

Chapter 6: Deployment, Piloting & Scaling

6.1 The Agile Delivery Methodology: Sprints and Ceremonies

8-Month Sprint-Based Implementation Framework

GovBot follows a structured **8-month agile implementation plan** comprising **16 sprints**, ensuring systematic progression from foundation setup to full deployment and handover.

Sprint Governance and Timeline

Sprint Phase	Timeline	Key Objectives	Critical Deliverables
Sprint 0: Foundation Setup	April 14-25	Establish project vision, governance, and documentation	Vision Document, System Requirements Documentation, Risk Register, Agile Work Plan
Sprints 1-2: Kickoff & Agile Setup	April 14-May 02	Align teams and initiate Agile delivery	Kickoff Report, Product Backlog, System Architecture, NLP Resources Inventory
Sprints 3-4: Architecture & Model Init	May 05-30	Finalize system design and initiate AI pipeline	Approved Architecture, NLU Model v1, CMS & Vector DB Design, CI/CD Pipelines
Sprint 5: MVP Build	June	Develop chatbot MVP	Public Beta MVP, Web + USSD Interface, Dialog Flow Tests, Beta Feedback Framework
Sprints 7-8: Testing & Integration	July	Conduct internal testing and refinement	GovStack Sandbox Deployment, Alpha Feedback Summary, Bias Testing Report
Sprints 9-10: Community & Governance	August	Engage community and publish governance	IP DPG Governance Document, NLP Workshop Report, Training Materials
Sprints 12-13: Public Testing	September	Prepare for larger-scale public exposure	Public Beta Usage Report, Support SOPs, Training Guides, Privacy Assurance

Sprint Phase	Timeline	Key Objectives	Critical Deliverables
Sprints 13-14: Soft Launch	November	Launch to live platforms with monitoring	Live Chatbot Deployment, Real-time Feedback Systems, Support Desk Operational
Sprints 15-16: Stabilization & Handover	Month 8	Finalize and ensure go-live	Source Code Archive, Open-Source Release, Implementation Report, Scale-up Roadmap

Implementation Team Structure

- **Lead Implementer:** THINK
- **Key Partners:** GIZ, ICTA, KoTDA, MICDE, KFCB, KCAA
- **Cross-functional Teams:** Project Management, AI/ML Engineers, DevOps, Software Engineers, QA, Community Lead

6.2 The Phased Deployment Strategy

Phase 1: Foundation and Architecture (Sprints 0–4)

a) Key Activities

- **Governance Establishment:** Vision & Scope, IP Strategy
- **Stakeholder Alignment:** Stakeholder Map, Risk Register, Agile Model
- **Technical Foundation:** Product backlog, system architecture
- **AI Pipeline:** Initial NLU training (English & Swahili), TTS/STT feasibility

b) Deliverables Status

- Vision Document
- System Requirements Documentation
- Risk Register
- Agile Work Plan
- NLP Resources Inventory (KenCorpus, etc.)
- Governance Structure & Reporting Setup

Phase 2: MVP Development and Sandbox Testing (Sprints 5–8)

a) MVP Capabilities

- Public Beta MVP: Web + mobile prototype
- Multimodal Interaction: Text + Voice
- Speech Technology: STT/TTS integration
- Basic Dialog Flows: Primary user journeys

b) Sandbox Integration

- **GovStack Sandbox Deployment:** Horizontal prototype testing
- **Internal Alpha Testing:** Full functionality checks
- **Performance Benchmarking:** NLP stress tests
- **Quality Assurance:** Bias, security, performance validation

c) Current Status (Sprints 7-8)

- Alpha Feedback Summary
- Updated Dialog & Models (*Started*)
- Finalized Bias Testing Report
- Stable Sandbox Build

Phase 3: Community Engagement & Governance (Sprints 9–10)

a) Community Activities

- NLP Community Meetup
- Digital Public Good Governance Framework
- Capacity Building for officials
- Knowledge Capture for iteration

b) Deliverables Completed

- IP DPG Governance Document
- NLP Workshop Report
- Training Deck
- Community Notes

6.3 Infrastructure and Operational Readiness

A) Technical Infrastructure Deployment

Infrastructure Component	Timeline	Status	Details
Server Configuration	July Week 4	Documentation in Review	Sustainable server deployment
Analytics Dashboard	July Week 4	In Development	System monitoring & analytics
Admin Dashboard	July Week 4	In Development	Ministry content management
Backup & Restore Policy	July Week 4	Created & Tested	Disaster recovery & continuity

B) Training & Support Framework

Training Stream	Timeline	Approach	Resources
Communications Team	Aug Week 1	One-week retreat	Messaging + comms strategy
IT/Technical Team	Aug Week 1	Hands-on workshops	Administration + support
Process Owners	Aug Week 1	Role-based training	Workflow management
Help Desk Setup	Aug Week 1	Operational readiness	Support channels + escalation

6.4 Soft Launch and Public Deployment (Sprints 12–14)

A) Public Testing Phase (Sprints 12–13)

- **Target Users:** Citizens + Civil Servants
- **Feedback:** Real-world usage and satisfaction metrics
- **Usability Testing:** End-user UX testing
- **Support Setup:** Help desk + FAQs + escalation
- **Data Protection:** Continuous privacy compliance

B) Live Deployment (Sprints 13–14)

- **Platform Integration:** Live government portals
- **Real-time Monitoring:** Performance & issue tracking
- **Support Activation:** Hotline + FAQs + incident response
- **Public Feedback:** Continuous improvement

6.5 Contingency and Risk Management

A) Rollback & Recovery Planning

- Defined rollback checkpoints
- Disaster recovery + business continuity
- Measurable go/no-go criteria
- Authority for go-live decisions

B) Stakeholder Communication

- Awareness campaign
- Change management timeline
- Resource planning post-launch
- Issue escalation via DevOps

6.6 Stabilization & Handover (Sprints 15–16)

A) Final Project Deliverables

- Source Code Handover (models + training data)
- Open-Source Release repository
- Comprehensive Implementation Report
- National Scale-up Roadmap

B) Success Metrics and Monitoring

Metric Category	Measurement Approach	Responsible Party
Technical Performance	Uptime, response time, accuracy	DevOps + QA
User Adoption	Query volume, satisfaction, channels	Analytics + Ministry Partners
Operational Impact	Call center reduction, efficiency	Gov IT + Process Owners

Metric Category	Measurement Approach	Responsible Party
Business Value	ROI, benefit to citizens	PM + Stakeholders

6.7 Go-Live Readiness Criteria

A) Pre-Launch Verification

- User Acceptance Tests signed off
- All defects resolved
- Performance testing successful
- Interfaces tested + validated
- IT Deployment Plan approved
- Resources confirmed
- Handover Plan approved

B) Post-Launch Support

- **Immediate Support:** Active help desk
- **Escalation Protocols:** Defined & documented
- **Continuous Monitoring:** Real-time analytics + feedback
- **Stakeholder Updates:** Regular status reporting

“ This structured deployment ensures GovBot becomes a production-grade government platform with continuous improvement, monitoring, and national-scale support readiness.