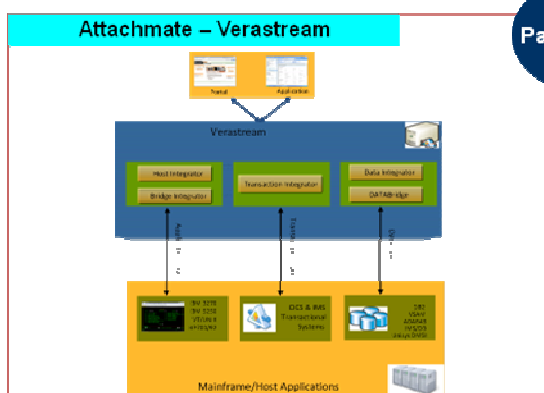
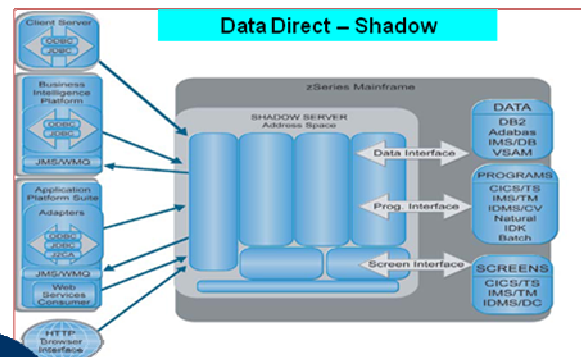
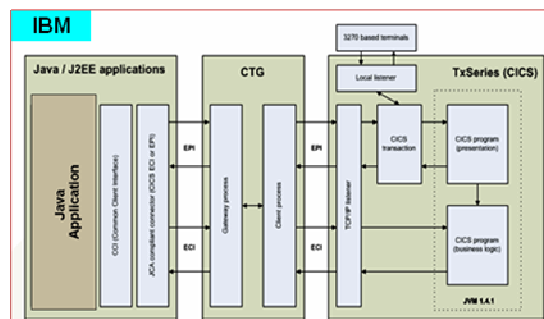
6.2 Service enabling partners

In our view, key considerations for mainframe integration include:

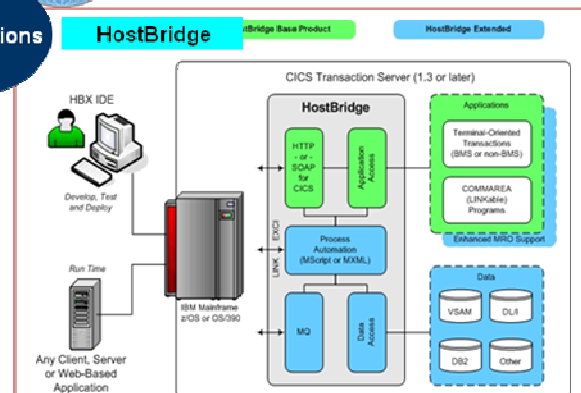
- Minimum modification in existing code.
- Maximum reuse of existing resources, business logic, code
- Secure access to application data
- Maintain existing application integrity
- Develop futuristic reusable components
- Low maintenance cost
- Segregate business logic from presentation
- Real time response
- Simple and scalable design

Keeping this perspective in view, Capgemini has extensive experience and assets in Service Enabling Partners for Integration and in industry-proven solutions & approaches. This includes:

Name	Description	Features
CICS Transaction Gateway	CICS Transaction Gateway provides connectivity from IBM WebSphere Application Server to all CICS servers, with an architecture that supports business and application requirements	<ul style="list-style-type: none"> Provides J2EE standards-based connectivity Uses JCA specification to manage connections, transactions and security Provides enhanced performance, availability, scalability and management 1,000+ Transactions Per Second Base Java, C, C++, Cobol and COM interfaces supported. IBM Product Support available
HostBridge	HostBridge is a mainframe software to facilitate the invocation of existing CICS BMS transactions and deliver the executed transaction output to a requesting application as a standardized XML document	<ul style="list-style-type: none"> Communicates through standard TCP/IP and XML Resides on Host machine (Mainframe) Does not perform Screen scraping Works under the existing Security model Highly Scalable System Accessible to local & remote clients
MQ Series	MQ provides reliable, resilient application integration by passing messages between applications and Web services	<ul style="list-style-type: none"> Integrated support for web services Messaging backbone for deploying ESB Support secured Internet connections Offers proven scalability, availability, and performance Supports clustering for dynamically distributing messaging workload



Partner Solutions



Capgemini Service Enabling Partners for Integration

7. Proposed engagement model

7.1 Engagement Models

Capgemini has limited understanding of the pain-points and prioritization of the newly formed Integration team within ANZ. Hence it would not be appropriate for us to recommend or propose an engagement model, at this stage. We can however provide a view of typical options of engagement models under which Capgemini works with other clients in the Integration services space.

Capgemini typically works under the below three standard engagement models, although it is not uncommon to design a hybrid-model based on client/project specific project needs. However, Capgemini would ideally like to engage further with ANZ teams and enhance its current understanding before we propose a suitable engagement model.

1. Model A – Skill Staffing services
2. Model B – Project based services
3. Model C – Managed Services

Core & Flexible team

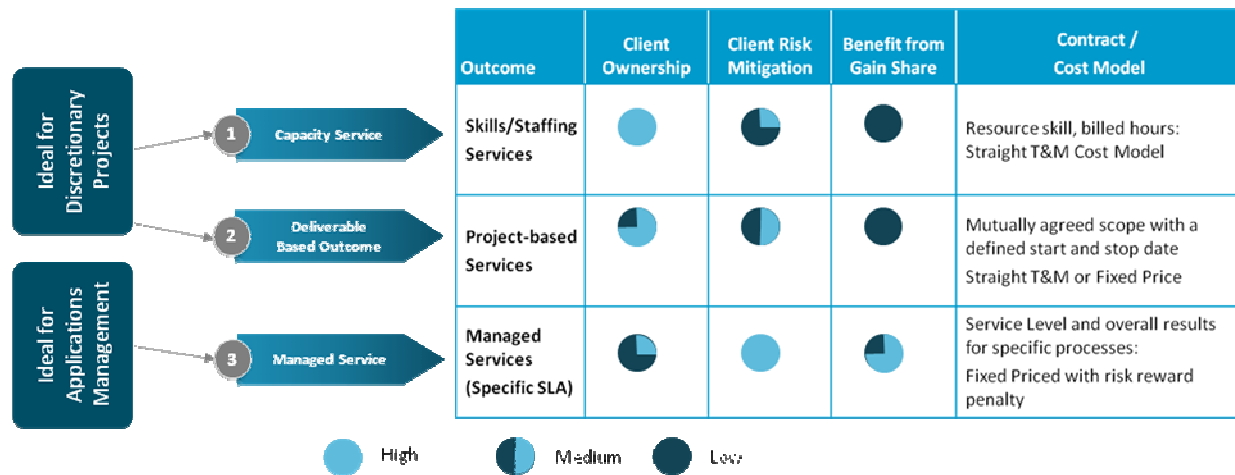
Based on past experience, Capgemini firmly believes that demand-forecasting is a standard challenge with large banking clients and ANZ is not an exception. Hence we suggest that ANZ can consider a Core + Flexi team model, where the Permanent roles can be fixed and on-going to act as the overall management layer for the Integration team. While the supplementary roles can be scaled up or down by Capgemini, based upon ANZ's forecasted needs and project requirements. This model can help provide the right balance of skills and capacity to ANZ, without trying to create a rigid, inefficient model of resourcing & delivery. This model can also enable the most optimized leverage of offshore resources to ANZ initiatives.

7.2 Model Comparison

Below table captures the basics of the three engagement models with regards to its description, fitment and limitations.

Services Type	Model A Skill / Staffing Services	Model B Project –based Services	Model C Managed Services
Description of services	<ul style="list-style-type: none"> Specific staff augmentation requests fulfilled by Capgemini for a rate, cost and duration. No SLA's apply for such agreements 	<ul style="list-style-type: none"> Specific projects that are agreed between to the specific parties to deliver a defined set of services within a specific timeline and cost 	<ul style="list-style-type: none"> Provide a fixed output for a defined price. A baseline commitment for a level of output (tickets, function points, etc) is agreed for a price and duration
When is it suitable	<ul style="list-style-type: none"> Temporary augmentation of existing resource pool Uncertainty of demand/scope 	<ul style="list-style-type: none"> Clearly defined deliverables and client dependencies Capgemini carries risk of delivery out with timeframes and budget 	<ul style="list-style-type: none"> Support/service-type activities subject to SLA. Capgemini carries risk of delivery with timeframes and budgets Long-term agreement that can include retention of key personnel, with scope for Capgemini innovation and performance improvements
Limitations	<ul style="list-style-type: none"> Client retains resource management responsibility Ability to retain key resources when demand fluctuates Capgemini ability to respond to significant fluctuations in demand 	<ul style="list-style-type: none"> Poor, or late defined scope subject to change control 	<ul style="list-style-type: none"> Ongoing demand/capacity needs to be established (or mechanism for ramp-up/down agreed) – particularly if service contains a hybrid of support and fixed delivery SLA definition and verification

Another comparative view of the three standard engagement models is provided below keeping three customer perspectives in mind: client ownership, risk-mitigation and benefits.



7.3 Alternatives to the delivery/resourcing model

At this stage, Capgemini believes that we have limited understanding of ANZ's road-map for Integration services and it may be some time before a final, comprehensive strategy is in place. Hence today, we are not in a position to envisage or propose any alternative to the already discussed delivery/sourcing models. In due course, we should be able to understand ANZ's strategy in depth and based on same, provide inputs & feedback for the proposed delivery & resourcing model. Capgemini shall endeavor to ensure that the proposed models are simple, fit-for-purpose and provide the right balance of agility & risk-aversion to ANZ.

8. Production support services

The following table provides details on Capgemini's standard definitions of support levels and our assumptions regarding an end-to-end production support engagement. We would like to deep-dive into ANZ's current processes & experience in production support services and thereafter recommend the best model for an effective, agile support engagement.

Service	Description	Proposed Approach
Level 0 Support	A Level 0 type of support typically entails ANZ specific business policy and procedures questions, functional support, basic navigation and "How To" questions like transaction entry, query	A mix of ANZ & Capgemini employees and application key users or super users will act as the first point of contact for end users at each location. This team will make a first attempt to resolve a reported incident.
Level 1 Support	The initial response to an incident that is typically handled by the contact center helpdesk, which shall log all such incidents in the designated Help Desk Tool and assign it to appropriate resolver group. Provide resolution to known issues, Password reset and resolve problems relating to access issues, define and authorize user ids	24*7 Help desk will make an attempt to service the support request. When the reported incident is construed as a Severity 1 incident, the Help desk team member makes a telephonic call to the Capgemini service delivery On-Call phone number.
Level 2 Support	Level 2 type of support is defined as a support request that requires technical support for resolution of application related issues. It includes proactive application monitoring activities, checking alerts and logs as well.	Level 2 applications support can be provided by Capgemini. Level 2 team initiates action on a support request escalated by ANZ's Help desk. The main activities undertaken are: <ul style="list-style-type: none"> • Keeping systems up and running • System service specific administration and monitoring • Update Changes • Update web services end point changes • Application recovery • Break-fix • Lights ON monitoring • Monitoring audit logs • Application exception monitoring and correcting
Level 3 Support	A Level 3 type of support is defined as a support request that requires technical support for corrective and preventive maintenance for resolution of application related bugs.	Level 3 applications support is provided by Capgemini. The main activities undertaken are: <ul style="list-style-type: none"> • Application bug fixing • Root cause analysis • Liaise with 3rd party service providers or other service providers • Application Release / Rollout of a patch • Preventive maintenance activities
Level 4 Support	Inherent functional or performance issues with the package or system software that are not caused by the	3 rd party service providers or product vendors or service provider groups within ANZ. It is assumed that ANZ has entered into

Service	Description	Proposed Approach
	coding or configuration activities of the team. Preventive maintenance to prevent potential problems following identification by the AM support teams of a software defect in the production environment.	<p>appropriate maintenance agreements with OEMs for on-going product support. Capgemini will then work with product vendors to apply the appropriate “patches” to the system to address identified issues. Key activities provided here are:</p> <ul style="list-style-type: none"> Identifying appropriate patches and service packs Logging issues with product vendors and providing information Applying patches as suggested by the vendor
Application Enhancements	<ul style="list-style-type: none"> Changes to the functionality or processes embedded in the application Report development or amendments 	<p>The change request or an enhancement request will be worked upon by the dedicated Capgemini resource and part of the overall Capgemini service delivery team.</p> <p>This dedicated resource will be responsible for delivering work requiring up to 2000 person hours of effort in a year.</p> <p>ANZ employees will provide detail functional requirements document to Capgemini team to create technical documentation. ANZ employees will carry out an impact analysis of the change before the request is allocated to the Capgemini resource.</p>

9. IBM-Capgemini Global Alliance

9.1 Alliance highlights

The relationship between Capgemini and IBM has been in place since 2001. As industry leaders we collaborate together by sharing best practices and technology to help clients achieve better, faster and more sustainable results. Capgemini combines its business insights and delivery expertise with IBM's industry-leading technology to create highly effective business solutions.

Our Global Alliance spans 22 countries for Capgemini group and currently IBM categorises Capgemini as a Strategic Global Tier 1 partner. Alliance Managers in each country are dedicated to innovating, selling and delivering IBM solutions, with 55 Capgemini professionals and 43 IBM experts around the world, working together to ensure the success of the Alliance. More than 11,000 Capgemini group employees worldwide are members of IBM PartnerWorld, making Capgemini one of the largest participating business partners in IBM's business partner program. More than 1,600 Capgemini and IBM personnel use IBM collaboration technology tools to share information and manage joint programs and client projects.

- The Capgemini-IBM Alliance is backed by top-level executive sponsorship and participation to decide key priorities for joint investment and global go-to-market initiatives
- The Capgemini IBM alliance focuses its solution development, enablement and marketing efforts around strategic initiatives aligned with Capgemini's TechnoVision. Significant investment is being made in the development of joint offerings. Capgemini has developed valuable and re-usable solutions
- Over 2,000 of our Capgemini Engineers community are trained on IBM technology

Technology Coverage

As IBM extends its technology offerings through strategic and frequent acquisitions, Capgemini enables its teams to ensure they maintain unique expertise on IBM's comprehensive portfolio, including the following brands and technology areas:

- IBM Lotus®
- IBM Rational®
- IBM Tivoli®
- IBM WebSphere®
- IBM Information Management
- IBM Business Analytics
- IBM Enterprise Content Management
- IBM System p, x, z and i series servers
- IBM System Storage products

Partner-Speak

"IBM values Capgemini's commitment to developing industry-leading solutions, using IBM products and the investment in skills to support those solutions. That expertise delivers customer value in terms of successful solutions with high client satisfaction. Capgemini has also made significant strategic investments in IBM technology to support Business Information Management (BIM), Business Process Management (BPM), Smarter Commerce, Agile Legacy Lifecycle, Asset Management, Mobility and Testing solutions," - **Najette Kadri-Marouard, Global Client Director, IBM.**

9.2 Awards & Recognition

Capgemini's outstanding contribution to the alliance has been recognized by IBM over the years. Some of the recent awards include:

Capgemini Awards	Sogeti Awards (Part of Capgemini group)
<ul style="list-style-type: none"> ■ 2012 – Finalist, IBM Software Innovation Beacon Award for work at the Dutch Tax Office ■ 2011 – IBM Netherlands – Business Partner of the Year ■ 2011 – IBM France – Business Partner of the Year ■ 2010 – IBM Netherlands – Business Partner of the Year ■ 2008 – IBM Netherlands – IBM CSI Teaming Award ■ 2006 – IBM Netherlands – Alliance of the Year ■ 2005 – IBM Netherlands – CSI Most Innovative Partner ■ 2004 – IBM Netherlands – CSI Most Promising Partner 	<ul style="list-style-type: none"> ■ 2012 – Beacon Award for Social Business ■ 2012 – Social Business Agenda award, as the first IBM Business partner to do so. ■ 2011 – IBM Best System Integrator in France ■ 2011 - Beacon Award: Cloud Computing Innovation – Cloud Builder ■ 2010 – Outstanding Software Delivery in Product and Service Innovation with Rational ■ 2008 – Rational Excellence in Software Delivery ■ 2007 – Overall Technical Excellence in an IBM Business Partner

9.3 Investments

Capgemini has setup Solutions Centers and Labs based on IBM's portfolio. These centers develop innovative solutions and also act as incubation centers for new offerings around IBM products.

IBM WebSphere Center of Excellence

Its a critical piece of Capgemini's overall investments in the eco-system covering IBM related skills and technologies. The details for this have already been covered earlier in the document, under "Capability in middleware tools utilised by ANZ".

Innovation Labs in Madrid, Spain

A key platform for leveraging IBM related skills through launch of new initiatives in an efficient and easy way. It has 4 IBM supported CoEs: SOA / BPM, OSS (Tivoli and Netcool), FileNet (ACM) and Maximo.

Global BlueWorld Hub (GBW Hub)

The GBW Hub promotes sales and business development for Capgemini globally. Based entirely on an IBM® platform it is used to showcase and build our capabilities and credentials by leveraging IBM technology to win more business. Supported by a team of dedicated resources, the GBW Hub boasts a stable and robust platform, providing:

1. A Dedicated Center for promoting business development, demonstrating client value, and building skilled resources
2. The GBW Hub promotes sales and business development for Capgemini globally. Based entirely on IBM® platforms, it is used to showcase and build our capabilities and credentials

by leveraging IBM technology to win more business. Supported by a team of dedicated resources, the GBW Hub boasts a stable and robust platform, providing:

- Global reach: Accessible across the global Capgemini network with clients from countries including Netherlands, Germany, Australia, India and across sectors/service lines including Financial Services, BIM, Testing and Sogeti.
- A platform to build POC/Demos on IBM technology
- A showcase for client solutions and proof-of-concepts
- A platform for training and building skilled resources, and
- A forum to promote and support Capgemini's Centers of Excellence (CoE), focused on IBM technology, including:
 - Global Rational Quality Manager CoE
 - Lotus Notes® CoE
 - Maximo® CoE
 - DataStage® CoE
 - Cognos® CoE
 - MDM® CoE
 - FileNet® CoE
 - IBM BPM CoE

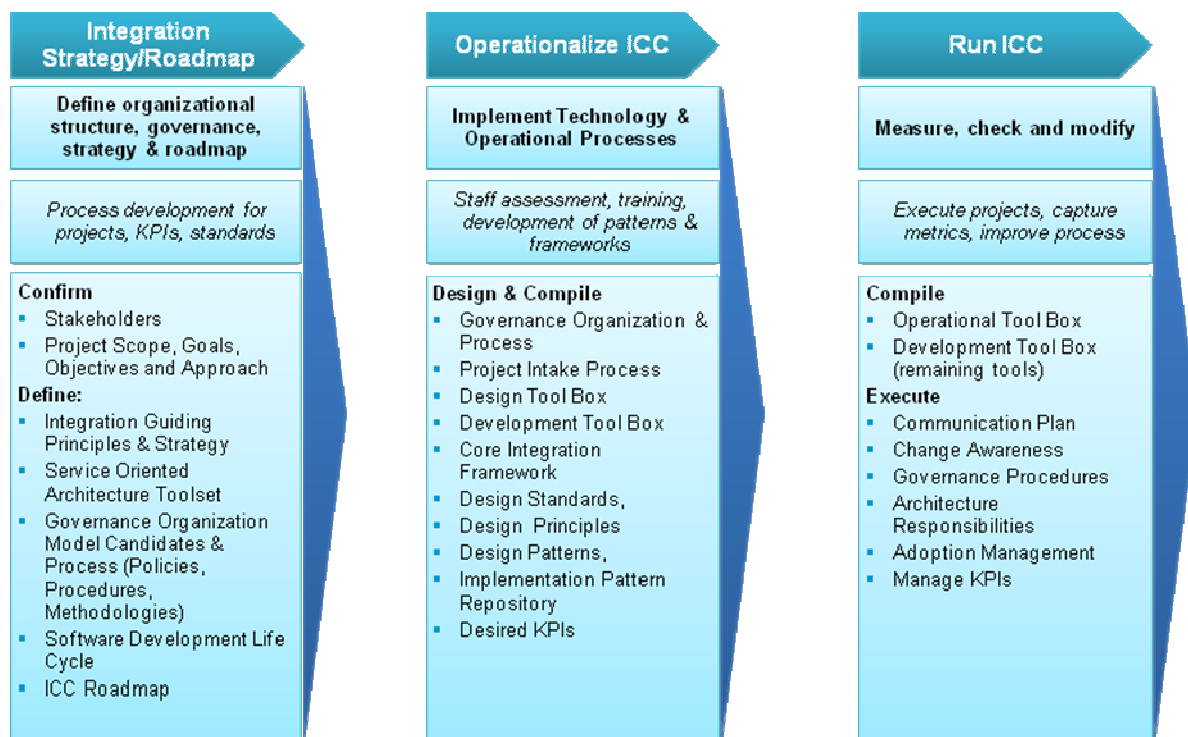
10. Governance, frameworks and protocols

10.1 SOA Governance Framework

Capgemini has a robust governance framework which allows the resources to pick and choose the wide range of tools from the toolkit to establish governance in client organization. The framework is built in order to provide tools and methods to deliver the following things.

- Service Portfolio Management
- Service Lifecycle
- Application and Integration portfolio management
- SOA Solution Portfolio Management
- SOA Solution Lifecycle
- Operating model development
- Business / Enterprise architecture

10.2 Governance Model

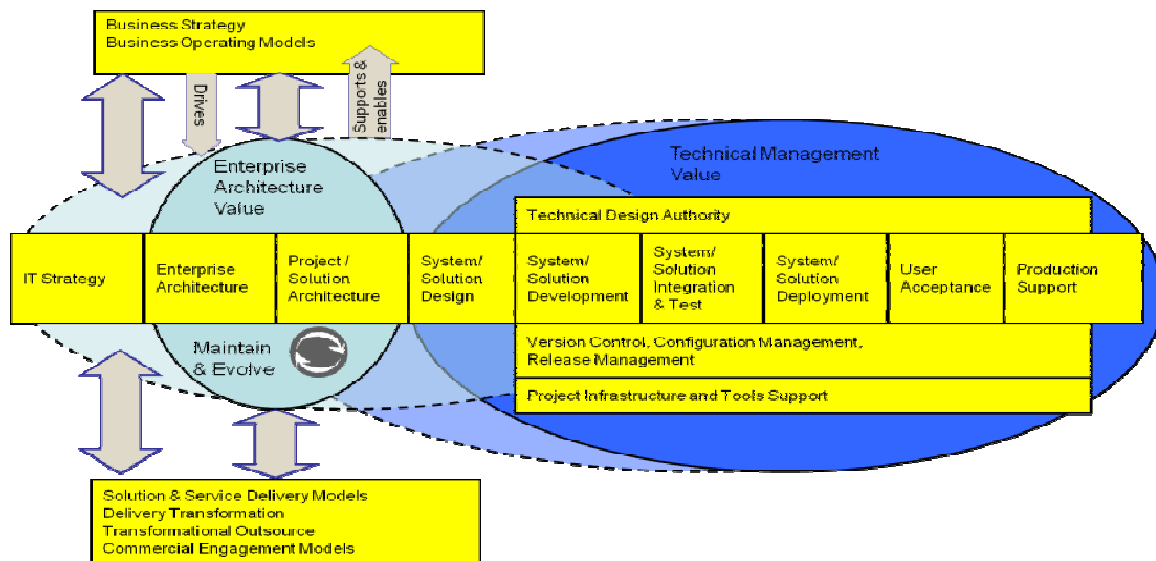


10.3 Integrated Architecture Framework – IAF

Integrated Architecture Framework is Capgemini's framework for architecture and business transformation engagements. The framework covers the Information Systems and Technology Infrastructure (IS&TI), Business and Information (B&I) aspects of such engagements, and provides an understanding of how the process of a large, generic IS&TI engagement can take shape. The IAF roadmap consists of the following four phases.

- Discovery, which coincides with the IAF Contextual phase
- Visioning, which coincides with the IAF Conceptual phase

- Create Reference Architecture, which coincides with the IAF Logical phase
- Prepare Implementation, which coincides with the IAF Physical phase.



10.4 IAF - Technical Implementation and features

- IAF is adhered and implemented with relevant technologies to allow customers to both store and register standards-based service metadata including WSDL, XSD and policy. This gives customers the ability to have a copy of record for all service metadata and thus ensures consistency throughout their enterprise.
- The publication of service metadata through tooling, UI or API allows customers to socialize their high value or standardized shared services encouraging interoperability and reuse.
- The ability to query and find service metadata is used at development time through tooling, for reuse of interfaces and schemas as well as static binding of service endpoints. At runtime these service queries through the API allow infrastructures such as the ESB (IBM WebSphere Message Broker) to make dynamic endpoint selection decisions based on metadata in the registry.
- The capture of service dependencies allows the impact of changes to be assessed. Consumers of services that are impacted by the change can be notified and thus take advantage of improvements and ensure that no degradation in quality of service occurs.
- Provides a basic mechanism for associating policies to services which allows the infrastructure (for example, WebSphere Message Broker) or application code to interpret and enforce the policy. This gives agility since policy is configured in the registry which can be changed quickly (without redeployment) but is still subject to governance).
- Allows client applications (and other middleware) to extend the metadata that can be represented beyond the out-of-the-box standards-based metadata. By providing user defined classifications, properties and relationships, WSRR can be extended to support any enterprise service metadata model.

- Supports validation plug-ins that can be configured to run whenever actions are performed against the registry. This means service metadata updates can be validated ensuring metadata integrity and (JMS) events generated to allow external applications to respond to the changes.

10.5 Integration Security framework

- **Authentication** – the framework supports to authenticate with any commercially available LDAP servers, such as Microsoft Active Directory or Tivoli Directory Server, by specifying the LDAP URL, and login credentials. The proposed solution shall also support mutual authentication with another application using SSL technologies (hashing, digital signature and digital certification)
- **Authorization** – the framework supports authorization using ACL of user profiles defined in the LDAP server.
- **Confidentiality** – the framework supports SSL technologies (secret key and RSA keys) to encrypt and decrypt the payload to prevent the content to be read by authenticate/authorized parties.
- **Data Integrity** – the framework supports SSL technologies (hashing) to ensure that tampering of data can be detected.

10.6 Continuous Integration & Build automation framework

Capgemini's continuous integration & build automation framework provides the toolset takes the business assets in the form of source code from the Source Code Control System and deploying it to an environment. It further extends to run automated testing which will check out, compile, deploy, then test the Components on a regular basis and report (via email) the success or failure of the test run.

Continues Integration framework has the following components.

- Hudson (Continuous Integration Server)
- Apache ANT, JUnit, SMTP server
- PVCS, PVCS command line client, SVN
- IBM Rational Build Forge, Rational Asset Manager

These are some of the features of the framework and the CI environments.

Tasks	Hudson
Installation and Setup	Primarily web UI setup with optional xml
SCM Integration	Support for PVCS, SVN
Build Notifications	RSS, email and IM

Build Reports	Use of JUnit to produce nice tables with history graphs
Test Reports	Use of JUnit to produce nice history graphs
Build Promotion	Automatic build promotion is configurable
Distributed Builds	Supported
Misc	Easier set up and configuration

The framework is built in such a way that the core components can be tweaked and scaled to suit any environment with minimal changes.

11. Assumptions

1. Capgemini does not have a comprehensive understanding of ANZ's challenges, objectives and road-map in the integration & SOA space. We assume to gain these insights in future and be able to correctly recommend the fit-for-purpose solution, approach & engagement models.
2. At this stage, we understand this request for information is to assess a high-level understanding of vendor capabilities and upon short-list, we shall be provided an opportunity to present our capability and experience in detail.
3. In line with ANZ's instructions, this document intends to provide only a summarized, high-level view of our relevant capability and experience. We assume that in future, an adequate opportunity would be provided to present a detailed view of our capability & experience.
4. We assume that ANZ would be keen to leverage offshore services to further optimize the delivery and resourcing of its Integration initiatives. We assume Wellington, New Zealand to be the onsite location and Bangalore India to be the offshore location for the same; this would enable the best leverage of current set-up in place for ANZ group and benefit from established infrastructure, connectivity, seating, tools and processes.
5. Capgemini has provided indicative/sample resumes for each of the roles mentioned in ANZ documents, to the best of our current understanding. We may request ANZ to allow us with replacements of these indicative resumes, if our understanding of the current landscape undergoes a change.
6. Some of the skills expected by ANZ are niche and not easy to source. Capgemini assumes that ANZ would provide the required inputs to plan the resourcing well in time and factor in adequate time for resource identification, ANZ selection, contractual & visa formalities and final on-boarding of resource.

12. Sample / Indicative resumes

Enclosed please find sample / indicative resumes for the below roles:

- Delivery Manager
- Design Lead
- Designer
- Data Modeller
- Developer