# QAI Project Document Pack – Checklist (Populated for QAI\_PoC\_Portfolio\_Optimization)

This document pack provides the required checklist and populated details for the approved **QAI Portfolio Optimization PoC** conducted by **Bhadale IT Hub**. It includes sections for **Legal/IP, Financial, Operational, and Risk & Compliance**.

## 1. Legal & Intellectual Property (IP)

* **Non-Disclosure Agreement (NDA)**  
  *Parties Involved:* Bhadale IT Hub, {{Client\_Name}}  
  *Scope:* Confidentiality of QAI portfolio optimization methods, financial datasets, prototype code.
* **IP Ownership Agreement**  
  *Background IP:* QAI Processor, QAI Datacenter, QAI OS, QAI Ops, QAI PLM frameworks, and QAI Portfolio Optimization prototype.  
  *Foreground IP:* Project-specific optimization datasets, refined models, reports generated during PoC.  
  *Ownership Structure:* Background IP remains with Bhadale IT Hub; Foreground IP shared under client license.
* **Patent Filings / Provisional Applications**  
  *Areas Covered:* Hybrid QAI optimization frameworks, combinatorial QUBO encoding, simulated annealing + continuous reweight hybrid method.
* **Technology Transfer Agreement**  
  *Transfer Scope:* Colab notebook, Python code, project documentation, performance metrics.  
  *Restrictions:* Reuse restricted to project scope, no transfer to competitors.

## 2. Financial & Commercial

* **Master Service Agreement (MSA)**  
  Governs relationship, liability, warranty clauses for portfolio optimization project.
* **Statement of Work (SoW)**  
  *Deliverables:* Colab notebook, GitHub repo, PoC report, figures, and presentations.  
  *Timeline:* 12-month pilot project.  
  *Milestones:* PoC completion → Pilot → Full rollout.  
  *Success Criteria:* Demonstrated optimization improvements, scalability beyond classical methods.
* **Pricing & Billing Structure**  
  *Model:* Hybrid – base fee + performance incentive.  
  *Cost Breakdown:* Staff ($150,000), Cloud Compute & Licenses ($40,000), Lab Access ($30,000), Travel ($10,000), Contingency ($20,000).  
  *Payment Schedule:* Quarterly billing against milestones.
* **Accounting / Audit Provisions**  
  Reporting: Quarterly financials to client steering committee.

## 3. Operational & Management

* **Governance Charter / Steering Committee Terms**  
  *Decision-making body:* Joint Steering Committee (client + Bhadale IT Hub).  
  *Meeting Cadence:* Monthly reviews.
* **Resource & Responsibility Matrix (RACI)**  
  *Client-managed:* Secure financial datasets, compliance approval.  
  *Startup-managed:* Algorithms, code, optimization framework, research staff.  
  *Shared:* Reporting, pilot execution.
* **Data Handling Agreement**  
  *Data Sources:* Synthetic datasets + client-provided anonymized data.  
  *Storage/Access:* Secure cloud (client-approved).  
  *Compliance:* PIPEDA (Canada), GDPR (EU clients).
* **Operational Continuity Plan**  
  Failover: Multi-cloud redundancy.  
  Disaster Recovery: 48-hour RTO.

## 4. Risk & Compliance

* **Cybersecurity Checklist**  
  *Standards:* ISO27001-aligned controls; NIST risk framework.  
  *Penetration Testing:* Required for client deployment phase.
* **Ethical AI / Quantum Compliance Statement**  
  *Bias Mitigation:* Portfolio selection tested against fairness metrics.  
  *Explainability Tools:* Reporting with visual frontiers and allocation transparency.
* **Insurance Coverage**  
  *Tech Liability (E&O):* To be procured.  
  *Data Breach Insurance:* To be procured.
* **Multi-Vendor Coordination** (if applicable)  
  *Non-Disclosure across Vendors:* Required clause if multiple PoC vendors are selected.  
  *Joint Test Plan / Metrics:* Client defines evaluation KPIs.  
  *Escrow Arrangements:* Optional for source code.

## 5. Internal Startup Preparation

* **IP Docket** – Documented all QAI frameworks (Processor, OS, Datacenter, Robots, Ops, PLM, Portfolio Optimization).
* **Patent Roadmap** – Provisional filings for hybrid QAI portfolio optimization and system-level QAI integration.
* **Governance Model** – Org chart with research staff (Quantum engineer, AI researcher, Financial data analyst).
* **Cost Sheet** – Total $250,000 request for 12 months.
* **Growth Story** – Path: PoC → Pilot with financial client → SaaS product release → Cross-industry adoption.

### ✅ Usage Notes

* All populated fields based on **QAI\_PoC\_Portfolio\_Optimization\_package** deliverables.
* Placeholders remain for client-specific details (e.g., {{Client\_Name}}, {{Payment\_Terms}}).
* This serves as a reference pack for project governance, funding, and IP protection.