Bitcoin for Missions White Paper

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Brilliance Labs

Abstract

In the "Bitcoin for Missions" venture, the spread of the gospel is our chief goal. We aim to identify innovative missions practitioners and national partners working in financially repressive contexts, expose them to the Bitcoin network as a multifaceted solution for financial empowerment, and coach them through prototyping tools and solutions that aid in their fulfillment of the Great Commission. This white paper details our research, findings, and a vision of the potential for Bitcoin to revolutionize financial activities in missions contexts.

Introduction

Background

Brilliance Labs commits to innovating around complex problems to introduce a holistic gospel to all, especially in regions where Christianity is less established. We work in association with the Ralph Winter Launch Lab at Frontier Ventures and Thank God for Bitcoin. This initiative aims to bridge the gap between Christian Bitcoiners unfamiliar with mission work and missions organizational leaders unfamiliar with Bitcoin.

From their common interest in investments, Ahshuwah Hawthorne introduced his friend Nate Scholz to Bitcoin in 2021. Their other common interest in serving refugees and international students compelled them down a path of discovery, as they wondered if these two pursuits might overlap.

There was clearly a community of Christian Bitcoiners out there who could visualize its application in missions, but the missions community had not yet approached the subject. Our friend, Erik Hersman, was a plenary speaker talking about his work in Africa. We asked him to announce that we wanted to meet with people interested in Bitcoin at the end of his talk. He pointed at us and made the invitation. There were over a thousand missions leaders in the room, and we thought for sure we'd get something started.

As Ahshuwah recalls the experience, "Okay... crickets. Where are they? We couldn't find them."

Not only was there no interest, but we've sometimes experienced opposition. Initial attempts to broach the topic clarified that, for many whom we spoke to, the topic of bitcoin was associated with fear, uncertainty, and doubt (FUD). We realized that trying to convince these people would spend far too much time and energy, so we resolved to seek partners who were already early adopters. Pulling entrepreneurial thinkers by demonstrating early success is more productive than trying to push the skeptical into something they don't care to visualize.

We started with a propelling question:

"How might we overcome complex problems faced in the pursuit of completing the Great Commission by using Bitcoin?"

To understand what we mean by the question, it is helpful to unpack a few concepts.

Complex Problems: Merely complicated problems are time-consuming and have many steps, but you expect positive solutions at the completion of the work. Complex problems are different. They involve multiple variables that provide unpredictable results, making it impossible to ensure a positive outcome. Dealing with complexity requires adaptive leadership, iterative experiments, and a tolerance for ambiguity.

Completing the Great Commission: Jesus instructed his followers, "go and make disciples of all nations, baptizing them in the name of the Father, and of the Son and of the Holy Spirit, teaching them to observe all that I have commanded you." (Mt. 28:19-20a)

Many interpret that obeying these directions is just about evangelizing nonbelievers into a minimal confession of belief. However, we recall Jesus' holistic personal example of addressing physical, emotional, and social needs along with their spiritual ones. We find that revealing the Kingdom of God means taking the time to bring fullness of life, which includes overcoming the painful obstacles that are presented globally by broken monetary and economic systems. Unjust measures often distract people from following Jesus in word and truth and also hinder faithful workers who cannot move resources to where they are needed.

Using Bitcoin: Many people mistakenly believe that the word "Bitcoin" represents all cryptocurrencies. This happens sometimes when a market leader's brand name gets used for the product they're famous for, as in Kleenex for facial tissues. There are a few reasons Bitcoin is distinctively more attractive than all the other "altcoins."

Bitcoin had a head start on its earliest competitor, which gave it a significant advantage as the first one in the market. Its steady global adoption has provided heightened security through its sheer size and computational power. Its proof of work structure gives advantages through decentralization, where decisions are made by consensus rather than by the authority of a few. The US Security and Exchange Committee (SEC) recognizes bitcoin as a legal "digital commodity," while it classifies every other cryptocurrency as an "unregistered security."

We often refer to ourselves as being "Jesus Maximalist and Bitcoin focused." By this we mean that we have confidence in Bitcoin over the other cryptocurrencies, but we don't elevate its importance. We see it as a potentially important tool to point to Jesus.

Motivation

This white paper explores the potential of Bitcoin to address financial challenges faced by everyone involved in the enterprise we refer to as "missions," and proposes strategies for collaborative research and experimental projects to test and implement Bitcoin-based solutions.

We intend to:

- **Educate and inform** the missions community of the unique advantages of Bitcoin
- **Bridge** the knowledge gap between Christian Bitcoiners and Missionaries
- **Reveal** complex financial problems that exist within the missions community that require adaptive leadership
- **Encourage** the adoption of an innovative systemic solution
- **Attract** the interest of new partners, donors, and future design lab participants
- **invite** other early adopters into networked leadership in thought and action
- **Support and guide** the informed decision-making of others in creating policy and strategy

But why are we doing this? What motivates us to go to such an effort to introduce this idea to a community who sees it as a weird and unstable innovation? Through our research and convictions, we believe that misinformation about Bitcoin is rampant, and succumbing to ignorance will delay the benefits for the kingdom if not corrected.

We can more effectively disciple the nations by leveraging innovative financial solutions that align with our mission and values. With this understanding, let's delve into the specific challenges missions organizations face today.

The Complexity of Missions Finance Problems

Missions organizations operate in some of the most challenging financial environments in the world. Managing finances in these contexts is extremely complex, involving navigating a myriad of obstacles that hinder efficient and secure financial operations.

Cross-Border Transactions: One of the primary challenges missions organizations face is the complexity of cross-border transactions. Traditional banking systems often impose high fees, long delays, and stringent regulations on international money transfers. These obstacles can significantly delay the receipt of crucial funds, which are needed to support on-the-ground activities and personnel. In some countries, governmental restrictions and bureaucratic red tape can further complicate the process, making it nearly impossible to send or receive money without substantial loss and frustration.

Access to Banking Services: In many developing regions where missions work is most needed, access to banking services is severely limited. ATMs are scarce, and local banks may not have the infrastructure to support reliable financial services. This lack of access forces missions organizations to rely on cash transactions, which are not only risky but also inefficient. Managing large amounts of cash increases the risk of theft and loss, and the logistical challenges of physically moving cash can detract from the primary mission work.

Government Surveillance and Control: In some countries, missions organizations operate under constant scrutiny from government authorities. Government authorities constantly scrutinize missions organizations, monitoring financial transactions and showing potential hostility towards any perceived association with foreign funds. This surveillance can lead to the freezing of assets, imposition of fines, or even the expulsion of missions workers. The need to maintain financial privacy and security is paramount, yet traditional banking systems often lack the safeguards to protect against these threats.

Currency Devaluation and Inflation: Many missions organizations work in countries experiencing high inflation and currency devaluation. In such environments, the value of local currency can fluctuate wildly, eroding the purchasing power of funds. This volatility makes it difficult to budget and plan for long-term projects. Inflation can quickly diminish the value of donations, leading to a constant struggle to secure sufficient resources to meet the missions' goals.

Fundraising Challenges: Raising support for missions work is increasingly challenging in today's economic climate. Donors are often hesitant to contribute to organizations that cannot guarantee the secure and efficient use of their funds. The complexity of financial operations, combined with the risks associated with traditional banking systems, can deter potential supporters. Missions organizations need to show financial integrity, security, and efficiency to maintain and grow their donor base.

The financial challenges faced by missions organizations are multifaceted and deeply entrenched. Without an effective solution, these obstacles will continue to block the impact and reach of missions work. The need for a robust, secure, and efficient financial system is urgent. Such a system would not only ease the operational burdens on missions organizations but also empower them to focus more fully on their core mission of spreading the gospel and providing humanitarian aid.

A Future Potential with Bitcoin

Unique Advantages

Bitcoin provides a revolutionary answer to the intricate financial obstacles that missions organizations confront. Its unique characteristics offer a range of benefits that can transform how these organizations manage and use their funds.

Global Payments Network: One of Bitcoin's most compelling advantages is its ability to facilitate nearly instantaneous and low-cost global transactions. Traditional banking systems often impose hefty fees and delays on international money transfers, but Bitcoin operates on a decentralized network that transcends borders.

In Nigeria, where cross-border payments can be prohibitively expensive and slow, missions organizations can use Bitcoin to transfer funds quickly and inexpensively. For instance, a mission group sending support from the United States to partners in Nigeria can use Bitcoin to avoid the high fees and delays associated with traditional bank transfers.

Financial Sovereignty and Security: Bitcoin offers unparalleled financial sovereignty and security, which is critical for missions operating in regions with unstable political environments or repressive governments. Because Bitcoin transactions are decentralized and encrypted, they are resistant to censorship and government interference.

In Venezuela, where the government tightly controls financial transactions and foreign currency exchange, missions organizations can use Bitcoin to bypass these restrictions. By receiving donations in Bitcoin, a mission in Venezuela can safeguard its funds from potential government seizure and operate with greater financial autonomy.

Protection Against Inflation: In many developing countries, high inflation rates and currency devaluation are persistent issues that erode the value of local currencies. Bitcoin's fixed supply and deflationary nature make it an excellent hedge against inflation.

In Zimbabwe, where hyperinflation has rendered the local currency nearly worthless, missions organizations can use Bitcoin to preserve the value of their funds. By holding donations in Bitcoin, an organization can protect its purchasing power and ensure that its resources remain valuable.

Financial Inclusion and Empowerment: Bitcoin has the potential to bring financial services to unbanked and under-banked populations, a significant advantage for missions working in remote or impoverished areas. All that is needed to access and use Bitcoin is a basic internet connection or even a simple SMS-enabled phone.

In Kenya, where many people lack access to traditional banking services, missions can use Bitcoin to empower local communities. By introducing Bitcoin wallets accessible via mobile phones, a mission can enable villagers to save, transfer, and receive money securely. This financial inclusion fosters economic growth and self-sufficiency, allowing communities to take part in the global economy with no conventional banking infrastructure.

Transparency and Accountability: Bitcoin's blockchain technology ensures transparency and accountability in financial transactions. The blockchain technology of Bitcoin records every transaction on a public ledger that is immutable and transparent.

In Uganda, a missions organization can use Bitcoin to enhance transparency in its financial operations. By receiving and spending donations in Bitcoin, the organization can provide donors with a transparent view of how funds are being used. This action builds trust with supporters and ensures that the

organization uses donations as intended. For example, a mission project building wells in rural areas can show donors the exact flow of funds from donation to implementation, enhancing credibility and support.

Hurdles in Adopting Bitcoin for Missions

While the advantages of Bitcoin are interesting and offer many benefits for missions organizations, it is also important to recognize the potential hurdles that come with adopting this technology. Missions organizations need to consider and address these challenges carefully to ensure successful implementation and integration of Bitcoin into their operations. Here are some of the key hurdles missions organizations might face and how they can overcome them:

Understanding and using technology: Bitcoin and blockchain technology can be complex, especially for those who are not tech-savvy. Missions organizations might struggle with understanding how to set up and manage Bitcoin wallets, secure their digital assets, and execute transactions.

In rural areas of Uganda, missions staff might lack the technical knowledge and resources to use Bitcoin effectively. Providing comprehensive training and support will be essential to overcoming this hurdle.

Legal and Compliance Issues: The regulatory landscape for Bitcoin varies widely across different countries. Missions organizations need to navigate legal and compliance issues, such as ensuring their use of Bitcoin complies with local laws and regulations regarding cryptocurrency.

In India, where the legal status of cryptocurrencies has been uncertain, missions organizations need to stay updated on regulatory changes and ensure they are operating within the law. This might involve consulting legal experts or working with local authorities to clarify compliance requirements.

Safeguarding Digital Assets: Security is a major concern when dealing with digital currencies. Missions organizations need to implement robust security measures to protect their Bitcoin from theft, hacking, and other cyber threats. This includes securing private keys, using reliable wallets, and educating staff on best security practices.

In Nigeria, where cybercrime is a significant issue, missions organizations must invest in secure hardware wallets and train their staff to recognize phishing attacks and other common security threats.

Managing Financial Stability: Bitcoin is known for its price volatility. While it has the potential for high returns, its value can also fluctuate significantly in a short period. Missions organizations need to develop strategies to manage this volatility and ensure financial stability.

In Lebanon, missions organizations might experience challenges in budgeting and financial planning because of Bitcoin's price swings. They could mitigate this risk by considering a long-term approach of holding treasury reserves for at least 4 years to overcome the downward effects of volatility. In hyper-inflationary environments, people might prefer Bitcoin's volatility over the rapid devaluation of the local currency.

Access to Technology and Internet: In some remote or underdeveloped regions, people may have limited access to the technology and reliable internet connections. This poses a significant barrier to the adoption of Bitcoin.

In rural parts of Kenya, limited internet connectivity can hinder the use of Bitcoin for financial transactions. Missions organizations might need to explore offline solutions, such as SMS-based Bitcoin wallets, or invest in improving local internet infrastructure.

Acceptance and Adaptation in Organizational Culture: Introducing a new financial system can meet resistance from within the organization

and the communities they serve. There might be skepticism or distrust towards digital currencies, or reluctance to move away from traditional financial practices.

In traditional communities in Guatemala, missions organizations might face resistance from local leaders and community members who are wary of adopting new technologies. Building trust through education, demonstrating successful use cases, and involving community leaders in the adoption process can help overcome this resistance.

Initial Investment and Ongoing Costs: Adopting Bitcoin involves initial investments in technology, training, and security. Missions organizations need to allocate resources effectively to cover these costs and ensure the sustainability of their Bitcoin initiatives.

A missions agency in El Salvador might need to budget for purchasing hardware wallets, hiring technical consultants, and providing ongoing training for staff. Ensuring that these costs are covered without diverting resources from core mission activities is crucial.

Implications of Adoption

The adoption of Bitcoin by missions organizations is not just a theoretical solution—it is a practical, actionable step that can revolutionize financial operations. By embracing Bitcoin, missions can overcome many of the financial barriers that have traditionally impeded their work. The potential for quick, low-cost transactions, enhanced security, protection against inflation, and financial inclusion makes Bitcoin an exciting and viable option for missions worldwide.

Imagine a world where organizations and missionaries can send and receive support instantly, securely, and at minimal cost. Picture communities in the most remote and underserved regions gaining access to financial services and economic opportunities through Bitcoin. Envision a future where missions organizations operate with greater financial transparency and integrity, strengthening their relationships with donors and supporters. We want to explore how a potential Bitcoin future can dismantle financial barriers and allow missions work to thrive unimpeded.

The Bitcoin for Missions Project

To turn this vision into reality, we have embarked on the "Bitcoin for Missions" project. Our approach is comprehensive, involving detailed research, collaborative partnerships, and practical implementation strategies. The following sections provide an in-depth look at our project's objectives, methodologies, and the innovative prototypes we have developed.

Design Labs

The design labs we've held in El Salvador and Kenya both aimed to explore how Bitcoin could advance the Great Commission by integrating innovative solutions within missions work. Each lab involved a diverse group of participants and followed a similar Human-Centered Design (HCD) approach, including pre-travel learning cohorts with empathy studies, an ideation process, and prototype development.

Here is the step-by-step flight plan we used to guide the process:

1. Discover an active Bitcoin project and connect with local leaders
2. Plan the trip details
3. Recruit the right mix of people
4. Provide training to the cohort for a month prior to travel
5. Convene them with cultural competency
6. Empathize, pray, listen, design
7. Test prototypical programs

Our version of the HCD process incorporates notable adaptations from typical design sprint practices, which are normally deeply rooted in Western business culture.

Our unique approach is to integrate faith elements and also consider the cross-cultural contexts of everyone present. Participants share a common faith in Jesus and engage in listening prayer sessions during our meetings. We pray God will reveal greater understanding that we might otherwise overlook, seeking divine guidance through memories of personal experiences, scripture, and insights from the Holy Spirit. Many report helpful feedback from these sessions - that they receive personal encouragement and glimpses of God's plans for them. Our gatherings include worship and a powerful community prayer experience where everyone laments aloud simultaneously after a time of sharing empathy stories.

Our meetings take place in a rural retreat center with truly hospitable hosts, not in a typical corporate urban setting. We organize seating in circles. We facilitate relational trust-building exercises to put people at ease with each other.

We condense the normally five-day process into three days - focusing on enhancing empathy and speeding up decision-making. This involves extensive storytelling and discussions in smaller groups, which helps in making the brainstorming sessions with sticky notes more engaging. We believe the adjusted pace and prayer sessions help mitigate the western-centric, linear, and analytical nature of the original process design.

Excursions to local ministries and other attractions frame our week and foster strong relational connections among participants.

Five missions practitioners from El Salvador, Peru, and Guatemala, along with five technical advisors, joined our group in El Salvador. Michael Peterson provided a comprehensive tour of the Bitcoin Beach ecosystem, including low-cost housing developments, English and computer training programs, a kids' surfing club, and other community development projects. These initiatives showed how Bitcoin can empower unbanked individuals to take part in everyday commerce while benefiting from price appreciation and instant digital payment settlements.

Similar to El Salvador, the lab in Kenya brought together ten missions practitioners from Nigeria, Sudan, and Americans serving abroad. The six Bitcoin technical advisors included a group of Kenyans. Participants toured Gridless Compute's Bitcoin mining operations, where founders Erik Hersman and Philip Walton showcased how these operations could use surplus electricity profitably to reward building more electricity infrastructure.

Having laid the groundwork with our project's strategic approach, we now turn to the tangible progress made through our initiatives. Here are some key examples of our ongoing projects.

Progress in The Current Reality

Examples of Ongoing Prototypes

Financial Sustainability Models: The Joseph Storehouse Funding Model prototype proposes using Bitcoin as a savings account to support missionary sending bases. By accumulating Bitcoin, which has historically risen in value, missions can create a sustainable funding model. Missions organizations would receive onetime gifts in Bitcoin and hold these assets over several years. The accumulated value can then support operational costs. This model reduces reliance on continuous fundraising and leverages Bitcoin's growth potential for long-term financial stability. For example, in El Salvador, a mission organization is experimenting with this model by receiving

Bitcoin donations and saving them to fund their activities, avoiding the volatility and restrictions of the local currency.

Similarly, the Brilliance Lab Impact Investment Strategy focuses on leveraging Bitcoin for long-term financial sustainability through organizational treasury diversification. This strategy involves not only saving Bitcoin but also using the gains from Bitcoin's appreciation to stabilize losses in the account from other underperforming assets. This effectiveness stems from Bitcoin's lack of correlation to the inflationary effects of the US Dollar.

Circular Bitcoin Economy Models: Inspired by Bitcoin Beach in El Salvador, the Guatemala Circular Bitcoin Economy prototype aims to create a Bitcoin-based circular economy in Parramos, Guatemala. This initiative involves integrating Bitcoin into community development projects and fostering economic growth through financial inclusion. Courses and practical applications in daily transactions educate local community members on Bitcoin's use. The project also includes a focus on discipleship and financial literacy, helping community members to understand and use Bitcoin effectively. This circular economy model has enabled villagers to save, transfer, and receive money securely, creating a resilient local economy less dependent on external financial systems.

Meanwhile, Michael Peterson's ministry, Missionsake, continues to develop the Bitcoin Beach circular economy in El Zonte, El Salvador and beyond. Together with his team, he has documented their experience in an explanatory white paper that he shares with the world on the Bitcoin Beach website. Recently, they have offered grants to those who would reproduce their experiment in their own locations. By fostering interconnected circular economies, the Bitcoin Beach-Like model (BBL) maximizes the impact of Bitcoin on community development and financial inclusion.

21st Century Village: The 21st Century Village prototype integrates Bitcoin mining, community banking, internet service, and teams of community educators who also act as money services agents working together to provide sustainable development in rural African villages. By partnering with Gridless Compute, these villages set up Bitcoin mining operations to fund renewable energy projects. The energy generated supports local needs, while Gridless uses the surplus for mining, creating a revenue stream. As the project progresses, we intend to offer it openly to others, expecting wide replication.

Countering Hyperinflation and Enhancing Financial Mobility: In Lebanon, hyperinflation has caused the Lebanese lira to lose 98% of its value against the US dollar since 2019, severely affecting the financial stability of missions organizations operating in the region. The Countering Hyperinflation prototype involves using Bitcoin as a store of value to protect against currency devaluation and ensure the financial resilience of missions work. By converting donations and operational funds into Bitcoin, a seminary can preserve its purchasing power and mitigate the effects of hyperinflation by converting to local currency on the day that it is required to be spent. This strategy has enabled biblical educators and mercy ministries in Lebanon to maintain their operations and continue supporting local communities despite the economic crisis.

Similarly, In India, where financial regulations and banking restrictions can pose challenges, one missions organization has adopted a Bitcoin standard to move money more effectively. By receiving donations in Bitcoin and converting them to local currency peer-to-peer with a network of local buyers, this organization avoids the high fees and delays associated with traditional banking systems. In addition, they can collect a 6 to 8% premium when trading Bitcoin because of the heightened demand. Both the Lebanon and India case studies demonstrate the practical benefits of using Bitcoin to counteract economic instability and enhance financial operations in challenging environments.

Future Steps

Building on the success of these prototypes, the next phase of the "Bitcoin for Missions" project will focus on expanding partnerships, conducting additional design labs, and exploring new locations for implementing Bitcoin-based solutions. By continuing to document and share successful prototypes as open-source tools, we aim to inspire and guide other missions organizations in adopting Bitcoin. Future steps include refining our strategies, enhancing our training programs, and managing the growth of an integrated relational network of people, focused on collaboratively building on these ideas.

Conclusion

Bitcoin presents a transformative opportunity for missions organizations to overcome financial barriers and enhance their impact. By leveraging Bitcoin's capabilities, missions can achieve greater financial empowerment and focus more on their core mission of spreading the gospel. The prototypes developed in this project show the potential for Bitcoin to revolutionize financial activities in missions contexts, fostering innovation, collaboration, and sustainable development.

We started with the propelling question: “How might we overcome complex problems faced in the pursuit of completing the Great Commission by using Bitcoin?”

We’d like to conclude with some compelling answers:

- We can, if we loudly celebrate existing success stories in public
- We can, if we convene the right knowledge stewards together with missionaries who possess God’s spirit of creativity to hatch plans
- We can, if others will couple their funds with our margin and incentive
- We can, if Bitcoin’s global adoption is as inevitable as we believe it is

If you resonate with these pursuits, we encourage you to partner with us and take action! Here are some ideas to move on:

- Sponsor a training event overseas for 20 missionaries for $15,000
- Fund a project micro grant
- Subscribe and contribute to the community
- Go on an upcoming design lab as a Bitcoin advisor or an interested missionary worker
- Volunteer your talents to extend the reach of this network
- Consult with us about adopting Bitcoin solutions for your ministry

Discover links to learn more about these options at https://www.brilliancelabs.org/bitcoin

Appendices

Appendix A: Legal Disclaimer

This white paper provides information for general informational purposes only and does not intend to constitute professional financial, investment, legal, or other advice. While we have tried to ensure the accuracy and completeness of the information contained in this document, we make no guarantees or warranties regarding the accuracy, completeness, or reliability of any information presented.

Using Bitcoin carries inherent risks, including but not limited to market volatility, regulatory changes, and security vulnerabilities. We advise readers to conduct their own research and consult with qualified financial, legal, or other professional advisors before making any financial decisions or investments.

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Our aim is to provide a balanced and informative perspective to help you make informed decisions.

Appendix B: Bitcoin Basics

Bitcoin is a protocol for networked digital money, just as the internet is a protocol for networked information exchange. The internet allows people to share information globally, while Bitcoin allows people to transfer value globally.

As a protocol, Bitcoin is a set of rules and standards that govern how to conduct transactions, similar to how internet protocols govern data exchange. We're all familiar with how other digital protocols allow for easy copying and pasting, but Bitcoin employs a complex system of encryption in the blockchain that makes duplicating ledger entries impossible and motivates all the network stakeholders to follow its rules.

As a network, transactions occur over a global web of computers rather than through a central authority. Currently, there are over 19,000 computers across the entire globe that run the Bitcoin software and are thus ensuring the accountability of the ledger. This decentralization of nodes protects against any one party taking control of the network.

Besides node operators who secure the ledger, there are other parties in the network who validate transactions and mint new Bitcoin in a process called mining. Miners assign computer power (hash rate) to compete at solving a mathematical problem, which will win them the right to add new transactions into the ledger and reap the reward of newly minted Bitcoin. The electricity spent provides proof of work in the encryption process. This proof of work is essential for the network to be secured against attacks that would allow duplicate spending otherwise. It prevents the simple copy/paste procedure of operating with digital files that would exist without it.

Based on its hash rate, global distribution, and energy consumption, it is accurate to describe Bitcoin as the largest distributed computer network in the world.

As digital money, it is distinct from traditional physical currencies because it exists purely in digital form. It allows for seamless and instantaneous transactions across borders with no intermediaries, like banks.

Is Bitcoin Really Money?
Bitcoin also fulfills the seven properties that are necessary to consider something appropriate for use as a currency: Durability, portability, divisibility, uniformity, having limited supply, acceptability, and fungibility.

Durability and portability mean that the medium doesn't degrade easily, and it's easy to move. Being intangible and digital, Bitcoin enables secure, fast, and reliable fund transfers to missions sites, regardless of geographical barriers.

Divisibility and uniformity enable the measurement of goods and services in units of varying size, providing a common measure for accurate valuation. As an intangible but standardized digital entry in the blockchain ledger, Bitcoin's consistency eliminates unjust measures. Missions organizations can facilitate various donation sizes with Bitcoin, making it easy for supporters of all economic backgrounds to contribute. It's true that the daily price of Bitcoin is volatile, but when considering the compound annual growth rate of Bitcoin, the historical record shows clear growth of value.

Limited supply means that the medium will maintain its value over time, allowing people to save and retrieve wealth consistently. The issuance schedule of Bitcoin and the fact that there will only ever be 21 million coins in existence makes it resistant to inflation, ensuring value preservation and a stable asset for project funding.

Acceptability and fungibility require widespread trust and acceptance as a means of payment in units that are equally interchangeable. Approximately 3% of the world's population has adopted Bitcoin, and the network is expanding every day. According to Yahoo Finance, Bitcoin currently trades on 11,134 active markets in every jurisdiction on the planet. Growing global acceptance means more ability to streamline collaboration and resource exchange with other organizations.

Bitcoin Layers
We can compare how Bitcoin layers work to the structure of the internet. TCP/IP is the base layer protocol that allows the ability to communicate between connected computers. On top of that layer, HTTP and HTTPS commands allow greater functionality and security to web pages. Yet higher in the stack, JavaScript and others are constantly supporting creative new ways for people to interact.

In Bitcoin, the on-chain layer records all transactions on the Bitcoin blockchain, serving as the fundamental layer. It's secure and transparent, but can be slow and expensive for small transactions.

The Lightning Network layer exists on top of the Bitcoin blockchain to enable faster and cheaper transactions. It allows users to create off-chain payment channels for instant, low-cost payments, which are settled on the blockchain later, similar to an open bar tab.

Side chains are separate blockchains that run parallel to the main Bitcoin blockchain. They allow for experimental interaction with the Bitcoin Blockchain using new features and enhanced privacy without affecting the base network's security and performance.

These three layers work together to enhance Bitcoin's efficiency, scalability, and usability for various applications.