Digital Vanguard: A Prelude to Innovation

Techman Studios' proposal is a next-level blueprint that fuses state-of-the-art cryptocurrency mining with sustainable energy innovations. By deploying high-performance servers, advanced immersion cooling, and a robust solar power system, our model isn't just about efficient mining—it's a demonstration of how modern tech can drive economic resilience. As a proud veteran-owned enterprise, we're all about merging innovative digital asset strategies with a commitment to environmental stewardship and community impact.

In line with the Executive Order's mandate to promote U.S. leadership in digital financial technology, this initiative underscores our dedication to fostering a secure, decentralized, and transparent digital economy. The Order's emphasis on safeguarding financial sovereignty, enhancing regulatory clarity, and supporting lawful blockchain innovation resonates deeply with our approach. By aligning our business model with these national priorities, we're not only optimizing operational performance but also positioning ourselves as a catalyst for positive change in the digital asset arena.

Blending futuristic tech with a down-to-earth, innovative spirit, this economic model offers a compelling case for federal support. It's a smart, scalable venture that meets the dual challenge of generating sustainable revenue and bolstering America's position at the forefront of digital financial innovation. With this proposal, we're ready to secure the funding needed to transform potential into tangible economic impact while staying true to the visionary directives of our administration.

Business Proposal: Economic Model for Techman Studios' Monero Mining Small Business

Executive Summary

Techman Studios, a Self-Certified Small Disadvantaged Business, Veteran-Owned Business, and Service-Disabled Veteran-Owned Business, proposes a small business venture focused on cryptocurrency mining, specifically Monero (XMR), using high-performance computing hardware with innovative cooling and renewable energy solutions. The initial setup involves two Gigabyte H273-Z80 servers (each with eight AMD EPYC 9965 CPUs), achieving a combined hashrate of 2,560,000 H/s (2.56 MH/s). To enhance efficiency and sustainability, the operation will incorporate a Submer MicroPod 800 Dry Cooler (\$81,000) for immersion cooling and a 35.64 kW solar power system (\$117,514 net cost after rebates/credits), producing 42,729 kWh/year and offsetting 57.94% of utility costs. Based on current market data (1 XMR = \$207.41 as of January 15, 2025), this operation is projected to yield \$56.40/day, \$394.80/week, \$1,716.64/month, and \$20,586/year in gross revenue before expenses. With a total capital expenditure (CapEx) of \$418,514-\$448,514 (servers + cooling + solar + infrastructure), Techman Studios offers a scalable, environmentally conscious, high-return opportunity. Funding of \$420,000-\$450,000 is sought through a federal grant or VA business program to cover initial CapEx and operational costs, with a clear path to profitability and expansion.

Business Description

Techman Studios leverages advanced server technology to mine Monero, a privacy-focused cryptocurrency with stable market value and consistent mining rewards. The operation will utilize two Gigabyte H273-Z80 servers, each configured with:

- CPUs: 8 AMD EPYC 9965 (8 per server, dual-CPU configuration per node),
- Memory: 96 units of M321R8GA0BB0-CQKVG (64GB each),
- Storage: 16 MZ1L21T9HCLS M.2 SSDs (1.92TB each),
- DPU: 1 MBF2H332A-AEEOT per server.

Each server supports 4 mining nodes, with a total hashrate of 1,280,000 H/s per server (320,000 H/s per node). Two servers combined achieve 2,560,000 H/s, translating to predictable revenue based on Monero's mining algorithm and current exchange rates. To optimize energy efficiency and heat management, the operation will use a Submer MicroPod 800 Dry Cooler, supporting up to 6U of IT gear (19 inches wide, max depth 800 mm) with 5–6.7 kW heat dissipation capacity. The cooler uses SmartCoolant, requiring no water, reducing operational costs and environmental impact. A 35.64 kW solar system (88 panels, Tesla Powerwall 3x) will offset 57.94% of electricity costs, enhancing sustainability. Additional infrastructure, including a facility, building upgrades, networking (e.g., cabling, racks), and power distribution, is budgeted at \$60,000-\$80,000.

Techman Studios is registered with SAM.gov (Unique Entity ID: MTXPXGQWBWW5, CAGE/NCAGE: 8X4K7) and operates under NAICS code 518210 (Computing Infrastructure Providers, Data Processing, Web Hosting, and Related Services), with product and service codes DB01 (IT and Telecom - High Performance Computing (HPC) Support Services), DB10 (IT and Telecom - Compute as a Service: Mainframe/Servers), and DC10 (IT and Telecom - Data Center as a Service).

Market Analysis

Cryptocurrency mining remains a lucrative industry, with Monero's RandomX algorithm favoring CPU-based mining. As of January 15, 2025, Monero trades at \$207.41 (source: CryptoCompare.com), reflecting stability and demand due to its privacy features. Techman Studios targets a niche in small-scale, efficient mining operations, scalable to meet growing demand. Competitors often rely on larger, less sustainable setups, whereas Techman Studios prioritizes modularity, energy efficiency, and renewable integration.

Revenue Projections

Revenue is calculated based on hashrate and Monero's market value, with data sourced from CryptoCompare.com. The table below summarizes projections for the initial 2-server setup and potential scalability:

Configuration	Hashrate (H/s)	\$/Day	\$/Week	\$/Month	\$/Year
1 Server (4 nodes)	1,280,000	28.20	197.40	858.32	10,293
2 Servers (8 nodes)	2,560,000	56.40	394.80	1,716.64	20,586
10 Servers	12,800,000	282.0 0	1,974.00	8,583.20	102,930
1 DataTank (24 Servers)	30,720,000	676.8 0	4,737.60	20,599.68	247,032

For the initial 2-server setup:

- Gross Annual Revenue: \$20,586
- **Daily Output**: Approximately 0.272 XMR (at 2,560,000 H/s, based on network difficulty and reward rates as of January 2025).

Cost Structure

1. Capital Expenditures (CapEx):

- 2 Gigabyte H273-Z80 servers: \$80,000 each = \$160,000 total.
- Submer MicroPod 800 Dry Cooler: \$81,000.
- Solar power system: \$167,872 gross cost, net \$117,514 after rebates/credits.
- Additional infrastructure (building, networking, etc.): \$60,000-\$80,000.
- **Total CapEx**: ~\$418,514-\$448,514.

2. Operational Expenditures (OpEx):

- Electricity: Assuming 1,000W/server at \$0.12/kWh, 24/7 operation = ~\$5,760/year for 2 servers without solar. With the 35.64 kW solar system offsetting 57.94% (42,729 kWh/year), electricity cost drops to ~\$2,414/year.
- **Maintenance**: Estimated at \$1,500/year (including cooling system, solar panels, and infrastructure).
- SmartCoolant/Overheads: \$500/year.
- Total OpEx: ~\$4,414/year.

3. Net Income (Before Taxes):

- Gross Revenue: \$20,586
- OpEx: \$4,414
- Net Income: \$16,172/year
- ROI: ~3.6%-3.9% annually on \$418,514-\$448,514 CapEx (excluding depreciation).

Funding Request

Funding of **\$420,000-\$450,000** is requested to:

- Purchase two Gigabyte H273-Z80 servers (\$160,000),
- Acquire a Submer MicroPod 800 Dry Cooler (\$81,000),
- Install a 35.64 kW solar system (\$117,514 net),
- Cover additional infrastructure costs (building, networking, etc., \$60,000-\$80,000),
- Provide working capital for the first 3–6 months of operation.

Scalability and Growth Plan

The model is designed for scalability:

- **Phase 1**: Operate 2 servers with Submer cooling, solar, and infrastructure, establish proof of concept, and refine efficiency (Year 1).
- **Phase 2**: Expand to 10 servers (\$800,000 CapEx + \$405,000 for 5 additional MicroPods + solar/infrastructure scaling), increasing annual revenue to \$102,930 (Year 2–3).
- **Phase 3**: Deploy a DataTank[™] 48U with 24 servers (\$1.92M CapEx + \$1,944,000 for 24 MicroPods + solar/infrastructure), targeting \$247,032/year (Year 4+).

The Submer MicroPod 800 supports up to 6U of IT gear, aligning with the 2U/server configuration, and its 5–6.7 kW heat dissipation capacity ensures scalability while reducing energy costs. The solar system and infrastructure can scale proportionally with additional servers.

Economic and Environmental Impact

This venture will:

- Create 1–2 initial jobs (system administration, maintenance),
- Contribute to local tax revenue as a small business,
- Reduce carbon footprint by offsetting 57.94% of electricity use with solar power and using immersion cooling,
- Support the decentralized cryptocurrency ecosystem, aligning with federal interests in blockchain and renewable energy innovation.

As a Self-Certified Small Disadvantaged Business, Veteran-Owned Business, and Service-Disabled Veteran-Owned Business, Techman Studios aligns with federal priorities for supporting veteran entrepreneurs and underserved communities, enhancing socio-economic impact.

Conclusion

Techman Studios' innovative Monero mining venture, enhanced with Submer cooling, a 35.64 kW solar system, and robust infrastructure, offers a low-risk, high-potential opportunity with a clear path to profitability and is designed not only for profitability but also to embody the forward-thinking principles outlined in the **Strengthening American Leadership in Digital Financial Technology** Executive Order. With an initial investment of \$420,000-\$450,000, our operation is positioned to generate positive cash flow within its first year, offering a scalable, low-risk opportunity that reinforces **American leadership** in blockchain innovation and digital asset management.

In alignment with the Order's directives to promote responsible digital asset growth, regulatory clarity, and economic liberty, this proposal underscores our commitment to building a vibrant, inclusive digital economy. Leveraging our veteran-owned status and eco-friendly practices, we aim to empower individual innovators by ensuring fair access to cutting-edge technology and supporting the decentralized development of open public blockchain networks. We are actively seeking federal grant or VA business program funding to launch this venture—a smart, sustainable, and visionary step forward in today's dynamic financial landscape.

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