



Fundraising In The Age of Blockchain

A large, faint, light blue graphic of a blockchain network is visible in the background, showing a series of interconnected nodes and lines forming a circular pattern.

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Introduction

No matter the size of a charity or the causes championed, fundraising is always a concern, if not a top priority for most charitable organisations.

No matter how big an organisation or how robust the supporter base, a charity needs to be able to cover its costs before it can effectively support the people it wants to help.

The bigger the charity, the greater the overheads, and the harder it has to work to gain the support of the general public.

With 185,000 charities in the UK and 5,000 new charities appearing each year – it's becoming harder and harder for organisations of any size to raise the capital they need. There simply isn't enough money to go around.

Moreover, the way in which supporters like to be engaged with has changed. Xennials, Millennials and Gen Z don't want to be approached on the street. They consider themselves to be time poor and therefore interruptive fundraising annoys them.

They also rely on technology to become informed and to research the causes and charities they believe in. They also tend to have less disposable income than the generations before them. As such, regular donations are seen as a point of anxiety and they would sooner make a contribution in other ways.

We have progressed to the point where we can now leverage technology itself to generate revenue.

Cryptocurrency represents an entirely new way for charitable organisations to raise significant revenue over time by leveraging the unused computer processing power of your supporters (and your own IT infrastructure).

It's a new revenue stream that takes full advantage of the increasing time we now spend on our computers.

Best of all, as a charity you generate regular, recurring, additional revenue from your supporters... by doing nothing more than asking supporters to run some software...

Why Cryptocurrency Will Change the World

Cryptocurrency is not just a digital currency.

Digital currency can more accurately be applied to the billions of financial transactions that flitter across networks between individuals, banks, payment merchants and businesses. Those are digital currencies moving from one ledger to another with the banks scrutinising the entire process.

Cryptocurrency – or more specifically the technology it's built on – is a disruptive decentralised peer-to-peer consensus network that can transform how the world interacts and transacts, much in the way the internet did.

It uses the internet to create an entirely new way of communicating value. Business without the banks.

The network achieves through consensus what the banking system achieves through layers upon layers of personal information that is checked and cross checked throughout the transaction. Essentially everyone on the network – who have all consented to follow the same set of rules – verifies a transaction.

Although most find the amount of security provided by the banks reassuring – and rightly so – that's only great if you're allowed a bank account in the first place.

It's important to note that banks don't just refuse service to people who are a potential credit risk. But surely a way to solve poverty is to give people a means to accumulate and invest wealth?

But the banks aren't in the business of emancipation. It's harsh but true. Banks exist to accumulate wealth for themselves.

Granted, the banks are regulated to ensure that they accumulate that wealth fairly and legally, as over exposure could spell disaster for global economies...

Back in 2009 – when Bitcoin was first launched – that's exactly what had happened with many of the world banks petitioning governments for bailouts, having confessed to decades of duplicity, insider trading, fraud and bad lending.

In 2015, 11.5 million documents were leaked that revealed over 214,000 offshore entities had been set up in order for the rich and powerful to hide their wealth and avoid paying tax. Including the British and Icelandic prime ministers.

These were a series of legal financial arrangements designed to hoard wealth and avoid paying tax. Worst of all it was abused by those centralised governments – in order to harbour and accumulate wealth.

The current system – built on centuries of outmoded, zero-sum game methodology – is broken. Cryptocurrency changes this, giving businesses and individuals licence to trade in a truly free environment.

It also solves one of the biggest challenges facing the developing world when it comes to mass access to banking.

1. Personhood

Only 1 billion people in the world have access to unrestricted banking. Roughly 2.5 billion are only eligible for the most basic banking services including small loans and mortgages.

The other 4 billion don't have any banking at all so rely heavily on cash transactions and barter, dramatically limiting their buying power, making them highly vulnerable to extortion as they are entirely at the mercy of the bank and loan providers who will deal with them. They are also locked into the local currency and victim to any volatility, corruption or spontaneous devaluations that can (and do) occur.

Part of the reason for this shortfall in service is the need for personhood.

To clarify – a bank needs to be able to prove that an individual is a person in the legal sense before they are allowed to have a bank account. They have to have a fixed abode, a form of identification, a means to prove their income and so on.

For many in developing nations – and even for some individuals in developed nations – this is impossible.

Imagine what the world would look like if everyone had access to cryptocurrency. A way of transacting peer-to-peer (from one person to another) free of market fluctuations, the whims of a banking system obsessed with self-preservation or – in some countries – corrupt regimes that charge exorbitant sales taxes whenever they so choose.

We're not talking revolution but democratising value.

But it goes deeper than this.

The fundamental misunderstanding we have with the current banking systems is this: the banks look after our money for us.

This is a lie.

We lend our money to the banks who, in turn, lend it to everyone else in the form of loans, mortgages and underwriting credit card debt. Then they charge exorbitant interest rates.



They dictate the terms and dictate harsh penalties for defaulting on payments.

The average return we get for loaning the banks our money? 3% if we're lucky.

Banks collapse when the money owed to them exceeds the money their customers lend them in the form of salaries, repayments and deposits. Banks are a lot like casinos. A casino has to be able to cover – in cash – every chip on the casino floor so in the unlikely event everyone wins, they can pay their debts.

Banks are essentially required to do the same, so when their exposure exceeds their income bad things happen.

But when it comes to banking, even when the house loses, the house always wins as they are bailed out by the state.

In these situations it's the low income majority who suffer most – especially those who still rely on cash for day-to-day transactions; but often in these situations the banks will refuse to give customers their money.

Cryptocurrency changes this master/slave relationship. Cryptocurrency is not a debt-based system; it is an asset-based system. If you own the keys for your cryptocurrency then it belongs to you. No one owes anyone anything.

The elimination of personhood from the equation gives individuals – especially the poorest members of our society – freedom to transact with anyone else who accepts cryptocurrency wherever they are in the world.

This is incredibly empowering as those in a traditionally cash or barter-based society are now free to trade with anyone, anywhere, on much more equal terms.

It also allows charities the power to support anyone in the world – all they need is a crypto wallet and access to an internet connection.

2. The Sixth Innovation

Money as a concept and as an expression of value is eons old. With the exception of the Incas, money has been a lynchpin in every civilisation on record.

Rudimentary currency in the form of shells and feathers has been discovered at the burial sites of pre-history civilisation – replacing barter (the first innovation).

This first abstraction of value was eventually replaced by precious metals – gold and silver which gave money a structure – a way of measuring value. A gold coin could, if needs be, be cut into pieces if the value of the item was less than the value of the gold.

Then we realised that carrying around purses of precious metals the whole time was impractical. Partly because it was very heavy but it also made you very easy to rob.

This is when the first major abstraction of money happened. We began to use non precious metals and – eventually – paper to communicate value. Money stopped being the thing of value and instead became a promise of value.

Then in 1950 a businessman named Frank McNamara came up with the world's first charge card – the grandfather of credit and debit cards.

Sixty-eight years later it is indirectly responsible for a global debt crisis with domestic debt (not businesses or government debt) – excluding mortgages – of around \$44 trillion. Needless to say this is a problem because for every penny owed to a bank, the bank owes it to someone else because that's how banking works.

Cryptocurrency is the sixth and biggest innovation and compared to how long it took for all the other changes in money and finance to evolve, this is happening at light speed.

What makes this so significant is it isn't a new gimmick – like contactless cards – this is an entirely new way of generating and spending currency that is compatible with traditional banking but is able to act autonomously. And it's going to change the world.

The Status Quo

It's easy to forget that the internet and the World Wide Web is a relatively new invention. Or that the automobile is only 130 years old. Yet we rely on both heavily every single day. They are the standard ways we communicate and get about.

Before the automobile came along, humanity had relied on horses for **millennia** so its advent was not hailed as a revolution in transportation but instead regarded as an unreliable death machine that would kill anyone who got in one.



The internet was regarded as a fad that would totally fail to scale and had limited real world application until in 1989 a guy called Tim invented the World Wide Web.

The ultimate irony of the status quo is that it's constantly changing in line with the precipitous way humanity innovates.

Where systems fail and turmoil ensues is when social groups or institutions fail to keep pace or resist the next innovation.

1. Early Adoption and Criminality

If the mainstream media is to be believed, cryptocurrency is the currency of choice for crime lords, drug barons and anarchists. That it's the currency of the dark web, Silk Road and underpins the black market.

They said something similar about the internet too, incidentally.

Although they're not entirely wrong, the reason why criminals are always so quick to adopt new technology is because they live in a world where risk and imminent threat of arrest or execution is constant so any edge over their competition or law enforcement is readily accepted.

Although off-putting to some, it serves as a clear indication that cryptocurrency works – purely because crime lords, drug barons and anarchists don't have the luxury of patience.

But, keeping things in perspective; cash is still by far the most common means of payment for criminal activity. You will note that the newspapers aren't suggesting we boycott ATMs.

Incidentally the adult film industry's adoption of VHS over Betamax, DVD over laser disc and Blu-ray over HD DVD was a major contributing factor behind mass market adoption for each innovation.

It shouldn't, therefore, come as any surprise that the adult film industry was also amongst the first to adopt streaming services and have been mining and trading in cryptocurrency for years.

In the same way this revelation shouldn't prompt anyone to burn their movie collections or cancel

their Netflix subscription, it shouldn't deter any individual or organisation from mining and using cryptocurrency.

We're not suggesting for a moment that pornographers are criminals – regardless of anyone's personal opinion – as what they are doing isn't illegal. It merely highlights that early adoption by fringe elements serves as a strong indicator of whether or not a technology or innovation will take.

Don't forget, bootleggers were the first mass adopters of the automobile during prohibition. Alcohol and the car aren't going anywhere – figuratively speaking.

As crime predates money it is inevitable that some choose to use cryptocurrency to further their nefarious ends. But considering money – as we understand it – has been around for millennia and cryptocurrency for less than a decade, it's not entirely fair or accurate to blame it for the world's wrongs.

2. Decentralising Money

In fact every major innovation including electricity and the automobile has been labelled by the media as the thing to bring about the collapse of society as we know it.

Of course what they're really saying is anything that challenges the status quo is bad. Established organisations have done this throughout history because they are the status quo.

Whether it's a political movement, a type of music or a technological innovation, the first response is always the same: **first they ignore you, then they laugh at you, then they fight you, then you win.**

The irony is that they were once the scrappy young upstart who disrupted their industry.

The death knell of society foretold by the media and big business is designed to do two things and two things only: maintain control and maintain profits.

It's not entirely unforgiveable. No business wants to lose money, become irrelevant or – essentially – fail. Part of the human condition is to succeed.

We are also pre-programmed to be wary of change. It's a survival instinct. When it was life and death we tended to work together. Now we are preoccupied with financial survival which makes companies ruthless and people selfish.

However, the reality is lives are at stake as the current system denies people access to banking. The current system is also partly the reason why charities are both more important and more cash strapped than ever.

Decentralising money – and with it redistributing the power amongst the masses – is the biggest challenge to the establishment and the status quo for centuries.

Challenging the authority of a corporation or central government has the same anthropological imperative as challenging a tribal leader to ritual combat or hunting an apex predator.

The establishment – broadly speaking – doesn't like to be challenged.

Electricity, the automobile and the internet have all helped to level the playing field on a societal level by giving the individual greater personal freedoms which can be disruptive.

Disruption is bad. So much so it can lead to legislation to prevent it.

The 1865 Locomotive Act, or Red Flat Act, effectively limited the use of automobiles on British roads. Parliament was so terrified by what they perceived as a mechanised menace that they failed to see the tremendous opportunity it represented both as an industry and a source of taxation.

Instead they controlled it to the point that it choked the British automotive industry almost to death. The response to cryptocurrency is no different.

World governments are trying to legislate to control cryptocurrency not because it's bad but because that's the first response to anything that disrupts business as usual.

A decentralised, democratised currency network that doesn't require personhood or layers of security couldn't possibly work, so it needs to be controlled.

Except that's missing the point entirely.

It doesn't need regulating because cryptocurrency is built on trust protocols that can't be ignored and three things that make cryptocurrency more secure than traditional banking:

Blockchain, peer to peer networks and proof of work.

Secure by Design

One of the biggest challenges the banking industry faces right now is security.

Most high street banks come under some form of sustained digital attack on a daily basis.

Occasionally those attacks succeed and the hackers steal customer information to be used or sold on.

Many predict this problem to worsen as banks scramble to implement security measures in the face of ever more sophisticated attacks.

What's more, transactions are insecure by design. Our personal details are transmitted between banks and payment merchants in a back and forth exchange that verifies the buyer's identity, that the money promised to the seller exists and that the seller themselves is legitimate.

These various steps are all designed to prevent fraud. However, if anyone hacks into that transaction, they can steal everything a fraudster would need to create a fake identity and commit widespread fraud.

The system relies entirely on the encryption used and each party in the process having the correct key to unlock that information. The second it is compromised the system is horribly vulnerable.

Cryptocurrency is different thanks to blockchain, peer to peer verification and proof of work.

1. The Power of Blockchain (and why it's only part of the equation)

Blockchain is the technology which is credited with much of the security associated with cryptocurrency.

The technology is a series of authenticated 'blocks' of data that possess the entire history of that crypto's transaction history, including every transfer of ownership and transaction right from the point it was originally mined.

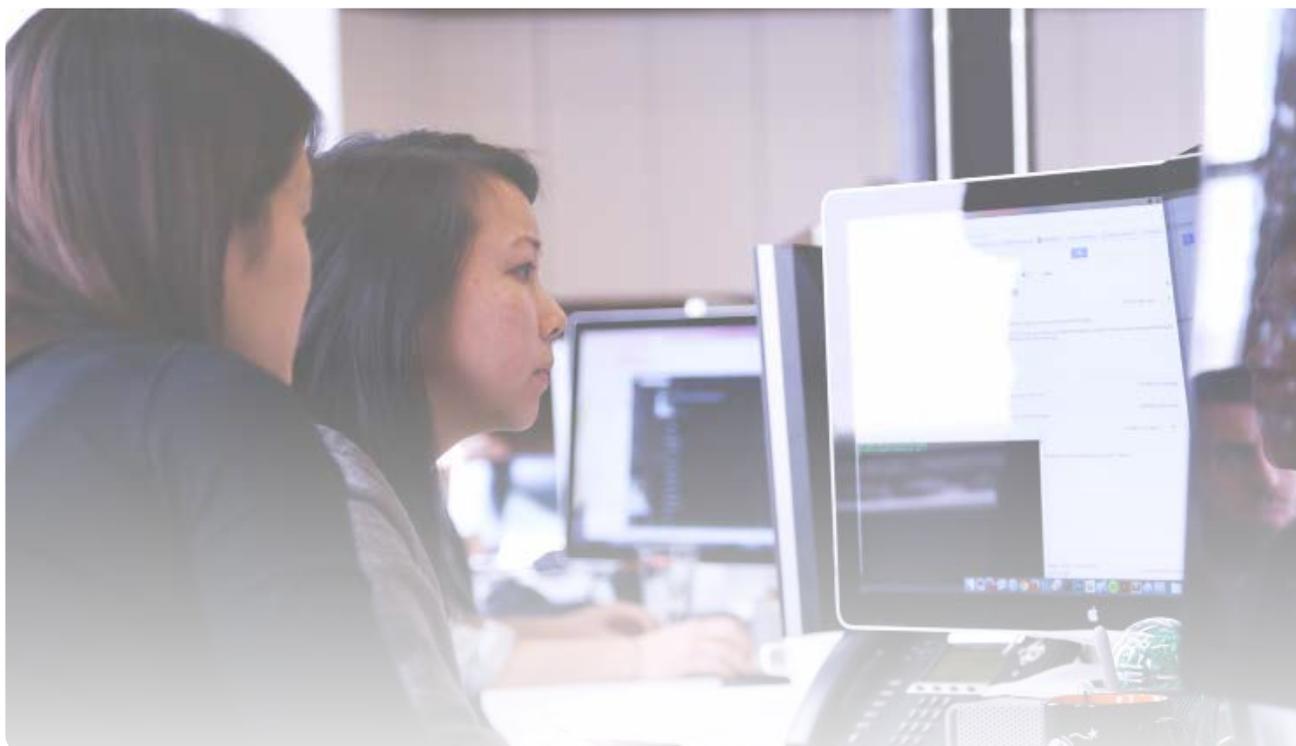
Any changes to that crypto – a transaction for example – are recorded, time stamped and verified by every computer within the mining network in a new block before the transaction is approved and completed.

This approval process – much like the verification steps your bank takes when you use your credit or debit card – is critical as it prevents what's known as double spending.

Without the blockchain to serve as a living record a crypto coin would be little more than an electronic reference with a value attached that you could trade as often as you want.

The original cryptocurrencies – like Bitcoin – make every record in the blockchain available to the public which is great for transparency but doesn't make it more or less secure.

New cryptocurrencies produce private coins which, as its name suggests, have a hidden blockchain. It still goes through all the exact same verifications as Bitcoin but the records are not readily available to the public.



2. Peer to Peer

Blockchain works as well as it does because of how it interacts with the two pieces of the crypto puzzle.

Peer-to-peer verification is arguably the real game changer as it's the democratising element that has the banking system so flummoxed.

Instead of two banks deciding amongst themselves if you are allowed to spend your money – a process they can halt or reject for the most arbitrary reason if they so choose – a peer-to-peer network of computers (or nodes) all examine the transaction and determine if it's valid.

Consensus is reached if the sender has the crypto in their position in the first place – they haven't double spent – and they are sending it to a specified user. They also need to have paid the appropriate fee. If all of these things are in place then the transaction can go through.

The network doesn't care who anyone is, just that the requirements for a transaction – a sender, a receiver, an amount and a fee – are all present. This is incredibly empowering.

This may seem overly simplistic as – surely – if someone were to hack your computer and steal your crypto-keys they could take ownership of your currency.

The honest answer is: yes, they could. However, there are simple ways of protecting yourself from this happening.

But this possible hack – and you are no more at risk of a hack after mining crypto than before – is still less likely to happen than having your cash stolen, your card cloned or stolen, having your identity stolen or your bank account hacked.

Depending on where you live in the world, the vast majority of people have had at least one of these things happen to them.

3. Proof of Work (the missing piece)

Blockchain on its own is undoubtedly an incredible innovation. The technology – only in its infancy – is already redefining how we express value.

The really exciting thing is that currency is just the beginning.

The blockchain on its own is extremely robust because it records every single change made, which means any attempt at fraud would be rejected by the network.

It's the digital equivalent of manually altering a written ledger and hoping no one notices. The network spots the change and rejects it.

However, what makes cryptocurrency so secure is proof of work. Proof of work functions that make up mining are designed purposefully to be difficult to prevent malicious behaviour, such as a miner who tries to add fake blocks to bitcoin or tries to rewrite the chain entirely.

Not only does proof of work protect digital currency against spammers, it prevents a single person from having control over which block is added to the ledger next.

The complexity of the equation – and therefore the energy that goes into acquiring them – helps to give value to the coins.

The really significant thing around proof of work is that should someone try to hack the blockchain to rewrite its history, they would never succeed purely because the rate at which new blocks are added to the chain vastly outstrips the pace at which they could be rewritten.

This makes cryptocurrency very secure.

It also makes cryptocurrency the perfect way of transacting with an increasingly interconnected world in which most don't have access to any form of banking.

Engaging Fundraisers Using Cryptocurrency

Cryptocurrency is an incredible technology and has the potential to make a big difference to a lot of people in the world.

It also represents a huge opportunity for charities to generate entirely new revenues, totally removed from your other fundraising activities, engaging individuals and businesses alike to generate significant monthly revenue, without increasing your infrastructure or headcount.

The mining of cryptocurrency for your charity rests almost entirely with your supporters.

However, just as this is an entirely new way to raise funds, it needs an entirely new mindset because any supporter who chooses to mine cryptocurrency for your charity can do so without registering their interest, handing over personal details or engaging with you in any way at all if they choose to.

If we applied traditional fundraising thinking this might be considered sub-optimal (as all charities want to know their customer) but it's actually, in the new world, a bit of a game changer.

In the new age of anonymity, given the increasing burden of managing personal data (GDPR, etc.), this may not be a bad thing for charities.

1. The Age of Anonymity

One of the most hotly debated topics of the early 21st Century is privacy. At what point is the state allowed to impinge on an individual's right to privacy and when is it violating that individual's rights?

Increasingly governments around the world have imposed stricter surveillance laws and regulations – some of which have been overturned as illegal – in an effort to keep us safe from ourselves, terrorists or foreign agents.

There is no easy answer – when does protection of a free society through the erosion of the smaller freedoms undermine the ideals of the democracy it's trying to protect?

When every shred of data about us is harvested by banks, governments, businesses, social media platforms and charities, individuals are becoming increasingly reluctant to share their details. Especially when time and again that data has been leaked, abused or sold to the unscrupulous.

More than ever people want to keep their data to themselves.

They want to help charitable causes but they don't want to fill out a form or hand over their bank details simply because they can't guarantee what will happen.

Supporters want to give money on their terms – not on yours. It's an uncomfortable truth but a truth all the same and no amount of enthusiasm on the high street or promises that the data will be handled appropriately will convince the average person differently.

Cryptocurrency as a means to donate to your charity gives those supporters the opportunity to raise money for the cause they care about anonymously.

Although this may seem like a negative to charities that traditionally rely on communicating with their database, consider this:

A supporter with a piece of automated cryptocurrency mining software will donate between £10-£30 a month, every month without having to be asked to do anything.

What makes this really powerful is that generating this revenue for your charity costs supporters just a few pennies a day, relieving the anxiety often associated with committing to monthly donations. Especially as most Xennials, Millennials and Gen Z express concerns over disposable income.

What's more, because they can't be contacted unless they choose to step over the anonymity threshold, they are given no reason to stop.

However, when someone starts directly contributing towards a cause – like mining cryptocurrency – something fairly remarkable happens. They start to get a sense of ownership. Through their (computer's) efforts, they have helped the community of charity supporters raise X amount for your organisation.

They become part of a tribe of supporters making a difference and they can see the difference they are making, every day.

This sense of ownership quickly translates to advocacy and it won't be long before they want to make themselves known to you because they will start to feel part of the team.

But even if that doesn't happen and your miner supporter base remains anonymous, their contribution to your cause can still transform the lives of those who really need it.

2. Corporate Social Responsibility

One of the biggest challenges for most businesses is juggling their desire to give back to their local community or support a good cause and maintain profitability.

Most businesses have set and want to meet their corporate social responsibility objectives, but during those difficult months a business will always choose making a small profit before helping a charity.

After all, what good is helping others if the business isn't sustainable?

This entirely understandable – and necessary – stance is frustrating for the business and employees but makes it difficult for charities to rely on businesses for charitable donations or support.

Even commitments of time are dependent on the business being able to spare members of staff for the agreed days to contribute. Again, the reality is, if they could be spared consistently, they likely wouldn't have a job, so the promises go unfulfilled.

But what if businesses could make significant donations each month with only a marginal increase in

running costs and not a penny coming off the bottom line?

What if businesses could meet (and exceed) their CSR objectives by leveraging their IT infrastructure?

Mining cryptocurrency on behalf of charities is a tremendous opportunity for your corporate supporters.

A business of 30 people – each with a standard computer, plus a server, could generate hundreds of pounds every month for your organisation for the cost of a few pennies of electricity, per computer, per day.

Considering a great many organisations don't power down overnight anyway, the increase in cost will be marginal.

The contribution from larger organisations, which operate multiple servers, could be transformational and the effort and inconvenience to them is minimal.





Crypto for Charities

Charities have never been more important to our society – or the global community as a whole. With more people living below the poverty line or fleeing the ravages of war and civil unrest since the Second World War (50 worldwide conflicts recorded in 2015), charitable organisations are integral to the welfare and survival of millions.

Charities are also under more financial pressures due to government funding being squeezed and fundraising becoming ever more challenging during a time of austerity.

As such charities need to try to engage new supporters as well as getting every penny they can from existing supporters. The problem is that behaviour is changing and increasingly people – especially Xennials, Millennials and Gen Z – do not want to be approached on the street or get an email they didn't ask for.

They are more likely to research a charity they are interested in, consuming significant amounts of content (blogs, etc.) about the charity and the good work they do before they would consider donating money.

The other challenge is that most individuals consider themselves to have limited disposable income, making monthly donations either unlikely or short term.

Traditional methods of fundraising will not reach these individuals on their terms whilst still meeting the charity's need for long-term, sustainable revenue.

We believe cryptocurrency is the answer.

1. Why Crypto is Good for Charities

Cryptocurrency allows us to accumulate wealth through solving complex mathematical equations. This is not business as usual.

Although there may come a time when the whole world moves to cryptocurrencies, for now cryptocurrencies serve as a viable and sustainable means of revenue generation for charities.

Cryptocurrency is a secure and transparent method of fundraising. There can never be any ambiguity or fraud with funds raised through mining – the crypto either belongs to the charity or it doesn't. Such is the beauty of binary.

Any cryptocurrency you own can be held or sold as your organisation deems necessary – it's wise to establish a policy on currency retention before you start mining – giving you greater control over your finances.

It also gives you an alternative to paying or donating to individuals and organisations overseas as it doesn't interact with the banking system at all – which means it can't be tracked, halted, tampered with or any fees taken.

This is especially advantageous in countries where corruption or high levies on international payments is a problem.

But the most important thing to understand is that this revenue stream sits entirely apart from all your other fundraising activities. It doesn't cannibalise a penny from anything else and allows you to engage with an entirely new audience who actively acquire and trade with cryptocurrency.

2. A New Way to Donate

Your biggest asset is your supporter base and the biggest untapped means of generating revenue is cryptocurrency.

Combine the two and you have a sustainable revenue stream that could yield significantly more in donations than traditional fundraising methods.

It's reasonable to assume that some of your supporters are actively mining and trading with cryptocurrency so giving those individuals and businesses a means to donate by that method too makes total sense.

Accepting cryptocurrency as a charitable donation requires less administration as cryptocurrency is classified as an asset and is therefore subject to capital gains tax (in the US & UK) rather than VAT. This does mean cryptocurrency isn't eligible for gift aid but also saves on the administration costs involved in claiming it back.

Accepting crypto is just one option. Your supporters can help you mine for crypto too!

Asking your supporters to mine for crypto, however, requires nothing more than the time they were already investing, some CPU power and a few pennies a day in electricity.

The average person spends over 27 hours a week online – and due to the rise in cloud-based systems that number is expected to increase.

Much like if you were conducting mining on your own (which you are well within your rights to do) the Cudo Donate software uses your supporters' computers to mine cryptocurrency on your behalf.

The free software pools the processing power of all of your supporters in order to maximise the mining potential, creating a sustainable revenue stream.

It also perfectly fits in with the way in which supporters – and consumers in general – prefer to engage with a business or organisation. Specifically: on their terms.

Mining will not compromise your supporters' computers or put your network at risk. It is an entirely viable, sustainable fundraising channel.

3. Crypto is an Asset

Unlike fiat currencies, cryptocurrencies behave as both currency and assets. They hold a value within the currency network and the real world, meaning they can be spent online or sold/exchanged for fiat currencies.

Essentially, they work as a tradable commodity that can increase in value. This isn't always the case and cryptocurrencies are subject to market fluctuations, so we recommend that you monitor the market values in order to maximise your return.



However, because currencies like Bitcoin have a high real-world value, mining or receiving crypto as a donation is potentially lucrative.

The really powerful thing about the value of cryptocurrency is you can hoard or spend it either to meet the needs of your organisation or to take advantage of a buoyant market – it's entirely up to you. This gives your charity a great deal of agility, especially if a funding opportunity presents itself.

However, before you start mining you need to make sure it's legal. In some countries it's been completely outlawed. In others – like Russia – the definitions are confusing, where it seems that it's legal to own crypto but illegal to do anything with it.

Make sure anyone you're planning on transacting with is legally allowed to accept it before you do so. Remember, you can't cancel a crypto-transaction.

Make sure you're aware of your local tax laws. Miners and traders in the UK can be expected to pay capital gains tax or corporation tax but whether or not any profit/gains are chargeable will be reviewed on a case by case basis.

As such, if crypto mining is something you wish to explore for your organisation it's important to seek professional advice regarding your obligations before you start.

Investing in Cryptocurrency

Cudo Donate provides an innovative, convenient way for charity supporters to give – one that doesn't make a big impact on household or corporate budgets – by donating spare computing power.

Cudo Donate's software operates quietly in the background on your computer as you go about your daily business. It harvests and uses spare processing power to help those in need by mining cryptocurrency.



Every supporter's computer can now create a regular revenue stream. A typical home computer can raise £10-30 a month - powerful computers could generate much more.

There is no other fundraising initiative in the world that asks so little of its supporters but can generate so much.

1. Is it a Viable Investment?

As with any investment it's not without risk. Some currencies are worth more than others and their values can – and do – fluctuate depending on the market conditions.

No market is without volatility and selling at the first sign of trouble is exactly what causes markets to collapse.

Remember mining for crypto – or even buying crypto – isn't like trading the stocks; it's not about a quick sale. Crypto mining is about growing an asset portfolio that can be liquidated at opportune moments in the market or if the organisation needs to release funds.

The other major risk is a whole new generation of Ponzi schemes built around crypto to take advantage of the ill-informed who want to make their fortune.

Unfortunately, these new schemes are proving highly effective at convincing people to hand over their money to make the organisers millions whilst leaving investors with nothing.

Again, it's important to recognise that Ponzi schemes – although made famous by Charles Ponzi in the 1920s – have been around since the mid-1800s. They are nothing new; it's just something individuals and organisations alike need to be aware of.

However, working with Cudo Donate takes a significant portion of the risk out of the equation. We merely harness the combined computing power of your supporters to mine the currencies that will yield the best possible return on investment.

2. Does this Cannibalise Existing Income?

Not in the least.

Cryptocurrency mining is an entirely new approach to fundraising.

At present your organisation relies on some, if not all of the following revenue streams:

- Government funding
- Monthly donations
- Legacies
- One off donations
- Charitable events
- Sponsored events
- Corporate donations
- Gift Aid
- Donations to be sold

None of these will be affected by your organisation and your supporters lending spare processing power to mine for cryptocurrency.

We struggle to foresee a situation under which government funding will be affected as cryptocurrency, or earnings generated by cryptocurrency, falls under capital gains so it's seen as an asset rather than additional earnings.

More importantly, even if every one of your supporters downloaded the software tomorrow and set it running – which would be amazing – the likelihood of your monthly donations disappearing as a result is highly unlikely.

Those motivated enough to give regularly will see mining as a cheaper way to give more but we are tapping into those supporters who wouldn't normally donate – either through lack of interest, lack of means or who don't want to 'just give money'.

These supporters don't care less than your die-hard advocates; they are just less inclined towards the traditional methods of donating. Chances are they would much rather 'do something' to raise money rather than set up a monthly payment.

By encouraging your supporters to mine on your behalf through the use of mining software, they are directly contributing to your success. This gives them a sense of ownership, making them more likely to engage with you.

However, they get the tangible proof of their efforts: a desktop app that shows them how they are making a difference to your organisation.

There will be a small increase in energy consumption but those few pence of electricity can represent pounds to your organisation. If you can effectively leverage your entire supporter base to mine cryptocurrency on your behalf the result would be utterly transformative.

Crypto mining is essentially a passive form of fundraising. All they need to do is download an app or click a button on your website to transform people's lives.

Ethical Mining

The subject of ethics has been part of the debate around cryptocurrency for some time. Its association with criminal activity is well documented to the point of being misleading and there is no shortage of controversy around the energy consumption – which is regrettably prodigious.

However, cryptocurrency is as responsible for criminal behaviour as the bank note is for binge drinking. One may facilitate the other, but it is in no way responsible for it. Especially as binge drinking predates the bank note and crime predates pretty much everything.

But to put this into perspective, criminals of the world have been doing just fine up to now without cryptocurrency. Let us explain:

- The total value of the world's money, excluding cryptocurrency, exceeds \$90 trillion.
- There is currently around 16.8 million Bitcoin in circulation – at time of writing worth approximately \$168 billion (\$0.168 trillion).
- The black market is valued to be worth \$10 trillion.

It is inevitable that cryptocurrency will get used in illegal activity – just like fiat currencies – but as evidenced, if all the crypto in the world were used for criminal activity, it wouldn't come close to making a meaningful dent in criminal spending.

However, we appreciate there is a lot more to ethics than a black and white definition of crime.

1. Standards

Is this just a question of perception? Cryptocurrency is simply perceived as bad rather than actually being bad.

So the answer is to inject as many 'good actors' into the space as possible. Although overwhelmingly the space is filled with good actors already, mining and using cryptocurrency for legitimate reasons.

It's also important that anyone who begins mining – be it for themselves or on behalf of a third party – understands the process, any potential risks and how it works differently to traditional fundraising.

Giving supporters a choice of fundraising efforts allows you to build a dialogue and trust with your supporters. It gives you the opportunity to explain how these various revenue streams are generated and what the costs are.

Transparency is becoming an increasingly important part of business and shows no sign of abating. Consumers only want to engage with organisations who they believe they can trust or echoes their values.

Cryptocurrency not only allows you to speak to an entirely new audience but serves as an opportunity to change the way in which you talk to your supporters about how you fund raise.

2. Sustainability

Mining for cryptocurrency uses energy. A lot of energy.

Mining Bitcoin alone consumes more than 29.05TWh of energy a year which is around 0.13% of the world's energy consumption.

This may not seem like much but it's more than the energy consumption of 159 countries combined and includes most of the African continent.

This energy consumption is effectively the investment made by the miner for the currency they earn. The more an individual or organisation mines the more energy they expend.

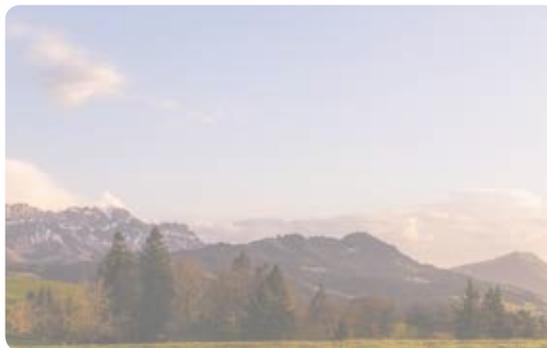
With energy consumption already outstripping production in many parts of the globe some are concerned the world won't keep up.

In truth the amount of power used by a CPU mining cryptocurrency verses normal usage is marginal and there is no denying the investment versus return. Especially when you calculate the energy expended organising a traditional fundraising campaign.

Of course, there are ways to offset this consumption.

Although we can't do anything about energy consumption, we can support the environment in other ways. We are able to determine the energy consumption of the computers using our mining software – be they an individual or a business, taking into account the energy mix by country to give us the total carbon footprint for the cryptocurrency mined.

We then purchase carbon credits in order to make your mining efforts carbon neutral. The carbon offsets directly contribute to projects which develop renewable energy sources, allowing us to support long-term solutions.



3. Responsible Mining

In the majority of countries the mining, spending, exchanging and sale of cryptocurrencies is perfectly legal with clearly defined guidance on taxation – so understanding obligations is important.

However, some countries like Morocco and Bolivia have banned all forms of cryptocurrency activity, including mining, trading and spending. Penalties include fines or even prison for repeat offenders.

Providing your country allows mining and trading then you are entirely within your rights to mine crypto either as an individual, part of a mining pool or as a business.

You are also free to spend the currency, trade or exchange cryptocurrency as you choose.

However, although cryptocurrency as a technology is secure and there are no spam transactions in the strictest sense, there are still threats to be aware of.

With traditional banking personal data is the target. Copying cards or hacking transactions gives a hacker free reign to duplicate identities and make fraudulent transactions. Fraud costs the UK economy £193 billion.

Mining cryptocurrency doesn't put your data at risk because at no point is your personal data part of the process – simply because they are not needed.

But wherever there is wealth there are opportunists and thieves, and just as there are those who would steal from you in the real world there are those who could try to steal your cryptocurrency.

One of the most important things to be aware of when it comes to cryptocurrency is that transactions are non-reversible – so if you're duped there is no financial mechanism to reverse the process.

Some scams to be aware of:

- Ponzi schemes have surged in number since the advent in cryptocurrency. Although the fraudsters aren't going after crypto specifically, they are using the buzz around the sector to manipulate the masses.

The proposition is usually a simple one – participants give their life savings to the organisers who invest it on their behalf. The portfolio collapses and everyone – except the organisers – lose everything.

The only thing you should ever need to pool when it comes to cryptocurrency is your processing power.

- Bad exchanges will charge exorbitantly high transaction fees for selling or trading your currency or will have a number of hidden costs that mount up as you go through the process.

Although still a relatively small amount compared to the total value of the trade or exchange, the number of transactions quickly equates to a sizeable sum that has been acquired through dishonest means.

- Scam transactions technically speaking don't exist within cryptocurrency networks as the network verifies transactions before they are completed. If there is a problem the transaction is rejected.

If someone pays for a service or product and doesn't get it, then they have fallen foul of a scam. However, there are ways of preventing this from happening including time locking transactions.

Scammers rely on a lack of understanding by the other party. They know – thanks to the nature of cryptocurrency – that once the transaction has been approved there is little the victim can do about it.

Scams like this have been going on for decades and cryptocurrency is just the latest platform for the nefarious to peddle their brand of crime.

For the most part the mining software and exchanges available are both secure and can be trusted but it is important to carry out your due diligence.

Our software, like most other miners, is built in open source so partners can scrutinise the code to determine for themselves that the app is safe before use.

System Security

You need to feel confident that any new fundraising or technology initiative will not only be viable from an ROI perspective but also not put your supporters or your existing technology infrastructure at risk. This is an entirely reasonable consideration.

Cryptocurrency – either through mining or through donations – is one of the most secure ways of raising funds for your organisation but undoubtedly elicits the greatest amount of anxiety from stakeholders.



1. Compliance

Mining for cryptocurrency using desktop software may seem like the antithesis of network security: locally installed, third party software that accesses the internet to exchange data back and forth with... the internet.

Until you consider what's actually involved in mining.

A desktop mining application does nothing more than handle packets of numbers – that contain nothing confidential whatsoever – solving complex equations before sending the data back over an encrypted connection.

Rinse and repeat.

Web browsers work in essentially the same way, only in a far less secure way, handling a lot more than just numbers.

The mining platforms available – including ours – are all open source so the code is in the wild and verifiable should it need to be. Even the interface we designed to wrap around the miner is built using the same code that drives platforms like Slack and Spotify.

There are no hidden nasties, just a piece of technology that generates revenue for your organisation.

However, because your organisation wouldn't be doing the mining, your network will be totally unaffected. The only consideration will be accessing your crypto wallet to collect your donations.

2. Storing Data

In short, there isn't any.

Beyond the currency keys we send to your wallet, there is no data to store. The mining happens on the computers of your supporters – unless your organisation chooses to mine as well.

However, no personal data is required to mine so none is collected. The mining software exchanges non-sensitive, encrypted packets of numbers – solving an equation in the process. It doesn't retain any of the data.

If the miner is switched off before a computation is completed the data is discarded.

This means that your supporters are able to mine on their terms, without revealing their identities or handing over their email address or bank details.

Although this flies in the face of traditional fundraising methods, do you need to know the identity of someone who is consistently donating £10-£30 a month without being asked?

Moreover, by allowing your supporters to give the way they want to give – specifically without being interrupted on the high street or called during their precious personal time – you are defining your organisation as something different.

The mining software is utterly focused on that single task so it is incapable of accessing any other part of the computer or even understanding the files it found there if it could.

The software just solves equations using the CPU or the GPU of the computer to do so.

The only data that needs to be handled with care are the keys to the cryptocurrency you receive through your supporter's mining.

3. Hacks

Hacking the blockchain itself is so time consuming and expensive that it simply isn't worth it so any currency you own is largely safe from a direct hashing attack.

This is one of the most powerful things about cryptocurrency. It is immutable whilst still being fungible, eliminating the fraud and counterfeiting that blights traditional currencies.

Equally, mining crypto does not make your computer more vulnerable to hacks but it does make hacks more costly if you're careless with your crypto-keys.



Because your crypto-keys are effectively your certificate of ownership for your currency, they need to be well protected. Although it's incredibly difficult for hackers to determine whether or not you own cryptocurrency, if they break into your computer and steal your crypto-keys there is very little you can do.

This is why it's highly advisable to keep your keys in a cold storage wallet. This is a computer that hasn't been connected to the internet, nor will be. This is the most effective way of protecting your keys.

4. System Failure

System failures are always a risk, there's no point in pretending otherwise. Servers fail. Working with an organisation like ours means that those failures are kept to a minimum as there are backups to prevent critical loss of data.

We also leverage Google Compute Engine so in the highly unlikely event of a complete system failure the most we'd lose is a single day of mining.

But that kind of failure would mean Google itself had gone down which means we've all got bigger problems.

Should you choose to mine or accept crypto then it's important to have processes in place to back up and protect your crypto wallet – and anything in it – from system failure.

Although our systems are robust, we can't do anything about your own.

Back-up drives or servers ensure that in the unlikely event of a crash your crypto, cash or fiat currency raised through mining isn't lost. Or, at least, as little is lost as possible.

Begin

1. The Potential

The charitable landscape is shifting. Charities need to identify new ways of raising funds from a new generation who are increasingly both time and cash poor.

A faceless monthly donation isn't enough to sustain a charity. They help but a charity needs champions. Advocates who believe what you believe.

The world is full of people who feel like you do. They are willing to help, providing they can help on their terms, in their way – a way that fits into their life.

Fundraising can no longer be dictated by the charity.

Demanding a firm commitment of donations causes anxiety and significantly increases the chances of those donations being stopped. In an increasingly saturated space, there is no guarantee an eager replacement can be found.

Although mining is anonymous there will be those who believe in your cause and will cross that threshold to become vocal advocates. These passionate few won't need to be sold to because they will already be vocal champions.

Giving your supporters the ability to mine cryptocurrency represents a whole new way for your organisation to engage with your audience and receive donations.

It gives your supporters something to work towards instead of the usual proffered hand or a hand in their pocket.

Instead, mining for cryptocurrency creates a community of people – inside and outside of the organisation – all lending their processing power to your cause. You are all working together to raise money for your cause.

They are contributing to a cause they believe in, in a way that feels exclusive and rewarding but still works for them.

Because they are mining simply by using their computer or visiting your website.

2. First Step

To begin a new era of fundraising for your organisation all you need to do is sign up to Cudo Donate. We will take you through the process and make sure you fully understand how mining works and how we'll work with you to raise funds.

We will then create a custom version of our Cudo Donate mining software that you can make available on your website and we will put it on the charity page we will create for you on our website.

All your supporters will need to do is download it and start mining. We will also give you some custom JavaScript for your website so visitors to your site can mine currency for you as well.

For more information visit cudodonate.com

Questions?

Get In Touch

Ready to get started?

Download The Software