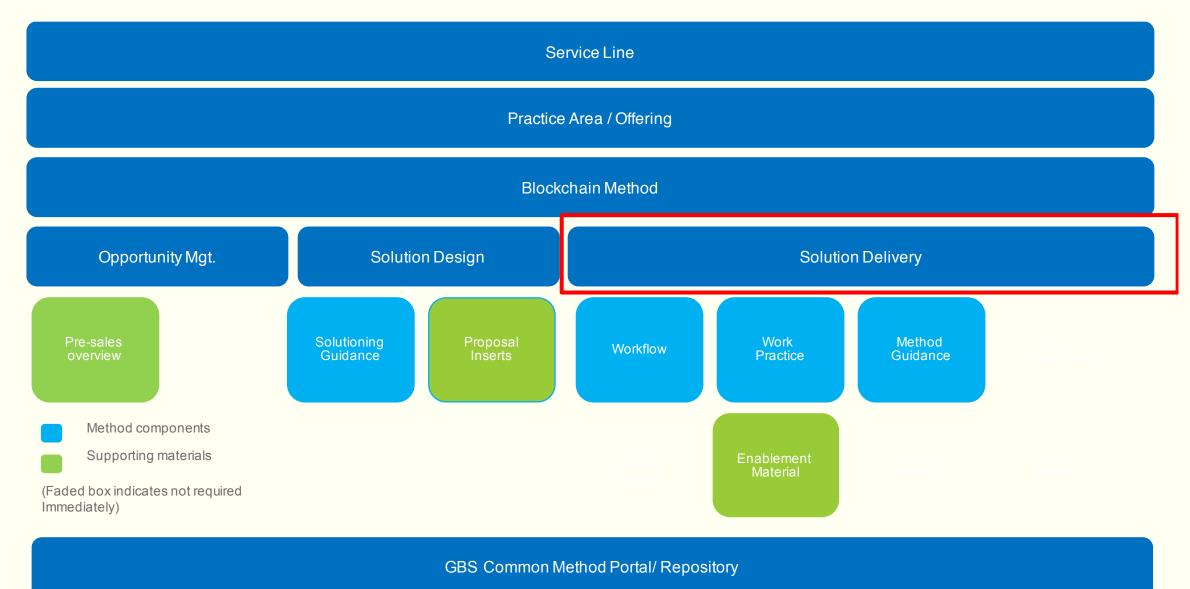
WORKFLOW

Blockchain Innovation

GBS Method

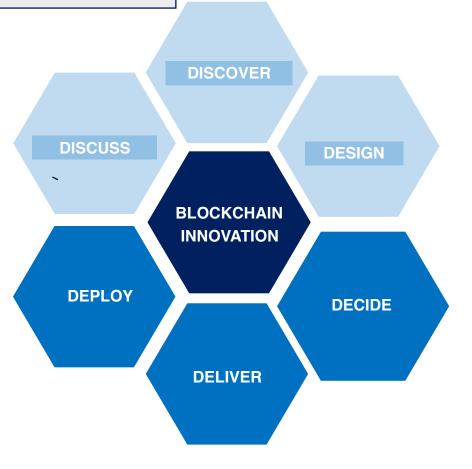
IBM Blockchain Innovation -Solution Delivery



IBM Blockchain Innovation

IBM Blockchain Innovation provides a practitioner friendly, tool based, light weight approach to deliver applications using Agile principles enabled by automation and DevOps.

- Plan and conduct user acceptance testing (UAT) for the Blockchain solution.
- Deploy solution after each increment using DevOps Tools.
 - Design, develop, integrate and test the Blockchain solution.
 - Adopt established delivery processes, tools and guidelines



IBM Blockchain Innovation

Opportunity Mgmt Solution Design

Solution Delivery

- Collaborate with client to finalize strategy, processes and technology for delivery
- Review Backlog & Sprint plans
- Validate the infrastructure, connectivity and tools

Design Principles for Blockchain Delivery

IBM's method for Blockchain provides a practitioner friendly, tool based, light weight approach to deliver applications using Agile principles enabled by automation and DevOps.

Test cases centric

development

A highly composable method provides components that can be selected and assembled in

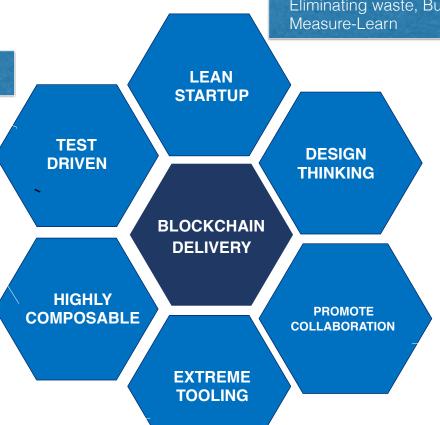
Promote, Standardize,
 Optimize Tool usage in each
 and every phase of the
 delivery lifecycle to bring in

various combinations to

satisfy specific project

requirements.

Less Documentation,
 Digital Media &
 Cognitive analysis,
 Quick turn around,
 Eliminating waste, Build Measure-Learn



IBM Blockchain Innovation

Opportunity Mgmt Solution Design

Solution Delivery

- User centric focus, Cross discipline collaboration, Quick iteration, Stakeholder interviews, Empathy mapping, Minimum Viable Product, User story approach – All results in Delivering Great Experience
- Promote collaboration and communication for collocated as well as distributed teams. Promote usage of digital collaboration platforms and reduce communication gaps, enhance trust within and across teams.

Decide – Work with all stakeholders for successful commencement of delivery

Project On-boarding

Project Planning and **Governance**

Design Guidelines

Architecture and Technical Design

DevOps Delivery Procedure

-- ACTIVITIES

- Onboard PM and key resources
- Register BMS Account ID & Generate work items
- Conduct Project Kick-off
- Review SoW, Scope Solution & IBM commitments
- Conduct Project planning workshop
- Identify User stories for initial three sprints
- Define Roles & Responsibilities
- Define Test strategy
- Review & confirm plans with key stakeholders
- Initiate environment setup

- Define technical stack for Chain code and UI
- Finalize the Devops strategy and tools
- Define Security parameters and Data Privacy
- Define scope and requirements for Smart Contract

- Execute technical workshop
- Review existing IT landscape & standards
- Develop architectural decisions
- Develop end-to-end Blockchain architecture
- Identify & agree NFRs
- Define integration and security approach
- Define technical dependencies
- Leverage and optimize code

- Execute DevOps workshop
- Define key delivery processes
- Install & configure tools
- Establish client connectivity
- Initiate DevOps platform
- Configure platform access
- Identify dashboard requirements
- Define configuration management tools & procedure

DELIVERABLES

- Project Charter
- Kickoff and Project charter.
- Governance & Escalation Matrix,
- Project Organization Chart
- Weekly Project Reports
- Prioritized list of backlog stories
- Project Sprint Plan & Schedule
- RACI Matrix
- Test Strategy

- Data Security and Privacy assessment
- Architecture Decisions document
- Architecture Overview diagram and High level design document.

- Updated Project Handbook
- DevOps Setup

• TOOLS, ASSETS

- PMP Tool and MS Project, JIRA, MS Excel
- JIRA, MS Excel, MS PPT
- Keynote / Power Point/Visio
- MS Visio, Drawing tools, MS Word/Powerpoint

Deliver – Design, Develop, Integrate and Test Solution in iterative manner

Sprint Planning Due Diligence UX Design Technical Design Build, Integrate and Review and Test **ACTIVITIES** Generate and review project Develop user interface, backend logic Identify security and performance Backend / Infra readiness Create navigation flows for the backlog and prioritize & integration parameters scope of work in the sprint assessment Capture user story description Identify UI components and libraries Perform unit testing and deploy DevOps impacts and Develop Wireframes and visual (business logic, assumptions solution across environments assessments design for the approved Develop detail technical designs and risks) Start engaging other teams / Perform static code analysis wireframes Create API definitions & validate API Estimate Story points and Business Units as required Conduct user testing Collaborate effectively for defect readiness Sprint Velocity to plan the Review Project plan with relevant tracking backlog Leverage assets & accelerators stakeholders Create test cases & test data Define test plan including test Review MDM, Hosting, Middleware data requirement Perform System Integration Test impacts Develop test cases Perform security & performance testing Identify & Communicate client dependencies UAT preparedness and readiness **DELIVERABLES** Architecture Decisions UX Design Artifacts Test Results Finalized backlog with the Requirements Document with document (personas, journeys, customization and enhancements Acceptance Criteria. Production ready application in Architecture Overview wireframes) various environments Prioritized requirements and Sprint Plan, Test Plan, diagram complete Due Diligence Checklist Client Dependencies • High Level Design Document • TOOLS, ASSETS Fabric Composer, Jenkins, JUnit, MS Power Point MS word, Swagger, SOAP UI Jira Jira SonarCube, Cucumber, Git, Selenium Photoshop

Deploy – Launch Blockchain Solution

IBM Blockchain Innovation

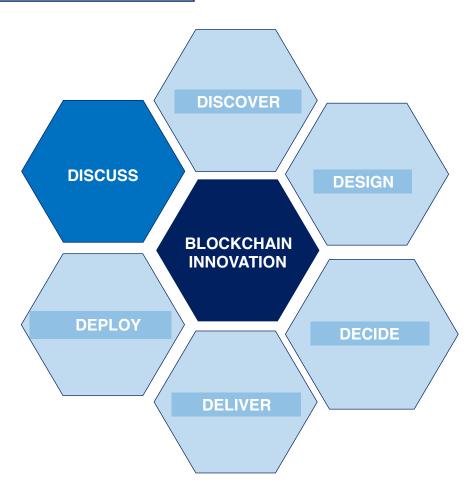
Opportunity Solution Solution Design Delivery

User Acceptance	Deploy	Launch	Hypercare
 ACTIVITIES Validate UAT test plan Create UAT test data Perform / Support User Acceptance Testing Record test results Fix defects (UI / integration & functional) Receive UAT Sign-off Evaluate Deployment preparedness and readiness 	 Create production build Data Migration activity (if applicable) Install adapters and integrator in the production environment Complete production verification testing (client-driven) - PVT Receive PVT sign-off Evaluate Application launch preparedness & readiness 	 Create training documentation for endusers Support any client requested training Validate support readiness 	 Full development support Defect Monitoring & Fixing Ensure system availability User level training Develop handover doc preparation Build to RUN transition initiation
 DELIVERABLES UAT Test Plan Test Results Solution Packaging & Deployment Artifacts 	 Deploy documentation 	 Training Document (User Manual) Project closure report 	 Updated Training Manual
 TOOLS, ASSETS JIRA for defect management DevOps Tools & Processes, Deployment Preparedness Checklist 	Jenkins	• MS Word,	

IBM Blockchain Innovation - Discuss

IBM Blockchain Innovation provides a practitioner friendly, tool based, light weight approach to deliver applications using Agile principles enabled by automation and DevOps.

> Collaborate with the client to optimize delivery processes, harvest assets/accelerators, add additional capabilities



Discuss – Enhance, Support & Optimize Solution

Solution Support

Enhance and Expand

Optimize

--- ACTIVITIES

- Transition from dev to support team
- Establish review and communication mechanism
- Fix defects
- Update architecture and Smart Contract documentations for application fixes

- Understand & Analyze solution enhancements
- Add advanced features / functionalities
- Implement Advanced features
- Expand Project scope by adding add-on Project services
- Add Project resources to 1) support additional development sprints, 2) support additional UAT sprints
- Develop roadmap for enhancements

- Assetization harvest assets & accelerators
- Improve technical designs
- Upgrade tools & services
- Improve delivery procedures (service level, incident, configuration, change, upgrades)
- Optimize support model
- Knowledge management

DELIVERABLES

Blockchain application with fixes, Updated application documentation

- Prioritized List of Enhancements,
- Implementation Roadmap, Proposal / PCR for enhancement
- Value Realization

- Optimized Roadmap, Lessons Learned, Reusable Assets,
- Improved Delivery Procedures, Proposal / PCR for additional resources & add-on services

• TOOLS, ASSETS

- Blockchain Solutioning tool,
- Project Planning Tool,
- Microsoft Word

- Blockchain Solutioning tool
- Microsoft Word,