

Technical Co-Founder Requirements: CapitalGoods.io

Platform: B2B Demand-Driven Marketplace for Capital Goods (Mexico)

Stage: Pre-launch / MVP Development

Equity: 20-30% co-founder equity

Location: Remote-friendly (Mexico preferred)

Executive Summary

CapitalGoods.io is building a professional procurement platform for the Mexican B2B capital goods market, combining SAM.gov-style formal procurement with modern marketplace features. We need a technical co-founder to build and scale a two-sided marketplace that handles complex bidding workflows, KYC verification, and integrated financial services.

The Opportunity: \$150-200B Mexican construction/industrial market with no dominant digital procurement platform. Beachhead: mid-size construction companies (50-200 employees) in Monterrey, Guadalajara, and Estado de México.

What We're Building

Core Platform Features

1. Demand-Driven Marketplace

- Buyers post solicitations (RFQ, RFP, IFB, Sources Sought, Direct Request)
- Verified suppliers submit competitive bids
- Structured procurement workflows (similar to SAM.gov)
- Real-time bidding and notifications

2. Professional Procurement Tools

- Multiple solicitation types with formal submission processes
- Sealed bid mechanism (IFB)
- Bid comparison and evaluation tools
- Document management (specs, drawings, proposals)
- Public/private listing options

- Deadline management and auto-close

3. Trust & Verification System

- Mandatory KYC verification (5 required documents)
- Enhanced verification tier with premium features
- Trust scores and verification badges
- Community endorsements (separate from ratings)
- Transaction verification

4. Social & Community Features

- Company profiles with project portfolios
- Follow/follower system
- Public updates feed (LinkedIn-style)
- Sector discussion forums
- Peer endorsements

5. Financial Services Integration

- P2P payments (Stripe/Mexican payment processors)
- Invoice factoring partnerships
- Credit lines for suppliers
- Escrow-ready payment flows

6. CRM & Analytics

- Supplier: Lead tracking, contact management, opportunity pipeline
 - Buyer: Vendor management, P/O tracking, spend analytics
 - Platform: User behavior, conversion metrics, GMV tracking
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Technical Architecture Requirements

Frontend Stack

Required Technologies:

- **Framework:** React.js or Next.js (preferred for SEO)
- **State Management:** Redux or Zustand
- **UI Library:** Tailwind CSS + Headless UI or Material-UI

- **Forms:** React Hook Form + Yup/Zod validation
- **Real-time:** Socket.io or Pusher for live bidding updates
- **File Upload:** AWS S3 or Cloudinary integration
- **Charts/Analytics:** Chart.js or Recharts

Key Frontend Features:

- Responsive design (mobile-first)
 - Bilingual (Spanish/English) with i18n
 - Real-time bid notifications
 - Document viewer (PDF, images)
 - Advanced search and filtering
 - Drag-and-drop file uploads
 - Interactive bid comparison tables
 - User dashboard with widgets
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Backend Stack

Required Technologies:

- **Language:** Node.js (Express/Fastify) or Python (Django/FastAPI)
- **Database:** PostgreSQL (relational data) + Redis (caching, sessions)
- **ORM:** Prisma (Node.js) or SQLAlchemy (Python)
- **Authentication:** JWT + OAuth 2.0 (Google, LinkedIn)
- **API:** RESTful + GraphQL (optional but preferred)
- **File Storage:** AWS S3
- **Email:** SendGrid or AWS SES
- **Queue:** Bull (Node.js) or Celery (Python) for async tasks
- **Search:** Elasticsearch or Algolia

Key Backend Features:

- User authentication and authorization (role-based)
- KYC document upload and verification workflow
- Bidding engine with sealed bid logic
- Notification system (email, in-app, SMS)

- Payment processing integration
 - Admin dashboard for verification and moderation
 - API rate limiting and security
 - Audit logs for compliance
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Database Schema (Core Entities)

Users

- id, email, password_hash, role (buyer/supplier/admin)
- company_name, location, industry
- verification_status, trust_score
- created_at, updated_at

Companies

- id, name, legal_name, RFC/tax_id
- address, city, state, country
- verification_documents (JSON)
- verification_tier (basic/verified/enhanced)
- employee_count, years_in_business

Solicitations

- id, user_id, type (RFQ/RFP/IFB/SS/SSL)
- title, description, requirements
- budget, currency, deadline
- category, location, visibility (public/private)
- status (open/closed/awarded)
- created_at, closes_at

Bids

- id, solicitation_id, supplier_id
- price, currency, proposal_text
- documents (array of file URLs)
- status (pending/accepted/rejected)
- is_sealed (boolean for IFB)

- submitted_at

Transactions

- id, buyer_id, supplier_id, solicitation_id
- amount, currency, status
- payment_method, payment_id (Stripe)
- created_at, completed_at

Verifications

- id, user_id, document_type
- file_url, status (pending/approved/rejected)
- reviewed_by, reviewed_at
- expiry_date (for insurance, licenses)

Endorsements

- id, endorser_id, endorsed_id
- category (delivery/quality/communication/pricing)
- comment, transaction_id (verified)
- helpful_count, created_at

Forum_Threads

- id, category, title, author_id
- content, tags, is_pinned, is_solved
- view_count, reply_count, created_at

Infrastructure & DevOps

Hosting & Deployment:

- **Cloud Provider:** AWS, Google Cloud, or DigitalOcean
- **Web Server:** Nginx or Cloudflare
- **Container:** Docker + Docker Compose
- **Orchestration:** Kubernetes (for scale) or simple EC2/Droplets initially
- **CI/CD:** GitHub Actions or GitLab CI
- **Monitoring:** Sentry (errors), Datadog or New Relic (performance)

Security Requirements:

- HTTPS/SSL certificates (Let's Encrypt)
- OWASP Top 10 compliance
- SQL injection prevention
- XSS and CSRF protection
- Rate limiting and DDoS protection
- Encrypted file storage
- PCI DSS compliance (for payments)
- GDPR/CCPA compliance (data privacy)
- Mexican LFPDPPP compliance (personal data protection)

Scalability Considerations:

- Horizontal scaling (load balancer + multiple instances)
 - Database read replicas
 - CDN for static assets (CloudFront, Cloudflare)
 - Caching strategy (Redis for sessions, API responses)
 - Async job processing (email, notifications, document processing)
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Third-Party Integrations

Required Integrations:

1. Payment Processing

- Stripe (international cards, ACH)
- Mexican payment processors (SPEI, OXXO, Mercado Pago)
- Escrow service (optional for MVP)

2. Identity Verification

- Stripe Identity or Trulioo (automated KYC)
- Manual review workflow for admin

3. Document Storage

- AWS S3 (encrypted)
- Document signing (DocuSign or HelloSign) - future

4. Email & Notifications

- SendGrid or AWS SES (transactional emails)

- Twilio (SMS notifications) - optional

5. Analytics

- Google Analytics
- Mixpanel or Amplitude (product analytics)
- Custom admin dashboard

6. Maps & Location

- Google Maps API (location search, display)

7. Invoice Factoring (Phase 2)

- Integration with Mexican factoraje providers
 - API for credit line approval
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MVP Scope (8-12 Weeks)

Phase 1: Core Marketplace (Weeks 1-6)

Must-Have Features:

- User registration and authentication
- Company profile creation
- Basic KYC document upload (manual review)
- Post solicitation (RFQ, RFP, IFB types)
- Browse solicitations (search, filter)
- Submit bids
- View and compare bids (buyer side)
- Award contract (simple status change)
- Email notifications (new bid, deadline reminder)
- Basic admin panel (user management, verification queue)

Frontend:

- Landing page
- Signup/login flows
- Buyer dashboard (post RFQ, view bids)
- Supplier dashboard (browse opportunities, submit bids)

- Company profile page
- Solicitation detail page
- Bid submission form

Backend:

- REST API for all core features
- PostgreSQL database
- JWT authentication
- File upload to S3
- Email service integration
- Basic admin endpoints

Phase 2: Trust & Payments (Weeks 7-10)

Features:

- Complete KYC verification workflow (5 documents)
- Verification badges and trust scores
- Stripe payment integration (P2P transfers)
- Transaction history
- Community endorsements
- Improved search (Elasticsearch)

Phase 3: Social & Polish (Weeks 11-12)

Features:

- Project portfolio on profiles
- Follow/follower system
- Public updates feed
- Discussion forums (basic)
- Mobile responsiveness polish
- Performance optimization
- Security audit

Required Technical Skills

Must-Have Skills:

✓ **Full-stack development** (3+ years experience) ✓ **Modern JavaScript/TypeScript** (React, Node.js) ✓ **Database design** (PostgreSQL, schema design, optimization) ✓ **RESTful API design** and implementation ✓ **Authentication & authorization** (JWT, OAuth) ✓ **Payment integration** (Stripe or similar) ✓ **Cloud deployment** (AWS, GCP, or DigitalOcean) ✓ **Git version control** and collaborative development ✓ **Security best practices** (OWASP, encryption, compliance)

Highly Desired Skills:

● **Marketplace platform experience** (two-sided marketplaces) ● **Real-time features** (WebSockets, live updates) ● **File upload/management systems** ● **Search implementation** (Elasticsearch, Algolia) ● **Bilingual applications** (i18n) ● **Mexican payment systems** (SPEI, Mercado Pago) ● **DevOps** (Docker, CI/CD, monitoring) ● **Scalability** experience (high-traffic applications)

Nice-to-Have Skills:

● GraphQL ● Microservices architecture ● Mobile app development (React Native) ● Machine learning (recommendation systems) ● Blockchain (for future escrow/smart contracts) ● Spanish language proficiency

What You'll Own as Technical Co-Founder

Responsibilities:

Technical Leadership:

- Define and implement technical architecture
- Make technology stack decisions
- Set engineering best practices and standards
- Manage technical debt and refactoring

Development:

- Build MVP (8-12 weeks, full-time)
- Implement core features (marketplace, bidding, verification)
- Integrate third-party services (payments, KYC, email)
- Ensure security and compliance

Team Building (Future):

- Hire and manage engineering team (when funded)
- Mentor junior developers
- Conduct code reviews

Product:

- Collaborate on product roadmap
- Provide technical feasibility input
- Balance feature requests with technical constraints

Operations:

- Deploy and maintain production infrastructure
 - Monitor performance and uptime
 - Handle incidents and bugs
 - Implement analytics and tracking
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Equity & Compensation

Equity Structure:

Technical Co-Founder: 20-30% equity

- Vesting: 4 years with 1-year cliff
- Equal decision-making authority on technical matters
- Board seat (when applicable)

Founder (You): 70-80% equity

- Business development, fundraising, strategy
- Customer acquisition and partnerships
- Operations and compliance

Compensation:

Pre-Funding (Months 1-6):

- Sweat equity only (no salary)
- Shared operating costs (hosting, tools)

Post-Seed Funding (Target: Month 6-12):

- Market-rate salary (\$80K-120K USD depending on location and funding)
- Additional equity grants possible based on performance

Target Funding:

- Seed round: \$500K-1M USD
 - Series A: \$3-5M USD (18-24 months post-launch)
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Timeline & Milestones

Month 1-3: MVP Development

- Week 1-2: Architecture setup, database design
- Week 3-6: Core marketplace features
- Week 7-10: Trust system and payments
- Week 11-12: Polish and testing

Month 4: Private Beta

- Onboard 10-20 pilot users (buyers and suppliers)
- Gather feedback and iterate
- Fix critical bugs

Month 5-6: Public Launch

- Launch landing page and marketing campaign
- Onboard first 100 users
- Process first transactions
- Prepare for fundraising

Month 7-12: Growth & Fundraising

- Reach \$100K GMV (Gross Merchandise Value)
- 500+ verified users
- Raise seed round
- Hire first employees (customer success, sales)

Year 2: Scale

- Expand to additional Mexican cities
 - Add advanced features (mobile app, AI matching)
 - Reach \$1M+ GMV
 - Series A fundraising
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Why Join as Technical Co-Founder?

The Opportunity:

Large Market: \$150-200B Mexican construction/industrial market, largely offline and fragmented

Clear Beachhead: Mid-size construction companies (50-200 employees) with established procurement needs but no digital solution

Differentiation:

- SAM.gov-style professionalism (vs. informal WhatsApp groups)
- Mandatory KYC verification (vs. unverified marketplaces)
- Integrated financial services (factoraje, credit lines)

Proven Demand:

- Supplier feedback validates pain points
- 500+ waitlist signups (if achieved)
- No dominant competitor in Mexico

What Makes This Different:

Not just another marketplace: We're building procurement infrastructure for an entire industry

Network effects: Two-sided marketplace with high switching costs once established

Multiple revenue streams:

- Transaction fees (2-5% GMV)
- Premium verification (\$500-1,000 MXN)
- Credit/factoraje commissions (future)
- SaaS subscriptions for enterprise (future)

Path to exit:

- Acquisition by construction tech companies (Procore, Autodesk)
 - Acquisition by fintech (Stripe, Mercado Libre)
 - IPO (long-term, if we dominate LatAm)
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What We've Done So Far

Validation:

✓ **Supplier interviews:** 4 key insights from Mexican suppliers ✓ **Comprehensive business plan:** 50+ page document with market analysis ✓ **Landing page copy:** Professional positioning and messaging ✓ **Platform architecture:** Detailed feature specifications ✓ **Beachhead strategy:** Clear target market (Monterrey, Guadalajara, Estado de México)

Assets Ready:

✓ **Brand identity:** Logo, color scheme, visual design ✓ **Landing page wireframes:** Ready for development ✓ **User stories:** Buyer and supplier workflows documented ✓ **Competitive analysis:** Differentiation strategy defined ✓ **Go-to-market plan:** Customer acquisition channels identified

What We Need:

✗ **Technical execution:** Build the platform ✗ **Technical expertise:** Architecture and scalability decisions ✗ **Development speed:** MVP in 8-12 weeks ✗ **Technical credibility:** For investor pitches and hiring

Ideal Co-Founder Profile

Background:

Experience: 3-7 years in software engineering

- Previous marketplace or B2B SaaS experience (highly preferred)
- Startup experience (bonus)
- Led technical projects from 0 to 1

Education: Computer Science degree or equivalent practical experience

Location: Mexico-based preferred (for market understanding and timezone), but remote-friendly for exceptional candidates

Personality & Fit:

Entrepreneurial mindset:

- Comfortable with uncertainty and rapid iteration
- Willing to work on sweat equity initially
- Long-term commitment (4+ years)

Execution-focused:

- Bias toward shipping quickly over perfection
- Pragmatic about technical decisions (MVP vs. ideal architecture)
- Comfortable wearing multiple hats

Collaborative:

- Strong communication skills (technical and non-technical)
- Open to feedback and iteration
- Aligned on vision and values

Ambitious:

- Wants to build a category-defining company
 - Excited about solving hard problems
 - Motivated by impact, not just compensation
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How to Apply (Y Combinator Co-Founder Matching)

What to Include:

1. Your background:

- LinkedIn profile
- GitHub profile (code samples)
- Previous projects or companies

2. Why this opportunity:

- What excites you about CapitalGoods.io?
- Why are you the right technical co-founder?

3. Technical approach:

- How would you architect this platform?

- What stack would you choose and why?
- What's your MVP strategy?

4. **Availability:**

- Can you commit full-time?
- When can you start?

5. **Questions for me:**

- What do you want to know about the business, market, or vision?

Next Steps:

1. **Initial call** (30 min): Get to know each other, discuss vision
 2. **Technical discussion** (60 min): Deep dive on architecture, stack, approach
 3. **Trial project** (optional): Build a small feature together to test collaboration
 4. **Co-founder agreement**: Equity split, vesting, roles, decision-making
 5. **Start building!**
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FAQ

Q: Why not hire a developer instead of bringing on a co-founder?

A: We need someone who thinks like an owner, not a contractor. A co-founder will:

- Make strategic technical decisions, not just execute tasks
- Stay committed through challenges (equity alignment)
- Help with fundraising and investor pitches
- Build and lead the engineering team as we scale

Q: What if we don't get along or it doesn't work out?

A: We'll have a 3-month trial period before finalizing the co-founder agreement. If it's not a fit, we part ways amicably with no equity transfer. After the trial, standard vesting applies (4 years, 1-year cliff).

Q: Can I work part-time initially?

A: Ideally, no. We need to move fast to capture the market opportunity. However, if you're exceptional and can commit 30+ hours/week initially with a plan to go full-time within 3 months, we can discuss.

Q: What happens if we can't raise funding?

A: We'll bootstrap as long as possible using early revenue (transaction fees). If the market validates the product (users, GMV), funding will follow. If not, we'll pivot or shut down—standard startup risk.

Q: Do I need to speak Spanish?

A: Not required, but highly valuable. The platform will be bilingual, and understanding the Mexican market is important. If you don't speak Spanish, you should be willing to learn basics and collaborate closely on localization.

Q: What's the expected time to exit?

A: 5-7 years is typical for B2B marketplaces. We're building for a strategic acquisition or IPO, not a quick flip.

Contact

Founder: [Your Name]

Email: [Your Email]

LinkedIn: [Your LinkedIn]

Location: [Your Location]

Platform: CapitalGoods.io

Website: [Landing Page URL when ready]

Pitch Deck: [Available upon request]

Appendix: Technical Resources

Recommended Reading:

- "The Lean Startup" by Eric Ries
- "Zero to One" by Peter Thiel
- "The Hard Thing About Hard Things" by Ben Horowitz
- Stripe Atlas guides on marketplace platforms
- Y Combinator's "How to Build a Marketplace" series

Similar Platforms (for reference):

- **SAM.gov** (US government procurement)
- **Alibaba** (B2B marketplace, China)

- **Thomasnet** (B2B industrial sourcing, US)
- **Knowify** (construction management, US)
- **Procore** (construction software, US)

Tech Stack Examples:

- **Airbnb**: Ruby on Rails → React + Node.js
 - **Uber**: Python + Node.js + Go
 - **Stripe**: Ruby + Scala + Go
 - **Faire** (B2B marketplace): React + Node.js + PostgreSQL
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