BoQ Management Platform — Comprehensive Project Proposal

# Executive Summary

The construction sector is overdue for digital transformation in its core financial and progress management workflows. The BoQ Management App will enable contractors, architects, interior designers, project owners, and consultants to manage Bill of Quantities, automate milestone-based billing, and gain real-time project and payment visibility.

Our goal is to reduce billing disputes, accelerate cash flow, improve compliance, and increase operational efficiency, targeting medium to large construction, engineering, and infrastructure firms globally.

# Market Opportunity & Research

## Global Market Context

1. **Global construction output: $13.57 trillion (2023, Statista)**
2. **IT Spend in Construction: $180B+/year (Statista, IDC)**
3. **SaaS construction software CAGR: 9.3% (Markets&Markets)**

## Target Markets

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Country | Construction Market (in billions) | Key Drivers | Digitalisation | Notes |
| UK | $420 | BIM Mandates, RICS | High | Strong compliance focus |
| Germany | $320 | Compliance, ERP | Med-High | Many mid-size firms, SME opportunity |
| USA | $2100 | Legacy upgrade, scale | Medium | Dominated by legacy ERPs |
| India | $800 | Infra push, GST, audit | Growing | Public sector, infra, rapid change |
| UAE/KSA | $300 | Mega-projects, audits | High | Fast digital adoption |
| Australia | $200 | Mining, compliance | High | High SaaS acceptance |

## Segment Sizing

1. TAM (Total Addressable Market): $2.5–4B globally (focused SaaS billing/project mgmt.)
2. SAM (Initial Target): $500M (UK, India, USA, Germany, Middle East, Australia)
3. SOM (Year 1–3 realistic share): $5–10M

# Problem Statement

1. **Manual BoQ** processes are slow, error-prone, and invite payment disputes.
2. **Excel-based workflows** lack traceability, version control, and audit readiness.
3. **No single source of truth** between owners, contractors, financiers, and auditors.
4. **Compliance risks:** VAT, GST, BIM, and government audits require digital records.
5. **Delayed billing/cash flow:** Payments tied to unclear or untracked milestones.

# Solution Overview

The BoQ Management App provides:

1. **BoQ Upload & Builder:** Intuitive drag-and-drop or Excel upload for project BoQ.
2. **Flexible Payment Breakups:** Custom billing milestones per line item.
3. **Progress & Evidence Tracking:** Upload work completion for each item.
4. **Automated Billing:** Bills generated once milestone/progress is achieved.
5. **Real-Time Dashboard:** Track financials, progress, and pending actions.
6. **Role-based Access:** Secure login for clients, contractors, project managers.
7. **Compliance Tools:** GST/VAT ready, audit logs, export for regulators.

# Competitive Advantage

|  |  |  |  |
| --- | --- | --- | --- |
| Feature | Our App | Procure/Autodesk | Excel/Manual |
| Custom Payment Breakups | Yes | Partial | Manual only |
| BoQ Upload & Builder | Yes | Yes | Yes |
| Automated Billing Triggers | Yes | No | No |
| Price (SME-friendly) | Low ($20-$100) | High $350+ | N/A |
| Local compliance (GST/BIM) | Yes | US/EU focused | Manual only |
| Quick onboarding | Yes | Weeks | Yes |

# Business Model

1. SaaS Subscription: Monthly/yearly per project/org (Freemium available)
2. Professional Services: Onboarding, legacy data digitization
3. Integrations: Paid connectors to accounting/ERP, tax software
4. Premium Analytics: Benchmarks, custom reports, multi-project dashboards

# Product Features (MVP & Roadmap)

## MVP Features

1. User registration/login, role-based dashboard
2. Project creation, BoQ builder/upload
3. Add/Edit payment breakups per BoQ line item
4. Track and update progress per BoQ item
5. Upload completion evidence/files
6. Automated invoice/bill generation
7. Project analytics dashboard (progress, financials, pending bills)
8. Export to Excel/PDF
9. Basic integration (CSV/API) for accounting

## Roadmap Features (6–18 months)

1. Deep ERP integrations (SAP, Tally, QuickBooks)
2. AI anomaly detection (billing, progress deviation alerts)
3. Mobile app (React Native/PWA)
4. Multi-language, multi-currency support
5. E-signatures, payment gateway integration
6. Vendor/subcontractor management
7. Country-specific compliance modules (GST, VAT, BIM)

# Technical Architecture

1. Frontend: React, Tailwind CSS, Material UI, Framer Motion (for animation)
2. Backend: Python, FastAPI, Pydantic, Uvicorn
3. Database: MySQL (extensible to DynamoDB)
4. Data Processing: Polars for high-performance data operations
5. Authentication: JWT, hashed passwords, RBAC
6. Cloud Hosting: AWS/Azure, Docker-ready
7. Security: CORS, encrypted data, audit logs
8. Documentation: API-first, OpenAPI spec

## Execution Plan

## Team Structure

|  |  |  |
| --- | --- | --- |
| Role | Name | Background |
| Product Lead/Founder | TBC |  |
| Backend Lead | TBC |  |
| Frontend Lead | TBC |  |
| QA/Test Engineer (Manual & Automation) | TBC |  |
| Customer Success (Onboarding, Pilot feedback) | TBC |  |
| Advisor | TBC |  |

## Milestone Timeline

|  |  |  |
| --- | --- | --- |
| **Phase** | **Duration** | **Milestones/Deliverables** |
| Design | 1 Month | UI/UX wireframes, tech setup, team onboard |
| MVP Build | 2 Months | Core modules (auth, BoQ, billing, dashboard) |
| Testing | 1 Month | QA, pilot client onboarding |
| Beta Launch | 1 Month | Early clients (UK, India), feedback loop |
| Expansion | 2 Months | Integration, mobile, global launch |

## Detailed Steps

1. Design: Figma wireframes, user flows, branding, database modeling
2. Setup: CI/CD, cloud infra, test/staging/dev environments
3. MVP Dev: Core frontend and backend, API endpoints, security
4. Testing: Unit/integration tests, early pilot customer feedback
5. Iteration: Rapid bug fixes, usability polish, feedback-driven features
6. Go-to-Market: Onboarding guides, website, webinars, LinkedIn campaigns
7. Scale: Add integrations, local compliance, mobile, advanced analytics

# Go-To-Market Strategy

* 1. UK/Europe: Target mid/large construction, leverage LinkedIn, RICS, and trade associations
  2. India: Target EPCs, infra, and government contractors; webinars, accounting partners
  3. USA: Focus on SME contractors underserved by legacy tools, channel sales
  4. Middle East/Australia: Partner with local consultants, focus on compliance-driven adoption

Tactics:

* 1. Digital marketing (LinkedIn Ads, webinars, SEO)
  2. Industry events, thought leadership articles
  3. Partnership with accounting/ERP integrators
  4. Freemium or risk-free trial for rapid onboarding

1. Risk Analysis & Mitigation

|  |  |  |
| --- | --- | --- |
| **Risk** | **Severity** | **Mitigation** |
| Adoption | High | Simple UX, free onboarding, support |
| Security | Medium | Pen-testing, encryption, GDPR |
| Regulatory | Medium | Modular compliance, local legal review |
| Competitors | High | Focus on billing, price, local needs |
| Funding Runway | High | Lean ops, milestone-based investment |

1. Financials & Investment
   1. Funding Need: £150,000 (pre-seed, 12–18-month runway)
   2. Use of Funds: 60% dev, 20% GTM, 10% infra, 10% ops/legal
   3. Target:
      1. Year 1: 50+ clients, £60K–£100K ARR
      2. Year 2: 250+ clients, £300K+ ARR
   4. Break-even: Projected in 18–24 months
   5. Offering: 10–15% equity (negotiable)
2. Conclusion

The BoQ Management App delivers a real solution to a multi-billion-dollar problem, with global applicability and a clear business case. The time is right to digitize construction billing, drive compliance, and empower all project stakeholders.

Join us in transforming how projects are delivered and paid for—faster, fairer, and more transparently.

1. Appendix
   1. Sample UI wireframes/screenshots (attach as needed)
   2. Founding team bios/CVs
   3. Detailed technical schema (on request)
   4. Example BoQ workflows/scenarios
   5. Testimonials from early pilot users (as available)