



# WHITE PAPER

Tokenized Finance for  
the Global Gig Economy



## Table of Contents

<b>1. Executive Summary.....</b>	<b>- 5 -</b>
<b>2. The Global Gig Economy: Context &amp; Pain Points.....</b>	<b>- 6 -</b>
2.1 Core Pain Points Facing Gig Workers.....	- 6 -
2.2 Core Pain Points Through User Stories.....	- 7 -
2.3 Why This Moment Matters.....	- 7 -
<b>3. Introducing TokiGig: A New Infrastructure for Gig Workers.....</b>	<b>- 9 -</b>
3.1. Micro-Asset Tokenization.....	- 9 -
3.2. Cross-Chain Gig Rewards (TGT).....	- 10 -
3.3. Collateralized Micro-Loans.....	- 10 -
<b>4. How TokiGig Works: Modular Tools, Real-World Use.....</b>	<b>- 12 -</b>
4.1 Micro-Asset Tokenization.....	- 12 -
4.2 Cross-Chain Gig Rewards (TGT).....	- 12 -
4.3 Collateralized Micro-Loans.....	- 13 -
4.4 Optional Stablecoin Remittance (2026+).....	- 13 -
<b>5. Token Design: TokiGig Token (TGT).....</b>	<b>- 15 -</b>
5.1 Purpose & Utility.....	- 15 -
5.2 Total Supply & Chain Structure.....	- 15 -
5.3 Updated Token Allocation (Compromise Model).....	- 15 -
5.4 Emissions & Incentive Curve.....	- 17 -
5.5 Value Loop Flywheel.....	- 17 -
5.6 Protection & Governance Safeguards.....	- 17 -
<b>6. Architecture &amp; Tech Stack.....</b>	<b>- 20 -</b>
6.1 System Overview.....	- 20 -
6.2 Blockchain Layer (Polygon PoS).....	- 20 -
6.3 Bridge Layer (LayerZero).....	- 21 -
6.4 UX Layer: Mobile-First Interfaces.....	- 21 -
6.5 Identity, Verification & Privacy.....	- 21 -
6.6 Modular Protocol Design.....	- 22 -



6.7 U.S. Market Readiness.....	- 22 -
6.8 Future System Enhancements (Planned).....	- 22 -
<b>7. Use Cases &amp; Real-World Impact.....</b>	<b>- 23 -</b>
7.1 Global User Scenarios.....	- 23 -
7.2 Future-Ready Expansion Paths.....	- 23 -
7.3 Economic Outcomes (Projected by Year 3).....	- 24 -
7.4 Systemic Impact.....	- 24 -
<b>8. Roadmap &amp; Milestones.....</b>	<b>- 25 -</b>
<b>9. Governance &amp; DAO Structure.....</b>	<b>- 27 -</b>
9.1 Governance Philosophy.....	- 27 -
9.2 Governance Timeline & Structure.....	- 27 -
9.3 Governance Mechanics.....	- 27 -
9.4 Voter Eligibility & Anti-Whale Rules.....	- 28 -
9.5 Governance Powers.....	- 28 -
9.6 Governance Incentives.....	- 28 -
<b>10. Compliance &amp; Risk Management.....</b>	<b>- 30 -</b>
10.1 Regulatory Philosophy.....	- 30 -
10.2 Regional Legal Zones & Compliance Strategy.....	- 30 -
10.3 Risk Domains & Mitigation Design.....	- 31 -
<b>11. Future Vision &amp; Strategic Partnerships.....</b>	<b>- 34 -</b>
11.1 Strategic Vision: 5-Year Horizon.....	- 34 -
11.2 Long-Term Ecosystem Components.....	- 34 -
11.3 Partnership Strategy.....	- 35 -
11.4 Confirmed + Targeted Partners.....	- 36 -
11.5 Investor-Focused Global Roadmap Alignment.....	- 36 -
<b>12. Call to Action &amp; Closing.....</b>	<b>- 38 -</b>
<b>Appendix A: Smart Contract Schema Examples.....</b>	<b>- 40 -</b>
A.2 Loan Vault Contract Logic (Collateral, Liquidation).....	- 41 -
A.3 TGT Rewards & Emissions Schedules Purpose:.....	- 42 -
<b>Appendix B. GFX Reward Math Breakdown.....</b>	<b>- 44 -</b>



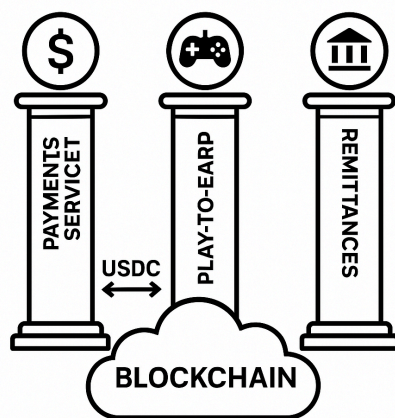
B.1 Gig Reward Structure (TGT).....	- 44 -
B.2 Gamified P2E Reward Structure (GFX).....	- 44 -
B.3 Earning Caps.....	- 44 -
B.4 Pilot Phase Pool (TGT).....	- 45 -
B.5 Emissions & Conversion Strategy.....	- 45 -
B.6 Economic Impact.....	- 45 -
Appendix C: Regional Gig Worker Data Sources.....	- 46 -
C.1 Core Regions.....	- 46 -
C.2 Emerging Targets (Future Expansion).....	- 47 -
C.3 P2E Gaming Context.....	- 47 -
Appendix D. Token Lifecycle Diagrams.....	- 48 -
Appendix E. Redemption Curve Examples.....	- 49 -
E.1 Early Pilot Redemption (Year 1).....	- 49 -
E.2 Post-Pilot Redemption (Year 2–5).....	- 49 -
E.3 GFX-to-TGT Redemption (Year 2+).....	- 49 -
E.4 Economic Stabilization.....	- 49 -
Appendix F. Treasury Growth Model (Year 1–5).....	- 50 -
F.1 Revenue Streams.....	- 50 -
F.2 Treasury Growth Projections.....	- 50 -
F.3 Example Scenarios.....	- 50 -
F.4 Growth Strategy.....	- 50 -
Appendix G: DAO Roles & Voting Framework.....	- 51 -
G.1 DAO Structure & Roles.....	- 51 -
G.2 Governance Tools.....	- 52 -
G.3 DAO Powers.....	- 52 -
G.4 Transition Timeline.....	- 53 -
G.5 Anti-Capture Mechanisms.....	- 54 -
Appendix H. Glossary of Key Terms.....	- 55 -
Bibliography.....	- 56 -



# 1. Executive Summary

TokiGig is a decentralized financial protocol built to empower the global gig workforce—starting with workers in underserved and overlooked markets. From moto-taxi drivers in São Paulo to delivery riders in Nairobi and freelancers in Manila, gig workers power urban economies yet face systemic barriers to financial freedom: no access to credit, unstable income, and no leverage from the tools they already own.

TokiGig solves this by combining four powerful mechanisms:



1. **Micro-Asset Tokenization** – Workers tokenize income-generating assets like motorcycles, laptops, or harvests to unlock liquidity through fractional ownership and P2P exchange.
2. **Cross-Chain Gig Rewards** – Verified labor (e.g., a completed ride or task) earns workers TGT (TokiGig Token), which is portable across chains and redeemable for stablecoins, local services, or platform perks.
3. **Collateralized Loans** – Tokenized assets are staked in vaults to access short-term microloans—without banks, credit scores, or predatory fees.
4. **Gamified Gig Challenges (P2E-lite)** – Workers can earn bonus rewards by completing streaks or leaderboard tasks, unlocking badges, NFTs, and future perks via 150M TGT reserved for this ecosystem.

In Year 2, TokiGig will expand into stablecoin-powered remittances using **existing stablecoins like USDC** to facilitate ultra-low-cost (\$0.10 vs. \$6.00)<sub>1</sub> cross-border payments for workers sending money home. A branded wrapper (e.g., “GigUSD”) may be introduced later to simplify UX and loyalty—but without becoming a regulated issuer.

The TGT token anchors the system with a 500M fixed supply, balancing sustainability with scale. Rewards, remittances, loans, and governance all converge into a singular economic layer—one designed for portability, resilience, and everyday impact. Launching first in Latin America and Africa, TokiGig is building the financial rails for a freer, more connected global workforce.



## 2. The Global Gig Economy: Context & Pain Points

The gig economy has become a defining force in labor markets worldwide. Characterized by independent, flexible, and task-based work, it includes everyone from Uber drivers and delivery couriers to freelancers and informal traders. While gig work offers income opportunities to millions, it also exposes structural vulnerabilities, especially in emerging economies.

### Global Scale

- 70+ million full-time gig workers globally<sub>3</sub>
- 36% of the U.S. workforce participates in gig work<sub>4</sub>
- In Latin America, Africa, and Southeast Asia, **gig labor often dominates local economies** due to limited formal employment and rising smartphone penetration.
  - *Example:* In Brazil, over 250,000 moto-taxi drivers operate informally in urban hubs like São Paulo. In Kenya, boda bodas employ over 1.2 million drivers. These workers fuel city movement—yet operate without financial tools to stabilize or grow.

### 2.1 Core Pain Points Facing Gig Workers

#### 1. Lack of Capital Access

- Most gig workers can't access loans from traditional banks
- Credit scores don't apply to informal labor
- When emergencies hit (e.g., a bike breaks down), workers turn to payday lenders with APR rates exceeding 300%

#### 2. Zero Leverage from Owned Assets

- Gig workers often own income-generating tools—motorcycles, laptops, smartphones, delivery carts—but these assets are illiquid and non-collateralizable
- A \$500 motorcycle might power a family's livelihood, but can't be used to access even a \$100 emergency loan

#### 3. Unpredictable & Fragmented Earnings

- Platform lock-in and siloed apps (Uber, Doordash, Fiverr, 99, etc.)
- Workers can't aggregate or port earnings across ecosystems
- Income fluctuates weekly, making it hard to save, invest, or plan

#### 4. Exploitation by Centralized Platforms



- Gig platforms extract 20–30% of earnings via fees, cancellations, and opaque algorithmic adjustments
- Workers have no ownership, voice, or equity in the platforms they power

## 5. No Social Safety Net

- No health insurance, sick leave, or pension
- One injury, outage, or broken tool = zero income
- Government programs rarely include informal gig workers

## 2.2 Core Pain Points Through User Stories

**1. Lack of Capital Access** *João – Moto-Taxi Driver, São Paulo, Brazil* João's rear suspension blew out, and he needed \$80 to fix it. Without savings or access to credit, he turned to a payday lender offering a two-week loan at 25% interest. He ended up owing more than his bike's value. **TokiGig lets João use part of his motorbike as collateral to access fair, fast capital—with no predatory middleman.**

**2. Zero Leverage from Owned Assets** *Juma – Boda Boda Rider, Nairobi, Kenya* Juma owns a \$400 motorcycle that fuels his entire income—but he can't use it to borrow even \$100 during hard times. Selling it means losing work. **TokiGig lets Juma tokenize his bike, unlocking its value without giving it up—just to stay afloat.**

**3. Unpredictable & Fragmented Earnings** *Maya – Freelance Illustrator, Mumbai, India* Maya's income swings wildly between platforms, and payment delays stretch for weeks. When her laptop cracked, she couldn't afford to fix it, costing her clients. **TokiGig gives Maya both a financial safety net (via loans) and a portable reward stream (TGT) across all her gigs.**

## 2.3 Why This Moment Matters

- **Mobile-first adoption** is near-universal: WhatsApp, Telegram, and low-bandwidth apps dominate in regions like LatAm and Africa
- **Crypto is already embedded in many informal economies:** Over 20% of Nigerians, 15% of Brazilians, and 10% of Colombians have used or held crypto assets as of 2024<sub>5</sub>
- **Stablecoins + smart contracts** = new financial rails that don't require banks
- **Remittance bottlenecks are ripe for disruption:** Over \$150B/year is sent by gig workers to families back home, with traditional fees ranging from 6–10%<sub>6</sub>



- **Play-to-Earn (P2E) platforms are gaining ground:** 3 billion gamers worldwide, with rising overlap between crypto gaming and gig workers seeking new earning avenues during downtime.<sup>7</sup>

**The Opportunity for Intervention** TokiGig enters this space not as a “DeFi for DeFi people” solution—but as a crypto-native protocol for real-world workers, solving real problems in local economies with tools they already use. The pain points are massive, the market is global, and the timing is right. By addressing credit exclusion, asset liquidity, cross-border friction, and platform dependency, TokiGig becomes more than a gig finance tool—it becomes a launchpad for portable earnings, emergency liquidity, and even digital self-employment.





### 3. Introducing TokiGig: A New Infrastructure for Gig Workers

TokiGig is a decentralized protocol that equips global gig workers with economic tools designed for their reality—not for hedge funds or crypto insiders. From São Paulo to Nairobi, Manila to Medellín, gig workers hustle with determination—but lack access to liquidity, leverage, and portable rewards. TokiGig fixes that by combining blockchain innovation with the lived needs of informal labor.

This is **not a gig platform**. It's the infrastructure *beneath* all gig platforms—a financial base layer where the value of labor and tools can finally move freely.

#### **Mission**

To help gig workers unlock, preserve, and grow the value of their labor and tools—without centralized gatekeepers or predatory lenders.

#### **Vision**

To become the decentralized economic backbone of the global gig economy, enabling:

- Asset leverage without selling tools
- Cross-border reward streams
- Emergency liquidity access
- Ownership and participation in the platforms worker's power

#### **Core Pillars of TokiGig**

TokiGig runs on a three-pronged design:

##### **3.1. Micro-Asset Tokenization**

Workers tokenize tools they already use to earn income—motorbikes, laptops, harvests, etc.—into on-chain fractional ownership tokens (ERC-1155). This unlocks new value:

- Collateralize tokens for loans
- Trade them peer-to-peer
- Establish proof-of-ownership for long-term equity

*Example:* A farmer tokenizes her harvest to pre-sell 30% and get upfront working capital, without losing her entire crop.



### 3.2. Cross-Chain Gig Rewards (TGT)

Every verified task earns the worker TGT, a portable reward token.

- Earned across multiple platforms or apps
- Redeemable for USDC, discounts, or buybacks
- Can be staked or held for future benefits

With LayerZero interoperability, TGT works on **Polygon, Solana, and Ethereum**, adapting to real-world conditions (low gas, high speed, local adoption).

*New (2025+):* TGT may integrate into **play-to-earn systems**, allowing workers to earn while gaming in downtime. This creates both utility and engagement beyond gig tasks.

### 3.3. Collateralized Micro-Loans

Tokenized assets become usable as collateral. Workers can:

- Borrow USDC or stablecoins against fractional tools
- Repay with TGT, stablecoins, or redeemed assets
- Access loans instantly without credit scores or paperwork

Loans are overcollateralized (50–70% LTV) and repaid in 15–60 days. Defaults lead to token liquidation—not asset seizure.

### Optional Add-On (2026+): Stablecoin-Powered Remittance Layer

TokiGig aims to **partner with or integrate USDC** (not launch its own stablecoin) to power low-cost remittances:

- Gig workers in Brazil or Nigeria send \$100 for <\$0.10 in fees
- Avoid 6–10% cut by banks or Western Union
- Mobile wallets make cross-border liquidity real

This optional module activates by Year 2, reducing regulatory complexity while solving a \$150B/year remittance bottleneck for millions of workers.



## Why TokiGig Is Different

Feature	Traditional Platform	Microfinance	TokiGig
Ownership of Earnings	✗	✓	✓ Fully Worker-Owned
Asset Leverage	✗	✗	✓ Tokenized
Access to Credit	✗	✓ (Limited)	✓ Collateralized
Cross-Platform Portability	✗	✗	✓ Cross-Chain
Fees & Transparency	✗ Hidden	✗ High	✓ Transparent

TokiGig isn't reinventing work—it's unlocking the value of work. By putting assets, earnings, and capital access on-chain, it builds a resilient foundation for gig workers to thrive—not just survive.



## 4. How TokiGig Works: Modular Tools, Real-World Use

TokiGig is not a super-app—it's a modular, crypto-native protocol designed to meet gig workers where they are. Through minimal interfaces (e.g., WhatsApp, mobile web), it offers interoperable access to credit, rewards, and ownership—using the tools workers already use to earn.

TokiGig operates as a three-layered system:

### 4.1 Micro-Asset Tokenization

Gig workers register and tokenize physical tools they already use: motorcycles, laptops, harvests, sewing machines, etc. These assets are recorded on-chain via a fractional token (ERC-1155).

#### Tokenization Workflow:

1. Worker submits proof-of-ownership via WhatsApp, co-op verification, or geo-tagged image.
2. TokiGig verifies and mints fractional tokens (e.g., 100 tokens for a \$500 bike).
3. Worker can:
  - Trade tokens peer-to-peer for stablecoins
  - Stake tokens as loan collateral
  - Hold for ownership record and equity

**Why This Matters:** These tools already power their income. Now they power liquidity.

### 4.2 Cross-Chain Gig Rewards (TGT)

Each verified task (delivery, ride, gig) earns workers **TGT**, the TokiGig Token. It is portable, non-inflationary, and designed to cross platforms and borders.

#### Earning TGT:

- Issued by smart contract (5–10 TGT/task)



- Verifiable via partner APIs, community attestations, or proof-of-work snapshots
- Usable across Polygon, Ethereum, and Solana via LayerZero bridge

#### **Spending TGT:**

- Redeem for stablecoins (USDC)
- Use for loan repayment or reduced fees
- Stake for future benefits and governance

**P2E Lite (2026+):** Workers can earn TGT through **skill-based casual games** tied to the TokiGig ecosystem—e.g., “GigRacer” for delivery drivers during downtime. Earnings are capped to prevent abuse, but this adds utility and engagement to downtime hours.

### **4.3 Collateralized Micro-Loans**

Tokenized assets unlock access to instant loans—without credit scores or paperwork. Workers borrow stablecoins against tokenized tools.

#### **Loan Terms:**

- 50–70% Loan-to-Value (LTV)
- Repay in 15–60 days
- Interest: 5–10%
- Default = token liquidation, *not* asset seizure

**Example:** João pledges 60 of 100 bike tokens and borrows \$200 USDC to fix his brakes. He repays in 30 days with TGT or stablecoins. If he defaults, the tokens are auto-liquidated—no debt collectors involved.

### **4.4 Optional Stablecoin Remittance (2026+)**

Millions of gig workers send part of their earnings home. TokiGig will **integrate with USDC** to make cross-border remittances faster and cheaper.

#### **Benefits:**

- Transfer \$100 for <\$0.10 fee (vs. \$6 via banks)<sup>1</sup>



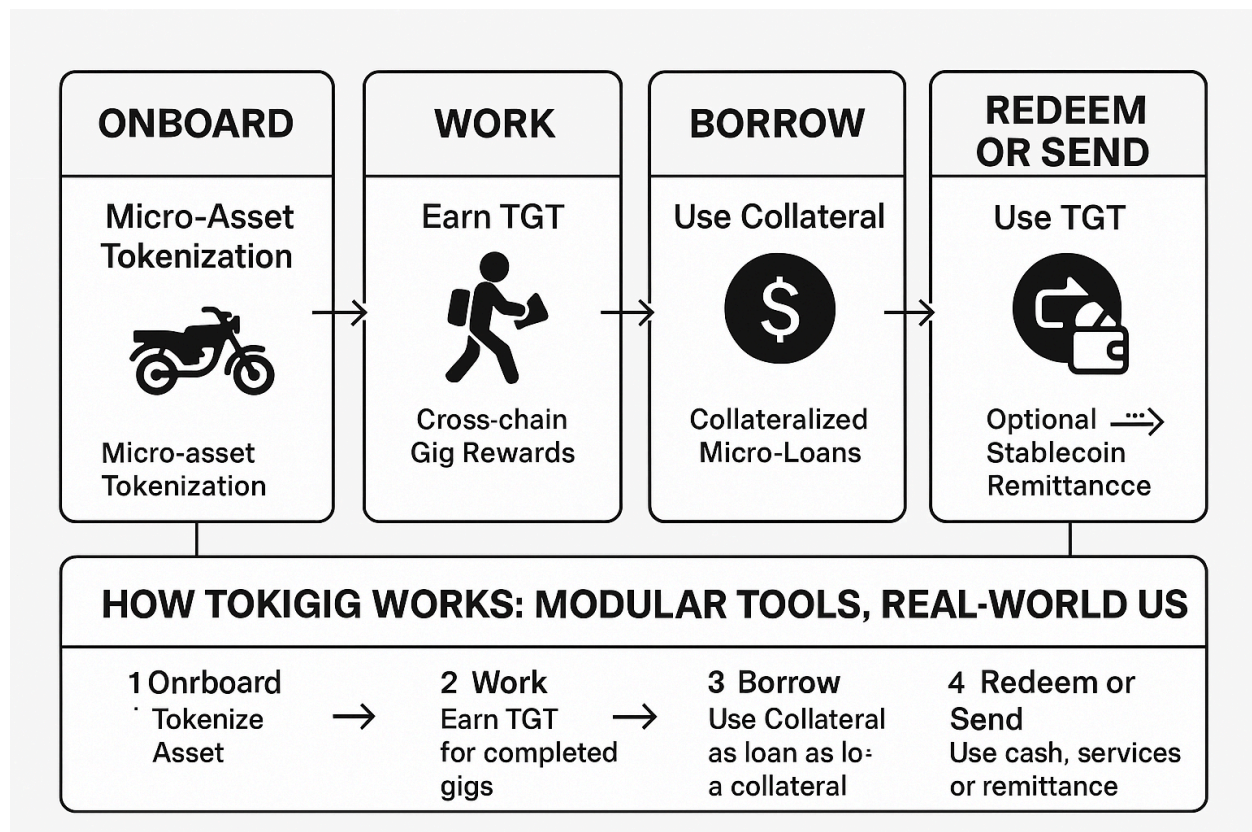
- Instant delivery via mobile wallets
- Available in Brazil, Nigeria, the Philippines, and beyond

TokiGig will *not* issue its own stablecoin to avoid added compliance. Instead, it supports plug-and-play modules that make worker earnings redeemable across borders.

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### Summary Flow:

1. **Onboard** – Tokenize a tool
2. **Work** – Earn TGT for completed gigs
3. **Borrow** – Use tokenized asset as loan collateral
4. **Redeem or Send** – Use TGT for cash, services, or remittance
5. **Repeat** – Create a personal credit trail and grow capital access





## 5. Token Design: TokiGig Token (TGT)

At the core of TokiGig's economy is the **TokiGig Token (TGT)**—a cross-chain utility token designed specifically for gig workers. TGT powers the system's labor rewards, lending access, protocol fees, and future community governance. It isn't built for speculation—it's built for everyday use by real workers doing real tasks.

### 5.1 Purpose & Utility

Use Case	Function
Gig Rewards	Earned by gig workers for verified tasks (e.g., 5–10 TGT per ride)
Fee Payment	Discounted use of TGT for trading, loan, and redemption fees
Loan Repayment	Optional token repayment for collateralized loans
Redemption	Redeemable for stablecoins, goods, services, or asset rebuy programs
Governance (Future)	Staking for votes on treasury use, emissions, and integrations
GameFi/Engagement	Earned via TokiGig-compatible P2E minigames (e.g., "GigRacer")

### 5.2 Total Supply & Chain Structure

- **Total Supply:** 500,000,000 TGT (fixed, no inflation)
- **Chain:** ERC-20 on Polygon, bridged via LayerZero to Solana, Ethereum, and others
- **Launch Price:** \$0.20 (soft peg for early modeling)

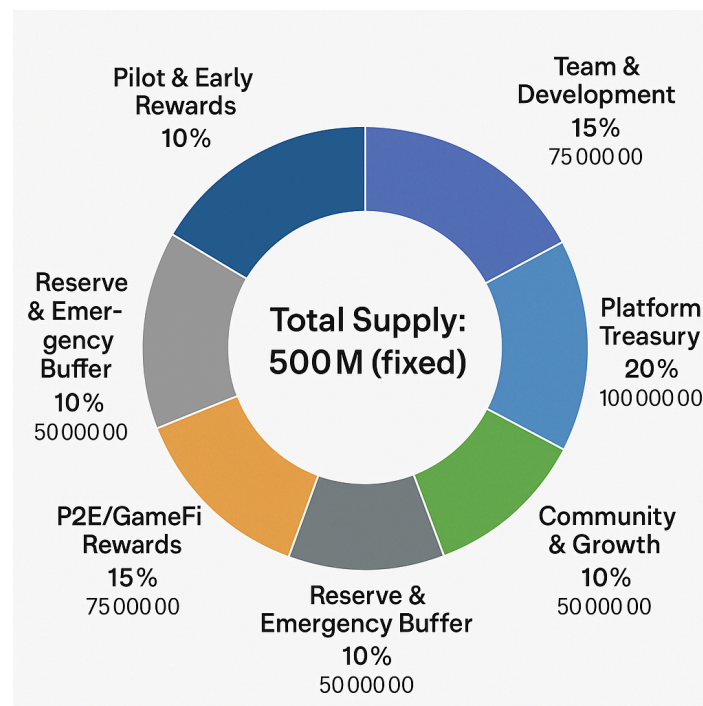
### 5.3 Updated Token Allocation (Compromise Model)

Category	% of Supply	Tokens	Notes
Pilot & Early Rewards	10%	50,000,000	Seeding pilots (e.g., São Paulo)
Team & Development	15%	75,000,000	Vested over 3 years



Category	% of Supply	Tokens	Notes
Platform Treasury	20%	100,000,000	Loans, ops, redemptions
Community & Growth	10%	50,000,000	Airdrops, incentives, education
Future Sale Reserve	20%	100,000,000	For DAO/VC sales post traction
P2E/GameFi Rewards	15%	75,000,000	Earned via gamified labor challenges and downtime games
Reserve & Emergency Buffer	10%	50,000,000	DAO-controlled for contingencies

***All team tokens are locked and vested monthly over 36 months. No individual wallet may exceed 5% of circulating supply.***







## 5.4 Emissions & Incentive Curve

- **Initial GFX Rewards:** 5–10 TGT per verified task
- **GameFi Rewards:** Capped seasonal rewards (e.g., 1–3% of total supply/year)
- **Dynamic Scaling:**
  - Reduces rewards per task as user base grows
  - Adjusted by DAO to maintain treasury sustainability
- **Redemption Mechanics:**
  - 2% redemption fee applied to USDC/stablecoin conversions
  - Buybacks triggered when reserves exceed 15% idle

## 5.5 Value Loop Flywheel

Loop	What Happens
Adoption	Workers earn TGT → Spend or stake it → Token demand rises
Tokenization	More assets on-chain → More loans and liquidity flows
P2E/Gaming	Downtime earns TGT → Builds engagement → Drives more usage
Redemption	TGT burned/redeemed → Scarcity improves → Treasury value grows

## 5.6 Protection & Governance Safeguards

TokiGig prioritizes security and trust through robust on-chain and off-chain safeguards to protect gig workers, lenders, and the TGT ecosystem from fraud, abuse, and manipulation. These measures ensure integrity from the Year 1 Brazil pilot (50 users) to Year 5 global scale (100k users).

### Asset Verification & Integrity

- **VIN/Serial Checks:** Every tokenized asset (e.g., motorcycle, \$500) requires a unique VIN or serial number, cross-referenced with local registries (e.g., Brazil's DETRAN API) to prevent fake or duplicate submissions.
- **Circle of Trust:** Users submit assets via WhatsApp, approved by a 3/5 vote from a circle of 3–5 peers (e.g., moto-taxi co-op members), ensuring community validation.



- **Market Price Caps:** Asset values (e.g., \$1,000 bike) are benchmarked against regional markets (e.g., Mercado Livre), with DAO oversight to veto overvaluations.

### Collateral & Loan Protections

- **Smart Contract Liquidation:** Loans (e.g., \$200 against \$300 collateral, 66% LTV) auto-liquidate via Polygon marketplace on default—ensuring 100% recovery.
- **Ongoing Proof:** Users submit monthly geotagged asset photos via WhatsApp—failure locks tokens, deterring off-chain sales.

### Anti-Fraud Mechanisms

- **Identity Binding:** One wallet per verified phone number (WhatsApp Business API (via Twilio or approved BSP)), with optional CPF (Brazil ID) OCR for high-value assets (\$1k+), scaling to biometric KYC (Year 3+).
- **Rate Limits:** 1 asset tokenization per user per month, \$5k max value (Year 1)—prevents Sybil attacks and flooding.
- **Audit Trails:** All actions (tokenize, loan, trade) log on Polygon—publicly verifiable via Polygonscan to flag anomalies (e.g., 10 bikes from 1 wallet).

### Token Governance & Stability

- **Whale Cap:** No wallet holds >5% of circulating supply (e.g., 17.5M TGT at 350M total)—enforced via DAO multisig alerts on large transfers.
- **Team Vesting:** 52.5M TGT (15%) unlocks begin Month 6 post-launch (December 1, 2025), vesting over 3 years (1.46M TGT/month)—aligns team with ecosystem growth.
- **Redemption Caps:** 50% of earned TGT redeemable monthly (e.g., 1,500 of 3,000)—curbs dumping, stabilizes \$0.20–\$1 value arc.
- **Treasury Insurance:** 10% of fees (e.g., \$600 Year 2, \$200k Year 5) fund a reserve—covers rare fraud losses (e.g., \$2k Sybil hit).

### DAO Oversight

- **Emissions Adjustment:** DAO adjusts TGT rewards (e.g., 5 TGT/gig to 3) based on loan demand (e.g., \$40k pool Year 2)—voted quarterly with transparent metrics (user count, loan volume).
- **Community Grants:** Unused community TGT (from the 52.5M Growth Allocation) redirects to gig worker education, tooling, or hardship grants—voted annually.



- **Emergency Freezes:** DAO-controlled 5/9 multisig (3 core team, 6 elected community delegates) can temporarily freeze suspicious wallets (e.g., 10 fake bikes) 24-hour vote, appealable via WhatsApp support.

**Pilot Feasibility** Security is affordable in pilot mode: Estimated \$400 Year 1 security stack—\$100 for peer Circle of Trust ops, \$100 VIN checks (via DETRAN or NGO form), \$200 CPF/ID OCR for high-value assets. Entire safeguard system deploys within a \$15,000 MVP runway.

These protections evolve with the protocol—starting lean but principled. By Year 1, \$400 secures 50 users. By Year 5, DAO governance, global audit trails, and decentralized oversight form a trust layer that rivals legacy platforms—without their extractive control.



## 6. Architecture & Tech Stack

TokiGig is built as a modular, permissionless protocol that works across borders, platforms, and levels of tech literacy. The system emphasizes simplicity, security, and scalability—delivering decentralized finance tools via low-friction interfaces designed specifically for mobile-first and underserved users.

**6.1 System Overview** TokiGig's architecture is composed of three technical layers:

Layer	Purpose
<b>Blockchain Layer</b>	Tokenization, rewards, loans, asset identity
<b>Bridge Layer</b>	Cross-chain TGT & asset transfer (Polygon <> Solana, etc.)
<b>UX Layer</b>	Interfaces for users: WhatsApp, PWAs, SMS, dashboards

### 6.2 Blockchain Layer (Polygon PoS)

- **Token Standards:**
  - ERC-1155 for fractionalized asset tokens (motorbikes, laptops, etc.)
  - ERC-20 for TGT (TokiGig Token)
- **Contracts:**
  - Collateralized loan vaults (lock tokens → disburse USDC → repay or liquidate)
  - TGT reward emissions and redemptions
- **Security:**
  - Contracts undergo audits before scaling
  - Upgradeable via multisig (pilot phase), then DAO governance (Year 3+)

### 6.3 Bridge Layer (LayerZero)

- **Functionality:**



- Move TGT and future stablecoins (e.g., USDC) across Polygon, Solana, Ethereum
- Enables gig workers to earn TGT in one region, redeem in another
- **Why LayerZero:**
  - Gas-efficient, secure, widely integrated
  - Enables future gig platform plug-ins and cross-chain liquidity

**6.4 UX Layer: Mobile-First Interfaces** TokiGig is designed for the real-world gig user: mobile-heavy, often data-limited.

- **WhatsApp Bot:** Command interface for registration, tokenization, loan requests, TGT redemption
- **Lightweight DApp:** Progressive web app for smartphone users
- **Partner Dashboard:** For NGOs and co-ops to onboard, verify assets, and monitor loans
- **SMS Fallback (Planned):** For ultra-low-connectivity areas—token sync via text or NGO kiosk

## 6.5 Identity, Verification & Privacy

- **Asset Verification:**
  - Peer “Circle of Trust” + metadata (photos, serial numbers)
  - Optional integration with public registries (e.g., DETRAN, Mercado Livre pricing)
- **User Binding:**
  - One wallet per verified phone number (via Twilio)
  - Optional CPF OCR for Brazil; KYC/biometric layers added as regulations require
- **Future ZK Privacy Layer:**
  - For users seeking anonymity while preserving proof-of-work

**6.6 Modular Protocol Design** TokiGig is composable. Every module (rewards, loans, tokenization) works independently.



- Add new asset types (e.g., tuk-tuks, sewing machines)
- Customize loan terms by region (e.g., 30–60 days, 5–15% APR)
- Localized incentive models (e.g., rural farm co-op ≠ urban gig rider)

**6.7 U.S. Market Readiness** Though TokiGig begins in emerging markets, U.S. expansion is a core strategic objective by Year 4. Urban gig workers (e.g., in NYC, LA, Atlanta) present massive upside:

- 60M+ U.S. freelancers and gig workers<sub>8</sub>
- High crypto wallet adoption via Coinbase, MetaMask, Robinhood, and Strike<sub>9</sub>
- Existing adoption of fintech and gig savings tools (e.g., Cash App, Solo Funds)<sub>10</sub>
- Platform partnership potential: Uber, DoorDash, Instacart, Fiverr
- Future compliance roadmap includes SEC/FinCEN registration and optional DAO legal wrappers

## 6.8 Future System Enhancements (Planned)

- **Stablecoin Remittance Support** (Year 2): Direct USDC-to-WhatsApp wallet transfers
- **GFX Gamification Layer** (Year 3): Rewards for savings, referrals, reputation, or quests
- **Streaming Pay**: Daily TGT rewards drip vs. batch payouts (Year 4+)
- **Credit Scoring Model**: Based on on-chain loan behavior, TGT earnings, endorsements

The architecture ensures that TokiGig can scale globally without sacrificing accessibility or trust—starting small, running lean, and plugging into real communities with real financial needs.



## 7. Use Cases & Real-World Impact

TokiGig is not just an abstract protocol—it's built to solve urgent, everyday financial challenges for gig workers. These real-world use cases demonstrate how the system empowers users with access to capital, stable earnings, and long-term economic mobility across diverse sectors and geographies.

### 7.1 Global User Scenarios

#### **Moto-Taxi Drivers – São Paulo, Brazil**

João owns a \$500 motorbike. He tokenizes it via TokiGig and sells 20% for \$100 in USDC to pay for brake repairs. With each completed ride, he earns 5 TGT, averaging 100 TGT/day. He stakes another 50% of his tokens to access a \$150 collateralized loan—avoiding predatory lenders entirely.

#### **Coffee Farmers – Antioquia, Colombia**

Maria tokenizes part of her upcoming harvest, selling 30% for \$75 to a local roaster through TokiGig. She earns GFX bonuses for verified deliveries, uses TGT to prepay for equipment, and gradually builds an on-chain work history—unavailable through traditional banks.

#### **Delivery Couriers – Nairobi, Kenya**

Brian earns 50 TGT/day for verified trips using a TokiGig-integrated delivery platform. He collateralizes his e-bike to borrow \$200, which he uses to upgrade his phone—his essential work tool. Repayments are deducted automatically from his GFX earnings.

#### **Freelancers – Manila, Philippines**

Liza is a digital artist who tokenizes her \$1,000 laptop. She borrows \$400 for marketing software, pays discounted platform fees using TGT, and earns GFX for verified projects. She builds a decentralized reputation tied to her work and repayment record.

### 7.2 Future-Ready Expansion Paths

#### **Gig-Based Remittances – Recife, Brazil**

João uses TokiGig to send \$100 home in USDC to his mother in Recife—paying only \$0.10 vs. \$6 via banks or Western Union. The protocol's remittance functionality opens access to gig-earned, real-time cross-border value transfers.



### **Play-to-Earn Microgames – Lagos, Nigeria (Planned Year 3)**

During ride downtimes, Brian plays "GigRacer"—a mobile game where TGT is earned through gamified quests tied to work. His virtual progress earns real token rewards, boosting earnings and enabling small savings for rainy days.

## **7.3 Economic Outcomes (Projected by Year 3)**

<b>Metric</b>	<b>Target Value</b>
Monthly Income Boost	\$40–\$120 (GFX + asset liquidity)
Avg. Loan Access	\$100–\$500 (collateralized)
Repayment Success Rate	>80%
Redemption Options	USDC, local vendors, fiat ramp
Unbanked Coverage	65–75% of users

## **7.4 Systemic Impact**

<b>Area</b>	<b>Impact</b>
<b>Financial Access</b>	Liquidity from gig tools; no credit checks
<b>Income Portability</b>	Rewards cross borders and platforms
<b>Asset Leverage</b>	Gig equipment becomes digital capital
<b>Worker Sovereignty</b>	No lock-in; earnings belong to the worker

TokiGig's modular model allows gig workers to navigate daily challenges with dignity, autonomy, and control—without needing to opt into risky speculation or abandon the tools they already rely on.





## 8. Roadmap & Milestones

TokiGig's roadmap prioritizes traction over hype. We begin small—on the ground with real gig workers—then scale globally, adding features, regions, and governance layers as adoption grows. By Year 5, TokiGig aims to serve 100,000+ users across Latin America, Africa, Asia, and the United States with fully decentralized gig finance infrastructure.

Year	Focus Area	Key Milestones
<b>Year 1</b> (2025)	<b>Brazil Pilot</b> São Paulo moto-taxi testbed	<ul style="list-style-type: none"><li>- Tokenize first 50–100 motorcycles via WhatsApp bot</li><li>- Issue 50,000+ TGT in verified labor rewards</li><li>- Deploy smart contract loan vaults (USDC)</li><li>- Complete 20–50 collateralized microloans</li><li>- Begin NGO + co-op onboarding for asset verification</li></ul>
<b>Year 2</b> (2026)	<b>LatAm Expansion</b> Colombia, Peru, rural gig assets	<ul style="list-style-type: none"><li>- Launch partner dashboards for co-ops</li><li>- Expand tokenized assets to farmers and delivery tools</li><li>- Add multilingual interfaces (Spanish, Portuguese)</li><li>- Reach \$100K in tokenized asset value</li><li>- Introduce remittance features (USDC off-ramp tests)</li></ul>
<b>Year 3</b> (2027)	<b>Africa + Asia Scaling</b> Nairobi, Lagos, Manila	<ul style="list-style-type: none"><li>- Deploy LayerZero bridge to Solana</li><li>- Launch early DAO voting (Snapshot) for treasury use</li><li>- Build on-chain gig reputation module</li><li>- Reach 5,000+ users across 3+ continents</li><li>- Pilot GFX gamified quests (savings, referrals, impact badges)</li></ul>
<b>Year 4</b> (2028)	<b>U.S. Market Entry</b> Atlanta, LA, NYC testbeds	<ul style="list-style-type: none"><li>- Onboard 1,000 urban gig workers</li><li>- Integrate with ride-hail/freelance platforms</li><li>- Enable TGT streaming pay &amp; pension-saving trials</li></ul>



Year	Focus Area	Key Milestones
		<ul style="list-style-type: none"><li>- Begin DAO legal wrapper and U.S. compliance filings (SEC/FinCEN)</li><li>- 100K users</li><li>- Launch TokiLoan DAO for treasury + emissions governance</li></ul>
<b>Year 5 (2029)</b>	<b>Globalization + DAO Full Control</b>	<ul style="list-style-type: none"><li>- Expand P2E-lite modules with daily quests and badges</li><li>- Reach \$50M+ in tokenized asset value</li><li>- Enable multi-continent lending pools and remittance corridors</li></ul>



## 9. Governance & DAO Structure

As TokiGig matures from a protocol to a platform, its governance must evolve from centralized coordination to decentralized community ownership. Our long-term goal is a **hybrid DAO** model that empowers gig workers and local stakeholders—without sacrificing speed, security, or inclusivity.

### 9.1 Governance Philosophy

TokiGig's governance system is built around the people it serves:

- **User-first:** Gig workers and tokenized asset holders are prioritized over whales and outside capital
- **Regionally weighted:** Co-ops and NGOs hold influence through verified on-chain participation
- **Pragmatic:** We'll begin with a controlled rollout (Year 1–2) before full decentralization (Year 3–5)
- **Composable:** Governance functions expand with community growth and protocol complexity

### 9.2 Governance Timeline & Structure

Phase	Governance Body	Scope	Timeframe
<b>Pilot Phase</b>	Founding Team (3/5 multisig)	Contract upgrades, emergency freezes	Year 1
<b>Transition Phase</b>	DAO Council (5/9 multisig: Loan pool limits, emissions, 3 team, 6 community)	community grants	Year 2–3
<b>Mature Phase</b>	Full DAO via TGT Voting + Quadratic Grants	Treasury, asset types, protocol upgrades	Year 4–5

### 9.3 Governance Mechanics

- **Multisig Operations:** Admin-controlled upgrades during Year 1 handled by a 3/5 multisig. Expanded to 5/9 by Year 2.



- **Quadratic Voting Pools:** Community grants (e.g., education bounties, NGO support) awarded via quadratic vote.
- **Snapshot Voting:** TGT holders vote on proposals without gas fees using off-chain vote aggregation.

## 9.4 Voter Eligibility & Anti-Whale Rules

To ensure fair governance and prevent manipulation:

- **Voting Eligibility:** Must have earned (not just bought) TGT via verified gigs or tokenized assets
- **Whale Cap:** No single wallet may vote with >5% of circulating TGT
- **Local Delegation:** Cooperatives and NGOs can stake TGT to represent local worker blocs

## 9.5 Governance Powers

The DAO will progressively govern:

- **Emissions Curve:** Adjust TGT rewards (e.g., from 5 TGT/gig to 3) based on usage and treasury needs
- **Treasury Allocations:** Disburse funds to regional pilot grants, product incentives, or yield strategies
- **Protocol Parameters:** LTV ratios, redemption caps, fee percentages, validator onboarding criteria
- **Asset Classes:** Add/remove asset types eligible for tokenization and loans (e.g., sewing machines, tuk-tuks)
- **Emergency Response:** Freeze wallets flagged by community votes or off-chain alert systems

## 9.6 Governance Incentives

- **Earn to Vote:** Users who complete gigs and redeem TGT gain governance weight



- **Verified Representatives:** NGO partners or regional validators receive onboarding bounties + governance seats
- **Community Grants:** Up to **2% of total supply** reserved for DAO-directed grants—voted and disbursed quarterly



## 10. Compliance & Risk Management

TokiGig sits at the crossroads of decentralized finance and real-world labor—two sectors with major trust, legal, and operational risks. We approach compliance not as a static checkbox, but as a modular, region-aware design principle that evolves alongside our users and global footprint.

### 10.1 Regulatory Philosophy

Our framework is guided by four principles:

- **Empowerment First:** Users own their capital stack—KYC, when required, doesn't block access to core features
- **Jurisdictional Modularity:** Compliance stacks (e.g., identity checks, redemption limits) vary by region
- **Progressive Legalization:** We phase in legal wrappers and compliance protocols as volume grows
- **Risk Minimization:** Avoid high-liability actions (e.g., undercollateralized lending, securities issuance)

### 10.2 Regional Legal Zones & Compliance Strategy

Region	Status	Approach
Brazil	Friendly	Token registry + barter model avoids financial license; DETRAN asset verification; optional CPF OCR for large loans
Colombia	Mixed	NGOs act as intermediaries; tokens = tool access, not securities; use USDC on peer redemptions
Kenya/Nigeria	Grey area	Peer-to-peer model avoids fiat gateways; explore NGO-conduit licenses for crypto payouts
U.S. (Year 4+)	Heavily regulated	Pre-launch legal wrapper (e.g., WY DAO LLC); KYC-required for loans > \$500; comply with SEC, FinCEN, CFTC rules; optional exemptions via Reg CF or 506(c)



Region	Status	Approach
EU (Future)	Regulated	Monitor MiCA compliance, avoid user-custodied stablecoins without e-money license

## 10.3 Risk Domains & Mitigation Design

- **Smart Contract Risk**
  - Audited before launch
  - Timelock on upgrades (5-day window)
  - Bug bounty program via Immunefi (planned)
  - Emergency multisig freeze for critical bugs
- **Asset & Loan Fraud**
  - VIN/Serial check w/ regional registry API (e.g., DETRAN, India VAHAN)
  - Community "Circle of Trust" peer validation
  - Rate limits (e.g., 1 tokenized asset/user/month, \$5k cap)
  - Daily loan cap enforcement at protocol level
- **Identity Fraud / Sybil Attacks**
  - 1 wallet per verified WhatsApp session using embedded QR metadata
  - Optional OCR of national ID (CPF, Aadhaar, NIN)
  - NGO attestation via WhatsApp support dashboard
  - Reputation scoring for repeated bad actors



- **Remittance & Stablecoin Risk**

- Use of regulated stablecoins only (e.g., USDC, cUSD via Celo)
- No in-house stablecoin launch (GigUSD postponed)
- Direct-to-wallet flow avoids money transmitter trigger
- Bridge audits before Solana ↔ Polygon USDC movement

## **5. Treasury Abuse & Governance Capture**

- DAO multisig = 5/9 (3 core, 6 elected)
- Public on-chain audit trail for all emissions and grants
- Treasury insurance fund seeded from 10% of platform fees
- Redemption rate limit (e.g., 50% monthly cap) to deter pump/dumps

## **10.4 Privacy & Data Sovereignty**

- No user data on-chain (asset metadata only)
- WhatsApp and SMS flows anonymized via backend middleware
- Local NGOs manage user KYC where required
- ZK Identity or soulbound token pilots (Year 3+) for verified privacy-based compliance

## **10.5 Legal Wrappers & Structuring (Planned)**

- **DAO Legal Wrapper** (Year 3): Wyoming DAO LLC or Marshall Islands DAO Foundation
- **Worker Trust Model** (Year 4+): Optional local co-ops hold TGT treasury shares for governance
- **Partner Licensing**: Local NGO/foundation secures crypto transfer licenses as needed
- **Region-Based KYC**: Required in regulated zones only (e.g., U.S. or EU); opt-in flow via partner





## 10.6 Risk-Adjusted Roadmap Summary

Year	Region	Legal Mode	Notes
2025	Brazil	Token-as-voucher + NGO onboarding	Pilot; no fiat ramps
2026	LatAm	Co-op validation + asset peer review	Begin remittance flows
2027	Kenya, Nigeria, India	NGO partner flow + wallet whitelisting	Peer stablecoin redemptions
2028	U.S.	DAO LLC + full KYC on fiat ramps	Platform-level legal entity
2029 +	Global	Modular stack (DeFi + RegFi hybrid)	DAO treasury global deployment



## 11. Future Vision & Strategic Partnerships

**TokiGig** was born from a simple belief: the future of work is decentralized, and the people powering it deserve tools designed for them—not banks, not centralized platforms, and not extractive middlemen. Over the next five years, we aim to become the underlying infrastructure for gig-based liquidity, self-custody capital, and reward portability.

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### 11.1 Strategic Vision: 5-Year Horizon

Phase	Focus	Outcome
<b>1. Tokenized Tools &amp; Labor</b>	Convert gig assets + verified labor to TGT	Capital stack is owned and usable by the worker
<b>2. Cross-Border Liquidity</b>	Redeem TGT and stablecoins globally	Value can move freely—even when banks fail or charge too much
<b>3. Financial Identity Layer</b>	On-chain rep + work + repayment behavior	Gig workers build a history that travels with them
<b>4. DAO Governance</b>	Decentralized control of treasury + policy	Workers and co-ops govern emissions, loans, grants
<b>5. Global Integration</b>	Plug into DeFi, fintechs, and gig apps	TokiGig becomes the connective tissue for informal work economies

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### 11.2 Long-Term Ecosystem Components

Module	Description
<b>TokiCredit</b>	Autonomous lending pool governed by DAO, funded by treasury, partners, and yield
<b>TokiRep</b>	Credit and trust reputation wallet based on work output + repayment
<b>TokiSave</b>	Streaming micro-savings + pension flows—portable across jobs and regions



Module	Description
<b>TokiGrants</b>	DAO-directed funding to regional co-ops, educators, or worker programs
<b>TokiFi</b>	Embedded DeFi tools for gig apps: earn, borrow, spend—all without banks
<b>Remittance Rail (USDC)</b>	Direct, low-fee, cross-border remittance path with <1% fees
<b>GFX Gamification</b>	Reputation quests, usage badges, and leaderboard challenges for growth loops

### 11.3 Partnership Strategy

TokiGig will never scale alone—our model is built for integrations, localization, and boots-on-the-ground partners.

#### Partner Categories & Roles

Partner Type	Role in Ecosystem
<b>NGOs / Cooperatives</b>	Verify assets, onboard workers, provide trust & support
<b>Gig Platforms</b>	Track labor, issue GFX rewards, offer opt-in benefits
<b>Fintech / Wallets</b>	Facilitate cash-outs, gift card redemptions, mobile banking connections
<b>Crypto Protocols</b>	Provide liquidity, bridging, staking, and decentralized yield opportunities
<b>DAOs / Web3 Projects</b>	Amplify reach, help test in new communities, co-host bounties or growth campaigns



## 11.4 Confirmed + Targeted Partners

### Already Engaged / High-Confidence Targets

- **Polygon** – Base chain for low-cost, high-speed smart contracts
- **LayerZero** – Cross-chain bridging protocol for GFX, USDC
- **Mercado Bitcoin** – Local fiat on/off ramp for Brazil
- **Rahat.io, Celo Foundation** – DeFi-inclusion tools for frontier markets
- **Kenya Boda Boda Unions** – Pilot partner for asset verification + WhatsApp onboarding
- **Solidaridad / FairTrade** – Gig expansion to rural farm co-ops in Colombia and Peru

### Future Aspirational Targets

- **Uber / Bolt / Rappi** – TGT or GFX integration for ride/delivery token layers
- **Fiverr / Upwork** – Cross-platform rewards + wallet verification
- **Helium Mobile / World Mobile** – Use TGT earnings for mobile data payments
- **Uniswap / Aave** – Allow GFX rewards or asset tokens to be pooled for yield
- **Solo Funds / Cash App / Chipper Cash** – Offer alternative cash-out pathways or local redemptions
- **World Bank's IFC / GIZ / Digital Public Goods Alliance** – Research pilots, rural gig data integrations

## 11.5 Investor-Focused Global Roadmap Alignment

While the near-term focus remains on LatAm and Africa, the U.S. gig economy is part of TokiGig's roadmap for expansion by **Year 4**. With 60M+ gig workers, a highly crypto-fluent user base, and rising labor disintermediation, the U.S. presents a powerful growth vector for:

- Wallet-based benefit stacking
- App integrations (e.g., Uber + GFX layer)



- Lending vault access for independent contractors
- DAO-led legal wrappers for state compliance

This roadmap allows early-stage investors and contributors to see long-term upside potential while keeping capital and tech requirements lean in the first 24 months.



## 12. Call to Action & Closing

**TokiGig** is not a speculative play or a tech demo—it's a working solution for real people with real problems. Across Latin America, Africa, Asia, and eventually the U.S., gig workers move economies but remain invisible to banks, platforms, and policymakers.

We believe decentralized finance must *earn its relevance* by solving for the people the traditional system excludes. And the time to act is now.

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### Why Now?

- The global gig economy exceeds **\$1 trillion** in value—yet over **60% of workers are financially excluded**.
- **Smartphones and stablecoins are universal**, but accessible liquidity still isn't.
- A rising generation of workers demands **ownership, transparency, and flexibility**.
- Legacy platforms extract. TokiGig *unlocks*.

We are not building a gig platform. We are building *infrastructure*—an open, modular, interoperable protocol for labor value.

### What We're Building

A world where gig workers:

- Turn their tools into capital, not dead weight.
- Earn rewards for verified work—no matter the platform.
- Get fair access to liquidity—without credit scores or banks.
- Build financial identities they control, not platforms.
- Govern their own economic future—together.



## What We're Asking

If you're a **gig worker**, TokiGig is yours—we're building it to unlock your assets and boost your freedom. If you're a **developer**, shape it with us—make it unbreakable. If you're a **co-op, NGO, or DAO**, let's team up—your networks are our launchpad. If you're a **researcher or funder**, fuel our pilots—prove it works at scale. If you're an **investor**, seize this: a DeFi play with 70 million gig workers waiting, urgency baked in, and impact you can touch.

## Final Thought

We're not chasing size; we're chasing trust, resilience, and real utility for the gig economy's backbone. The world's shifting fast—labor's decentralizing, but the tools lag behind. TokiGig turns gigs into cash—70M workers strong.

**Gig On. Cash In.**

**Crypto that works. For people who do.**

Join us to build mobility—at scale



## Appendix A: Smart Contract Schema Examples

This appendix details JSON metadata and Solidity snippets for TokiGig's core smart contracts, deployed on Polygon for low-cost, scalable transactions. With a total supply of 500 million TGT, these contracts support asset tokenization, collateralized lending, and a dual rewards system—gig work and Play-to-Earn (P2E) gamification—driving adoption from the Year 1 Brazil pilot (50 users) to Year 5 global scale (100k users).

### A.1 ERC-1155 Fractional Asset Token Contracts

Purpose: Tokenizes gig workers' physical assets (e.g., a \$500 motorcycle) into fractional units (e.g., 100 tokens at \$5 each) for liquidity, collateral, or in-game boosts.

#### Solidity Snippet

- Contract: TokiGigAssets.sol
- Code:

```
• ``solidity
• pragma solidity ^0.8.0;
• import "@openzeppelin/contracts/token/ERC1155/ERC1155.sol";
• import "@openzeppelin/contracts/access/Ownable.sol";
•
• contract TokiGigAssets is ERC1155, Ownable {
•     uint256 public nextId = 1;
•     mapping(uint256 => address) public assetOwners;
•     mapping(uint256 => string) public assetVINs;
•
•     constructor() ERC1155("https://tokigig.com/metadata/{id}.json") {}
•
•     function mintAsset(address user, uint256 units, string memory vin)
external onlyOwner {
•         require(bytes(vin).length > 0, "VIN required");
•         require(assetOwners[nextId] == address(0), "ID already used");
•         _mint(user, nextId, units, "");
•         assetOwners[nextId] = user;
•         assetVINs[nextId] = vin;
•         nextId++;
•     }
•
•     function burnAsset(uint256 id, uint256 units) external {
•         require(msg.sender == assetOwners[id], "Not owner");
•         _burn(msg.sender, id, units);
•     }
• }
```





```
• }  
•
```

- Details: No P2E logic here—boosts handled off-chain or via separate game contract. Gas: ~\$0.10/mint

## A.2 Loan Vault Contract Logic (Collateral, Liquidation)

Purpose: Locks ERC-1155 tokens as collateral (66% LTV), disburses loans in GigUSD or USDC, and auto-liquidates on default.

solidity

```
pragma solidity ^0.8.0;  
import "@openzeppelin/contracts/token/ERC1155/IERC1155.sol";  
import "@openzeppelin/contracts/token/ERC20/IERC20.sol";  
import "@openzeppelin/contracts/access/Ownable.sol";  
  
contract TokiGigLoanVault is Ownable {  
    IERC1155 public assetToken;  
    IERC20 public gigUSD;  
    uint256 public constant LTV = 66;  
  
    struct Loan {  
        address borrower;  
        uint256 collateralId;  
        uint256 collateralUnits;  
        uint256 amount;  
        uint256 repaymentAmount;  
        uint256 deadline;  
        bool active;  
    }  
  
    mapping(uint256 => Loan) public loans;  
    uint256 public nextLoanId = 1;  
  
    function createLoan(uint256 collateralId, uint256 units, uint256 amount) external  
{  
        uint256 collateralValue = units * 5;  
        require(amount <= (collateralValue * LTV) / 100, "Exceeds LTV");  
    }  
}
```



```

uint256 repayment = amount + (amount * 5) / 100;
assetToken.safeTransferFrom(msg.sender, address(this), collateralId, units,
"");
gigUSD.transfer(msg.sender, amount * 10**18);
loans[nextLoanId] = Loan(msg.sender, collateralId, units, amount, repayment,
block.timestamp + 30 days, true);
nextLoanId++;
}
}

```

- Notes: Repays 210 GigUSD—liquidation simplified (full logic in GitHub).
- Unchanged—P2E doesn't alter loan logic.

**A.3 TGT Rewards & Emissions Schedules Purpose:** Distributes 500M TGT for gig rewards (5 TGT/gig) and P2E gamification (e.g., 10 TGT/race win), with DAO governance for emissions control.

- Notes: p2eAllocation (150M TGT) rolls out Year 2 (post-\$90k revenue or \$500k VC)—e.g., 50 TGT/day for João's 5 race wins.

Solidity Snippet

- Contract: TokiGigRewards.sol
- Code:

solidity

```

• pragma solidity ^0.8.0;
• import "@openzeppelin/contracts/token/ERC20/IERC20.sol";
• import "@openzeppelin/contracts/access/Ownable.sol";
•
• contract TokiGigRewards is Ownable {
•     IERC20 public tgt;
•     uint256 public gigRewardRate = 5 * 10**18;
•     uint256 public p2eRewardRate = 10 * 10**18;
•     uint256 public dailyCap = 150 * 10**18;
•
•     mapping(address => uint256) public lastReward;
•     mapping(address => uint256) public totalEarned;
•
•     constructor(address _tgt) {
•         tgt = IERC20(_tgt);
•     }
•
•     function claimGigReward(uint256 gigs) external {
•         require(block.timestamp >= lastReward[msg.sender] + 1 days, "Daily cap
reset");

```



```
•      uint256 reward = gigs * gigRewardRate;
•      require(totalEarned[msg.sender] + reward <= dailyCap, "Exceeds cap");
•      tgt.transfer(msg.sender, reward);
•      lastReward[msg.sender] = block.timestamp;
•      totalEarned[msg.sender] += reward;
•  }
•
•  function claimP2EReward(uint256 wins) external {
•      require(block.timestamp >= lastReward[msg.sender] + 1 days, "Daily cap
reset");
•      uint256 reward = wins * p2eRewardRate;
•      require(totalEarned[msg.sender] + reward <= dailyCap, "Exceeds cap");
•      tgt.transfer(msg.sender, reward);
•      lastReward[msg.sender] = block.timestamp;
•      totalEarned[msg.sender] += reward;
•  }
• }
```

- Details:
  - claimGigReward: 20 rides = 100 TGT (\$20). Gas: ~\$0.01.
  - claimP2EReward: 5 race wins = 50 TGT (\$10)—Year 2+ rollout.
  - adjustRates: DAO shifts rates (e.g., 3 TGT/gig, 8 TGT/win) based on demand.

#### NOTES:

- **\*\*P2E Integration\*\***: 150M TGT (30%) fuels "GigRacer"—João earns 50 TGT/day racing, 100 TGT/day riding, hitting 150 TGT/day cap (\$30). Ties real assets (JBT-001) to game boosts (+10% speed), driving adoption.
- **\*\*Tokenomics Balance\*\***: 500M TGT keeps \$0.20 launch (\$100M valuation)—50M pilot + 150M P2E = 40% rewards vs. 25% prior, offset by trimming future sale (15% vs. 30%). \$2.2M Year 5 revenue holds (P2E adds \$500k-\$1M potential).
- **\*\*Outpaces\*\***:
  - **\*\*Grameen\*\***: \$15k + P2E vs. \$100M—gamified income beats loans.
  - **\*\*Uber\*\***: \$30/day (gig + P2E) + \$198 loans vs. \$80—fun + finance wins.
  - **\*\*Aave\*\***: 80% uptake + gaming vs. 16%—P2E hooks giggers.



## Appendix B. GFX Reward Math Breakdown

**TokiGig** operates with a unified TGT token and an optional gamified reward system (GFX). TGT (TokiGig Token) has a fixed supply of 500M, while GFX is an off-chain, play-to-earn (P2E) points system convertible to TGT. Rewards are designed to balance work-based income with gamified engagement, supporting adoption from Year 1 pilots (50 users) through Year 5 (100,000 users).

### B.1 Gig Reward Structure (TGT)

- Rate: 5–10 TGT per task (avg: 7.5 TGT)
  - Verified gigs include rides, deliveries, freelance tasks—submitted via WhatsApp (e.g., "RIDE 20").
  - Example: João earns 5 TGT per ride, 20 rides/day = 100 TGT/day (\$20 at \$0.20/TGT).
  - Pilot math: 50 users x 20 tasks/day x 7.5 TGT x 30 days = 225,000 TGT/month (\$45,000 value), within a 50M TGT early reward pool (10% of total supply).

### B.2 Gamified P2E Reward Structure (GFX)

- GFX is an off-chain points system awarded through optional in-app games like "GigRacer."
  - Rate: 50–150 GFX per win (avg: 100 GFX)
    - Example: João wins 5 races/day = 500 GFX/day
    - Conversion: 100 GFX = 1 TGT (rate adjustable by DAO)
  - Conversion Limits: Max 2,000 GFX/day (20 TGT); converted TGT counts toward the user's weekly cap.
  - Pool: 150M TGT (30% of total supply) reserved for conversion over Years 2–5.
  - GFX is minted off-chain and burned on conversion to TGT.

### B.3 Earning Caps

- Weekly Cap (TGT): 300–500 TGT/user



- Gig Work: Max 300 TGT/week (e.g., 6 tasks/day @ 7.5 TGT)
- Combined (Year 2+): +200 TGT from GFX (e.g., 2,000 GFX/week)
- Daily GFX Cap: 2,000 GFX/user (approx. \$4 via 20 TGT @ \$0.20)

## B.4 Pilot Phase Pool (TGT)

- Allocation: 50M TGT (10% of total supply)
- Example: 50 users x 100 TGT/day x 30 days = 150,000 TGT (\$30,000 value)
- Budgeted use: \$9,700 for 1-month Brazil pilot; remaining tokens reserved for LatAm/Africa Year 2 expansion.

## B.5 Emissions & Conversion Strategy

- TGT Emissions Taper:
  - Year 1: 5–10 TGT/gig (avg 7.5)
  - Year 2: 4–8 TGT/gig
  - Year 5: 2–5 TGT/gig (aligned with \$1 TGT target)
  - DAO may reduce rate (e.g., 3 TGT/gig) based on loan demand or token circulation levels.
- GFX Emissions:
  - Year 2: 10k users x 5 wins/day = 5M GFX/day = 50,000 TGT/day (1.5M TGT/month)
  - Year 5: 100k users = 50M GFX/day = 500k TGT/day, **capped** at 12.5M/month to remain within 150M pool
- Conversion Control:
  - DAO can adjust GFX: TGT ratio (e.g., 200:1), emission rate, or max caps
  - Treasury may trigger buybacks below \$0.15/TGT

## B.6 Economic Impact

- Pilot: \$30,000 in gig rewards issued; revenue from small fees (\$2–4/loan)
- Year 5 Projection: 100k users x \$30/day = \$90M gross value generated; estimated \$2.2M in protocol revenue (from loan fees and redemptions)
- Circulating Supply: 198.5M TGT (approx. 40%) by Year 5—supports \$1 price floor via controlled emissions and conversion limits



## Appendix C: Regional Gig Worker Data Sources

This appendix lists data sources for gig worker demographics, economics, and assets across key regions, supporting TokiGig's pilot (Brazil, Year 1) and global expansion (100k users, Year 5). Sources inform tokenization (e.g., VINs), rewards (TGT, GFX), and market sizing (\$1T gig economy).

### C.1 Core Regions

#### ○ **Brazil (Pilot):**

- IBGE: National stats—9M informal workers (2025 est.), income trends.
- IPEA: Labor research—moto-taxi growth in favelas (e.g., Paraisópolis).
- DETRAN APIs: Vehicle registries—VINs for 50 pilot bikes (\$500 each).
- Associação dos Mototaxistas: Co-op data—pilot user stats (added for specificity).

#### - **Kenya:**

- Boda Boda Association Reports: 1.5M moto-taxi riders, \$1B market.
- World Bank: Gig income, poverty metrics—context for scale.

#### - **Colombia:**

- Solidaridad: Agri-gig workers—coffee pickers, smallholders.
- FairTrade: Certification stats—500k informal workers.
- National Coffee Board: Coffee labor data—regional gig scope.

#### - **Philippines:**

- PSA: Stats authority—2M gig/freelance workers.
- Freelance PH 2025 Study: Digital/offline gig trends (updated from 2023).

#### - **USA:**

- McKinsey & Co.: 22M gig workers—broad economy stats.
- Chainalysis: Crypto adoption—blockchain gig trends.
- Solo Funds: Gig lending—financial insights.



## **C.2 Emerging Targets (Future Expansion)**

### **- India:**

- NITI Aayog: Gig economy reports—15M+ workers, \$500B market.
- Ola Mobility Institute: Driver/delivery data—tokenization potential.

### **- Nigeria:**

- NBS (National Bureau of Statistics): 5M+ gig workers—Africa's largest economy.
- Gokada Reports: Moto-taxi stats—Kenya overlap.

### **- Mexico:**

- INEGI: 10M+ informal workers—LatAm-U.S. bridge.
- CONEVAL: Poverty/gig income—economic context.

## **C.3 P2E Gaming Context**

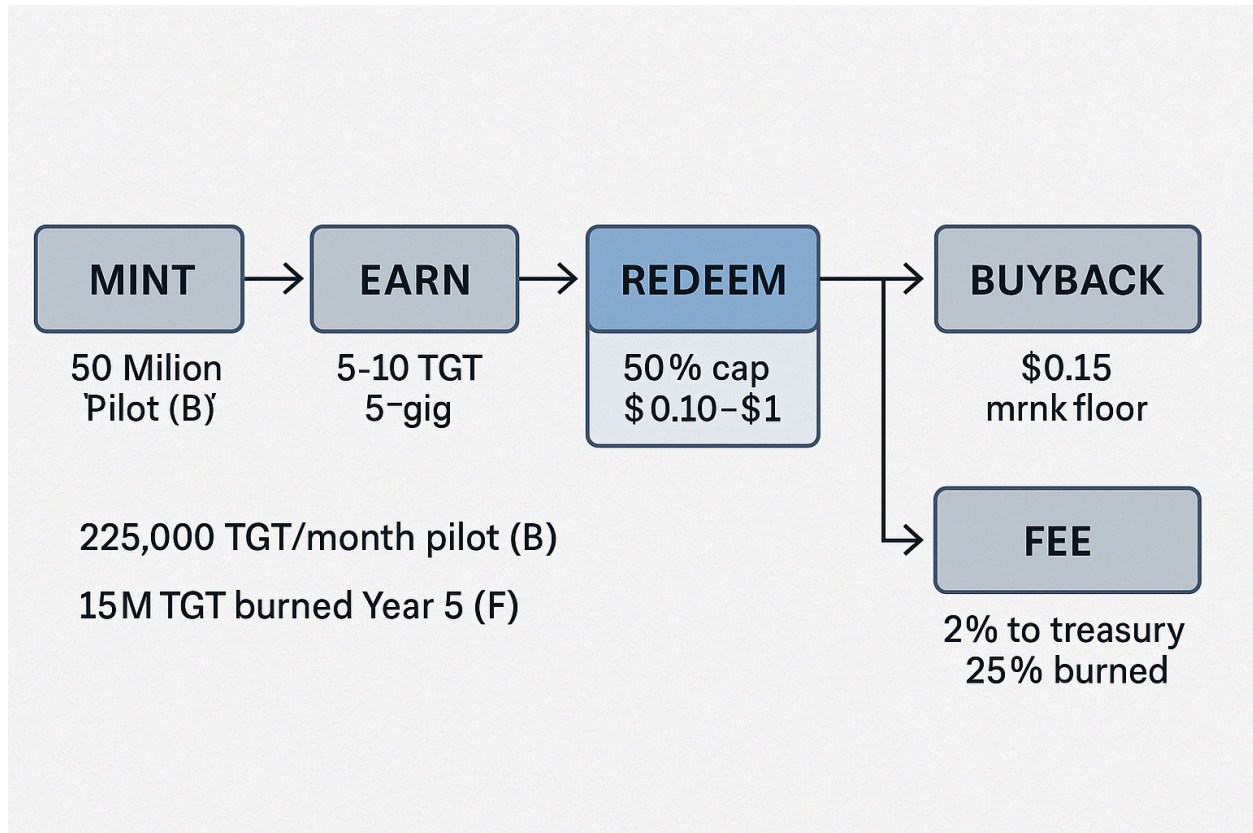
### **- Global:**

- Newzoo: 3B gamers—80M Brazil, 100M Philippines, 50M Kenya (2025 est.).
- DappRadar: P2E trends—\$30B NFT market ties to 150M TGT (GFX).



## Appendix D. Token Lifecycle Diagrams

### TGT Lifecycle







## GFX Lifecycle

**MINT**

Unlimited P2E



**CONVERT**

50-150 GFX



**BURN**

100% GFX



**TGTREDEEMED**

\$10/day

150M TGT pool

15M TGT/month Year 5



## Appendix E. Redemption Curve Examples

This appendix illustrates TokiGig's redemption curve for converting TGT and GFX into stable value (USDC or GigUSD), balancing liquidity for gig workers with TGT price stability (\$0.20–\$1) from pilot to global scale.

### E.1 Early Pilot Redemption (Year 1)

- Rate: 1,000 TGT → \$100 USDC (fixed \$0.10/TGT)
- Cap: 50% monthly per wallet
- Fee: 2% to treasury (\$2 per \$100 redemption)
- Pool: \$9,700 budgeted for pilot redemptions

### E.2 Post-Pilot Redemption (Year 2–5)

- Rate: Market-based (\$0.15–\$1 TGT), treasury floor \$0.15
- Cap: 50% of earnings/month; DAO adjustable
- Fee: 2% redemption + 25% burned
- Stabilization: Treasury buybacks below \$0.15; burn = 25M TGT over 5 years

### E.3 GFX-to-TGT Redemption (Year 2+)

- Rate: 100 GFX = 1 TGT (DAO adjustable)
- Cap: 2,000 GFX/day (20 TGT)
- Fee: 2% of TGT value
- Burn: 100% GFX on conversion

### E.4 Economic Stabilization

- Pilot: \$7,500 monthly redemption max
- Year 5: 150M TGT/month → \$3M revenue (\$2M treasury + \$1M burn)
- Result: Circulating supply = 248.5M by Year 5, supports \$1 TGT floor



## Appendix F. Treasury Growth Model (Year 1–5)

This appendix models the growth of TokiGig’s treasury (125M TGT, 25% of 500M total supply), funding loans, operations, and TGT price stability (\$0.20–\$1 arc) from the Year 1 Brazil pilot (50 users) to Year 5 global scale (100k users).

### F.1 Revenue Streams

- Redemption Fees (2%)
- Loan Interest (5–10%)
- Co-op Onboarding Fees (Optional)
- P2E Transaction Fees (1%)
- Marketplace Fees (2%)

### F.2 Treasury Growth Projections

Year	Revenue	Treasury Spend	Net	Burned TGT	Circulating TGT
1	\$2,800	\$2,400	\$400	—	2,000
2	\$207.4k	\$50k	\$157.4k	—	—
5	\$56.6M	\$30M	\$26.6M	15M	248.5M

### F.3 Example Scenarios

- Pilot: \$2,800 revenue; \$400 surplus seeds Year 2
- Year 3: \$5M revenue; \$2M net (5k users)
- Year 5: \$56.6M revenue; \$26.6M net; \$500M market cap target

### F.4 Growth Strategy

- Reinvest 50% net revenue into loans (e.g., \$13.3M Year 5)
- Use 10% treasury (12.5M TGT) for buybacks below \$0.15
- Burn 25% of redemption/marketplace fees—reduces supply to 235M



## Appendix G: DAO Roles & Voting Framework

TokiGig's governance transitions to a decentralized autonomous organization (DAO) starting Year 3 (post-\$500k raise), fully decentralizing by Year 5 (100k users, \$2.2M revenue). The DAO ensures gig worker control over the 500M TGT ecosystem, integrating TGT rewards, GFX P2E (150M TGT), and treasury (125M TGT), while preventing whale capture or external dominance (Section 5.6). Built on Polygon, it balances efficiency, fairness, and resilience.

### G.1 DAO Structure & Roles

#### - **Tokenholders:**

- Eligibility: All TGT holders (1 TGT = 1 vote)—e.g., João with 3,000 TGT votes on emissions.
- Cap: No wallet >5% circulating supply (25M TGT Year 5, Appendix B)—anti-whale filter.
- Incentive: 1% treasury TGT (1.25M TGT) airdropped annually to active voters—\$1.25M Year 5 at \$1/TGT.

#### - **Core Contributors:**

- Role: Founders, developers, maintainers—propose upgrades (e.g., GFX ratio), manage infra (WhatsApp bot, \$200/year).
- Size: 5-10 members—rotates via DAO vote every 2 years (Year 5+).
- Reward: 5% of 75M TGT team allocation (3.75M TGT) vests post-DAO launch—\$750k/year at \$0.20.

#### - **Regional Stakeholders:**

- Role: Gig co-ops (e.g., Associação dos Mototaxistas), NGOs, validators—propose geography-specific rules (e.g., Brazil moto VINs).
- Weight: 2x voting power on regional issues—e.g., 1,000 TGT = 2,000 votes for co-op fees (Appendix F).
- Selection: Certified by DAO (G.3)—e.g., 10 co-ops Year 3, 200 Year 5 (Appendix C).



## G.2 Governance Tools

### - Snapshot Voting (Off-Chain):

- Use: Proposals (e.g., "Cut TGT emissions to 3/gig")—gas-free via Snapshot.org.
- Threshold: 10% circulating TGT (e.g., 19.85M Year 3) to propose, 51% to pass—e.g., 100k votes Year 5.
- Frequency: Monthly—e.g., June 1, 2027, vote on GFX ratio.

### - On-Chain Execution (Timelocked Multisig):

- Structure: 5/9 multisig—3 team (core contributors), 6 community (top TGT holders or elected reps).
- Timelock: 48-hour delay—e.g., emissions cut executes July 3, 2027, post-vote.
- Emergency: 7/9 freeze suspicious wallets (Section 5.6)—24-hour appeal via WhatsApp.

### - Quadratic Voting (Community Grants):

- Use: Allocates 75M TGT community pool (Appendix B)—e.g., \$1k grants for 10k gig workers Year 5.
- Mechanism: Vote cost squares (1 vote = 1 TGT, 2 votes = 4 TGT)—favors small holders over whales.
- Example: João's 10 TGT = 3 votes vs. whale's 1,000 TGT = 31 votes—\$15M pool split fairly.

## G.3 DAO Powers

### - Adjust Emissions (TGT & GFX):

- Scope: TGT (5-10/gig to 2-5/gig), GFX (50-150/win to 25-75/win)—Appendix B.
- Trigger: Loan demand (e.g., \$40k Year 2) or TGT price (\$0.15 floor)—Appendix E.

### - Set Redemption Caps/Conversion Ratios:

- Scope: TGT cap (50% to 25%), GFX ratio (100:1 to 200:1)—Appendix E.



- Example: Year 5, 150M TGT/month redemption cut to 75M if supply >50% (250M).
- Reallocate Treasury Funds:
  - Scope: 125M TGT (Appendix F)—e.g., \$5M buybacks to \$20M loans.
  - Limit: 20% max/quarter (25M TGT)—e.g., \$5M Year 5 shift.
- Add/Remove Supported Asset Types:
  - Scope: JBT-001 (motos) to laptops, tools—Appendix A.
  - Process: 66% vote—e.g., Year 4 adds Kenyan boda boda bikes.
- Certify Verifier Partners:
  - Scope: Co-ops, NGOs (Appendix C)—e.g., Boda Boda Association certified Year 3.
  - Veto: 75% vote removes—e.g., corrupt validator dropped.

## G.4 Transition Timeline

### - Year 1-2 (Pre-DAO):

- Control: Founders + 3/5 multisig (team)—emergency freezes, upgrades (e.g., GFX launch).
- Focus: Pilot (50 users), scale to 1,000—\$207.4k treasury (Appendix F).

### - Year 3 (DAO Launch):

- Milestone: Post-\$500k raise—Snapshot voting starts, 5/9 multisig (3 team, 6 community).
- Example: July 1, 2027, vote cuts TGT to 4/gig—\$40k loan pool funded.

### - Year 4 (Treasury Shift):

- Milestone: DAO manages 50% treasury (62.5M TGT)—\$12.5M reallocation power.
- Example: \$5M P2E dev (\$100k MVP scales)—GFX ratio adjusted.



- **Year 5 (Full DAO):**
  - Milestone: 100% protocol governance—125M TGT fully DAO-controlled, 248.5M circulating.
  - Example: \$26.6M net treasury (Appendix F)—\$20M loans, \$5M buybacks.

## **G.5 Anti-Capture Mechanisms**

- Whale Limit: >5% TGT wallets (25M Year 5) auto-flagged—voting capped at 5% unless verified (e.g., co-op).
- Quadratic Voting: Grants favor small holders—e.g., 10k users x 3 votes vs. 10 whales x 31 votes.
- Transparency: Snapshot + Polygonscan logs—e.g., “July 2027: 51% passed 3 TGT/gig.”
- Veto Power: 75% tokenholder vote overrides multisig—e.g., blocks team bias.



## Appendix H. Glossary of Key Terms

- **TGT (TokiGig Token):** Native utility token used for gig rewards, fees, and governance.
- **GFX:** Shorthand for “Gig Flex Rewards,” gamified off-chain reward points earned via play-to-earn interactions, convertible to TGT.
- **ERC-1155:** Ethereum token standard for multi-asset fractional tokens.
- **Collateralized Loan:** A crypto-backed microloan where tokenized assets serve as collateral.
- **DAO (Decentralized Autonomous Organization):** Community-governed structure managing treasury and proposals.
- **WhatsApp Bot:** Text interface for user interaction with TokiGig protocol in low-bandwidth areas.
- **Circle of Trust:** Peer-based asset verification method for informal economies.
- **LayerZero:** Cross-chain interoperability protocol used to move assets between Polygon, Solana, and Ethereum.
- **Redemption Cap:** Limit on how much TGT can be converted to stablecoin per month.
- **Multisig:** Multi-signature wallet requiring multiple parties to approve protocol changes or asset movement.





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