SciQuipShar - Business Canvas

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Key partners

What are your key partners to get competitive advantage?

Community:
Users actively participate in creating good practices and validating the quality of services and equipment. The community builds credibility and trust around the platform.

Criptocurrency providers:
Platforms and services that provide infrastructure for blockchain transactions allow payments and insurance to be decentralized, transparent and fast.

Cost Structure

How much are you planning to spend on the product development and marketing for a certain period?

Value-driven:
We prioritize spending on features that directly enhance user trust and platform integrity—such as blockchain infrastructure, identity verification services, and technician partnerships—rather than volumetric or ad-based models. This "value-over-volume" approach positions SciQuipShar as a premium, mission-aligned service.

Marketing costs:
- Academic outreach (conference sponsorships, departmental seminars)
- Digital campaigns (targeted ads on research-focused channels, social media)
- Partnership development with professional societies and research consortia
- Content creation (case studies, white papers, webinars)

Hosting , development, and maintenance cost:
- Blockchain nodes (Hyperledger Fabric peers, Ethereum nodes) and associated gas or hosting fees
- Cloud infrastructure for our off-chain backend, databases, and file storage
- Ongoing development (smart contract audits, API integrations, frontend enhancements)
- Technical support and routine maintenance (security patches, performance tuning)

Key activities

What are the key steps to move ahead to your customers?

Secure equipment sharing and contracts:
Develop and maintain smart contracts to automate equipment bookings, enforce agreements, and ensure secure, traceable transactions between researchers and institutions.

Reliable reputation system:
Implement a robust reputation engine that rewards trustworthy behavior through non-transferable tokens ("badges") and ratings, ensuring accountability and fostering trust among users.

Accessible, cost-effective and unified:
Develop an integrated platform that minimizes access barriers, reduces resource under-utilization, optimizes cross-institutional sharing, and connects assets from multiple institutions.

Blockchain/web3 technologies integration for transparency and tracking of resources:
Integrate smart contracts and decentralized storage to transparently record equipment activity, ownership, and history across Web3 networks.

Cryptocurrencies integration for no taxes:
Enable seamless cross-border transactions through the use of stablecoins and native tokens, minimizing fees, taxes, and payment friction.

Key resources

What resources do you need to make your idea work?

Scientific Equipment:
Physical and digital research assets available for sharing, including:
- On-site equipment requiring in-person use;
- Remotely viewable resources;
- Remotely operable systems.

The blockchain:
Dual blockchain architecture (Fabric and Ethereum) supporting secure transactions, ownership validation, decentralized payments, and transparent reputation tracking.

Criptocurrencies:
Digital assets enabling low-cost, fast, and borderless payments for equipment bookings and related services.

Smart Contracts:
Automated, tamper-proof agreements governing reservations, reputation scoring, payment execution, and insurance claim handling.

Database:
Off-chain storage for user profiles, booking metadata, logistics tracking, and notification services, complementing the on-chain immutable records.

Web Platform and services:
User interface and backend systems enabling equipment discovery, booking, and system operations.

Value propositions

How will you make your customers' life happier?

Access to scientific equipment:
SciQuipShar opens the door to a broad network of under-utilized instruments, enabling researchers—regardless of institutional size or budget—to reserve high-end equipment on demand. By eliminating geographic and administrative barriers, even labs in remote or under-funded settings can tap into specialized tools (e.g., electron microscopes, NMR spectrometers) that would otherwise be out of reach.

Filtering of trustful and reputable partners:
Our platform employs a multi-layered vetting process—combining blockchain-anchored identity verification, peer reviews, and historical usage metrics—to ensure that every equipment owner and borrower has an established reputation. Researchers can filter listings by partner rating, institutional affiliation, or verified endorsements, reducing uncertainty and fostering confidence in each transaction.

Transparency and tracking of equipment reservations, usage and maintenance:
Every booking, usage session, and maintenance event is immutably recorded via smart contracts. Users receive real-time dashboards showing reservation statuses, time logged on each instrument, and upcoming calibration schedules. This end-to-end visibility minimizes scheduling conflicts, prevents over-booking, and ensures that each piece of equipment is returned in prime condition.

Unified equipment discovery:
Rather than hopping between siloed university catalogs or regional directories, SciQuipShar provides a single, searchable interface that aggregates equipment across institutions and geographies. Advanced filters (technical specs, availability windows, location, pricing) and keyword searches help researchers rapidly pinpoint the optimal tool for their project.

Encouraging collaborative science:
By surfacing complementary expertise—linking users who have run similar protocols or who possess niche technical know-how—the platform naturally fosters collaborative partnerships. Shared-use agreements can include co-authorship clauses or data-sharing commitments, incentivizing joint publications and cross-disciplinary innovation.

Insurance, traceability and responsibility assignment:
Optional insurance add-ons underwritten by pre-qualified providers protect against accidental damage, theft, or calibration drift. Technicians conduct pre- and post-use inspections, logging findings on the blockchain to assign liability clearly. Automated claims processing and escrowed collateral ensure timely reimbursement and deter negligent handling.

Reducing waste and cost of resources:
Under-utilized instruments represent sunk capital; by optimizing instrument uptime, SciQuipShar drives down per-experiment costs for owners and borrowers alike. Institutions monetize dormant equipment, and researchers avoid the overhead of purchasing rarely used tools—reducing both financial waste and the environmental footprint of manufacturing new devices.

Customer segments

Who are your customers? Describe your target audience in a couple of words.

Researchers/research groups:
Individuals or teams engaged in scientific research activities, including graduate students, postdoctoral researchers, university professors, and independent scientists.

Institutions:
Larger organizations, such as universities and research centers who have a large amount of scientific equipment.

Technicians:
Specialists responsible for inspecting, maintaining and validating the condition of equipment before and after the loan.

Customer relationships

How often will you interact with your customers?

Self service / automated services:
No personal assistance. The user interacts indirectly with the company, using tools and systems that allow him to do everything himself. Equipment management occurs automatically, without the need for direct intervention from the company.

Communities:
Connects different types of clients, service providers and consumers. Users can report experiences of using equipment, promoting the exchange of experiences nd strengthening trust. Researchers can report their experiences using the equipment, leaving detailed feedback that helps other users make informed decisions.

Revenue Streams

How much are you planning to earn in a certain period? Compare your costs and revenues.

Donations for system maintenance:
Recognizing the public good of shared research infrastructure, we welcome recurring or one-time donations from philanthropy, foundations, and institutional sponsors. Donors gain recognition on the platform and access to impact reports highlighting equipment utilization metrics and research outcomes.

Insurance Service Fees:
As an optional add-on, we partner with specialized insurers and certified technicians to underwrite equipment-sharing risks. A nominal fee (e.g., a percentage of the equipment's replacement value) covers pre- and post-use assessments, policy administration, and expedited claims handling.

Transaction Fees via Smart Contracts:
For every confirmed booking, a small percentage fee (e.g., 2–5%) is automatically deducted via the smart contract when funds—or tokens—exchange hands. This aligns our success with platform activity: more bookings mean more revenue, directly proportionate to the value we deliver.

Channels

How are you going to reach your customers?

Web Platform:
The web platform connects researchers, institutions, and technicians for equipment discovery, booking, and management. It offers a unified interface for reservations, payments, reputation tracking, and maintenance logging, serving as the main gateway for collaborative, efficient, and reliable equipment access.

The blockchain:
Blockchain enables trusted access to the platform's services. Hyperledger Fabric secures internal transactions (equipment registration, bookings, maintenance), while Ethereum enables decentralized payments and reputation validation, reinforcing trust across institutional and independent users.