**Market Potential**

Hundreds of millions of people globally have no checking or savings bank account. Financial exclusion undermines their quality of life and holds their nations’ economies back.

Morocco, Vietnam, Egypt, Philippines, and Mexico: these are the top 5 countries, according to a just-released study by the British research platform Merchant Machine, where the unbanked population is the largest. Countrywide, the nations with the highest percentages of unbanked populations include Morocco (71%), Vietnam (69%), and Egypt (67%). On a global level, the regions with the highest proportion of developing or emerging economies, quite predictably, top the list: in the Middle East and Africa 50% of the population is financially excluded, South and Central America follow at 38%, Eastern Europe and the former Soviet republics at 33%, Asia Pacific’s share stands at 24%. [Global Finance](https://gfmag.com/data/worlds-most-unbanked-countries/)

With over 50 million individuals unbanked out of a total adult population of 72 million, the bank reported that almost half of them (45%) mentioned the lack of enough money as the top reason for not having an account. Most people who are unbanked are unbanked because they have no income in the first place. True financial inclusion begins by lifting the unbanked out of poverty. [Global Finance](https://gfmag.com/data/worlds-most-unbanked-countries/)

**Challenges with cross-border transactions**

Cross-border transactions are generally more costly and slower, with less access and transparency than domestic payments. They can take a few weeks to reconcile and cost up to 10 times more than a domestic transaction. Here are a few more challenges with cross-border transactions.

**1. High funding costs**

Depending on the transaction type and currencies involved, payee entities must provide funding in advance. They may need to access the relevant currencies or foreign currency markets to even initiate the transaction. That means putting aside capital to cover expected transactions, and those funds can’t be used for anything else.

**2. Transaction fees**

The more entities involved in a cross-border transaction, the higher the cost due to bank fees at each stage. Many of these fees are absorbed into the merchant bank fees and accounts, but they’re sometimes passed along to consumers or the originating payee. For example, credit card companies often charge cardholders a foreign currency transaction fee for purchases made in currencies other than the card’s currency. This rate can vary between cards, issuers, and currency types, so it’s hard to know the fee for the transaction.

**3. Currency exchange rates**

Exchange rates fluctuate all the time, affecting both payee and recipient entities. Recipients could end up with a deficit if the rate decreased between the time the transaction was begun, processed, and settled. Likewise, payees may spend more on their end if the rate was higher when they started the process. To avoid this, many merchants offer the ability to purchase in a local currency and use a payment gateway or processor to find the best exchange rate for the merchant automatically. Consumers save money when spending and merchants save during the transaction and settlement processes.

**4. Long transaction chains**

A transaction chain is the number of entities involved in a payment transaction. Domestic transactions or in-network single currency cross-border transactions tend to have shorter chains. Multi-currency cross-border transactions tend to have longer ones. The correspondent bank model allows entities to offer cross-border transactions, but it can lengthen the transaction chain at the same time. Each “link” in the chain increases the timeline, funding needs, fees, validation checks, and the potential for data to be corrupted as it is transmitted.

**5. Complex compliance checks**

Cross-border transactions tend to face broader and more stringent compliance checks against fraud, sanctions, and financial crime. Each check takes time and may happen multiple times during the transaction’s journey. Each bank or payment gateway may use different rules and guidelines when checking transactions, leading to incorrect flagging or declines. For example, if a customer has a similar name to one in financial crime databases, they may be declined automatically.

Domestic compliance checks may complicate these transactions if they move through different domestic banking networks or systems and trigger domestic compliance rules. For example, in the US and Canada, transactions that move across states and provinces may trigger unique checks that other transactions may not. —And that’s even before the transaction gets to an international border.

**6. Tax and legal implications**

Taxes and local laws are another complication for cross-border transactions. There are implications for individual countries involved in the transaction and any tax-related treaties between their governments. Sales tax is the most obvious example of tax implications for cross-border transactions and how it’s applied to different transaction types depends on the countries involved. For example, it may apply to goods over a certain threshold in one country, and under that threshold in another. It may not apply to services at all in most countries and apply to all services in others but at different rates depending on the recipient entity’s location.

**7. Limited operating hours**

Digital transactions can happen at any hour of the day, but balances and settlements often depend on bankers’ hours of operation for updates. That means that reconciliation and settlements can only happen during the hour’s banks are open in the payee and recipient entity’s location. This can create long delays and bottlenecks in clearing and settling cross-border transactions, especially across large time differences.

The impact is that transaction fees may fluctuate since foreign exchange rates may change during this time. Banks, entities, and recipients often must hold enough balance to cover unknown costs of the eventual foreign exchange rate, driving up overall transaction costs.

**8. Fragmented and truncated data formats**

Financial transactions contain sufficient information to confirm the identity of those involved in the transaction and confirm its legitimacy. However, data standards and formats can vary significantly across countries, systems, message networks, and financial jurisdictions. This variation results in data fragmentation or loss as systems are not set up to handle unfamiliar data. Data may need to be translated and could lead to slight changes in spellings or formats, making it difficult to set up automated processes and increasing delays and decreasing transaction success rates.

**9. Legacy technology platforms**

Traditional financial institutions are notorious for using legacy technologies that may not interface well with newer technologies. These legacy processes and technologies may have fundamental limitations that cause settlement delays and create processing bottlenecks, such as relying on batch processing, no real-time monitoring, and low data processing capacity. These systems may not be able to handle the ebb and flow of financial transactions in real time. Legacy technology may be a significant barrier for emerging business models and cross-border transaction technologies that want to enter a new market.

There are a lot of challenges that people face while doing cross-border transactions and we all know doing a transaction is the most common and used financial service used by any customer whether it is any business or any common person. [Forbes](https://www.forbes.com/councils/forbesbusinesscouncil/2023/05/05/cross-border-payment-options-and-their-challenges/) [Cellpoint digital](https://cellpointdigital.com/articles/blog/the-ultimate-guide-to-cross-border-transactions)

**How are we solving this problem for cross-border transactions?**

1. Getting access to Money Gram
2. Reducing the cost of cross-border transactions
3. Using a stablecoin-based platform which on a high scale reduces the transaction fees which is almost equivalent to zero
4. Reduced currency exchange rates because of stablecoin
5. Reducing transaction delays
6. Increasing transaction transparency and accuracy

**Investors**

At the initial stage we will try to get funds by participating in different fintech incubator programs such as Engineering is Business Competition (EIBC), Pre-Incubator Programme, and Y Combinator and will acquire these funds so that we can get funding to get access to Money Gram. We can get an initial investment of 1500 GBP by taking part in the University of Exeter Pre incubator programme. Also, we can pitch our ideas in startup accelerators and take part in startup events at local universities, where angel investor funding is provided. [CrunchBase](https://www.crunchbase.com/)

Our first aim after getting funding is to get access to Money Gram which is a crucial part of our project.

**Accessing MoneyGram as a Fintech Company**

To access and integrate MoneyGram services into our fintech app after securing funding, we need to go through several key steps:

**1. Partnership Agreement with MoneyGram**

* **Contact MoneyGram**: Contact MoneyGram through their business development or partnerships team. This can usually be done via their website or by directly contacting their business division.
* **Proposal Submission**: Prepare a detailed proposal outlining your business, the value proposition of integrating MoneyGram services, your user base, and how this partnership will benefit both parties.
* **Negotiation**: Once initial contact is made, we will enter negotiations to define the terms of the partnership. This will include aspects like transaction fees, revenue sharing, compliance requirements, and service levels.
* **Contract Signing**: After negotiations, we'll sign a partnership agreement that legally binds both parties to the agreed terms.

**2. Technical Integration**

* **API Integration**: MoneyGram provides APIs that you can integrate into your fintech platform to facilitate money transfers. Our development team will work closely with MoneyGram’s technical support team to ensure seamless integration.
* **Testing**: Before going live, we will need to test the integration extensively to ensure that transactions are processed correctly and securely.

**3. Compliance and Regulation**

* **KYC/AML Compliance**: MoneyGram operates under strict regulatory guidelines, particularly regarding Know Your Customer (KYC) and Anti-Money Laundering (AML) laws. We will need to ensure that our platform complies with these regulations.
* **Licensing**: Depending on our country of operation, we may need specific financial licenses to partner with MoneyGram. Ensure that all regulatory requirements are met before launching.

**4. Launch and Marketing**

* **Go-to-Market Strategy**: Develop a marketing strategy to promote new MoneyGram-powered services. This could involve launching targeted campaigns to attract users who need cross-border transaction services.
* **User Education**: We will educate our users on how to use the MoneyGram services within your app. This could be done through in-app tutorials, FAQ sections, or customer support.

By following these steps, we can successfully integrate MoneyGram into our fintech app and leverage its extensive global network to offer cross-border transactions to our users.

By building a partnership with Money Gram, they will provide **50000 USD** to our app to market their product and services

As soon as we get access to Money gram, and we start building our user base for cross-border transactions using MoneyGram then we will approach venture capitalists to invest in our Fintech Product. We have made a list of VCs who are keenly interested in investing in Fintech Businesses and can provide their great expertise on how to do business with the lowest cost possible. These VCs are **Ribbit Capital** and **Sequoia Capital.** [**digital ocean**](https://www.digitalocean.com/resources/articles/how-to-find-angel-investors)

**FINANCE**

**Why People in Morocco and other countries are still unbanked?**

People in countries like Morocco, Vietnam, and other regions remain unbanked for a variety of reasons, often tied to socio-economic, cultural, and infrastructural factors. Here are some key reasons:

**1. Economic Factors:**

* **Low-Income Levels**: A significant portion of the unbanked population in these countries lives in poverty. For many, their income is so low that they feel there is no need to have a bank account. In Morocco, for example, many people work in informal sectors where income is irregular and often in cash, reducing the perceived need for a bank account​.
* **Cost of Banking**: The fees associated with maintaining a bank account, such as minimum balance requirements, transaction fees, and service charges, can be prohibitive for low-income individuals. This discourages people from using formal banking services. [global finance](https://gfmag.com/data/worlds-most-unbanked-countries/)

**2. Geographical and Infrastructure Barriers:**

* **Access to Banking Services**: In rural areas, especially in Morocco and Vietnam, banking infrastructure is limited. People living in remote regions may not have easy access to a bank branch or ATM, making it difficult to use banking services. The lack of financial infrastructure in these areas is a significant barrier.
* **Digital Literacy and Internet Access**: While mobile banking is growing, many unbanked individuals lack the digital literacy required to use online banking services. Additionally, in some regions, especially rural areas, internet access is limited or unreliable, hindering the adoption of digital financial services. [worldeconomicforum](https://www.weforum.org/agenda/2022/07/global-digital-financial-inclusion-findex/)

**3. Cultural and Social Factors:**

* **Trust in Financial Institutions**: There is often a lack of trust in formal financial institutions among the unbanked population. People may prefer to keep their money in cash or use informal savings methods like keeping money at home or participating in community savings groups.
* **Financial Education**: Low levels of financial literacy mean that many people are unaware of the benefits of having a bank account or do not know how to use banking services effectively. This is particularly prevalent in both Morocco and Vietnam, where financial education is not widespread. [wef](https://www.weforum.org/agenda/2022/07/global-digital-financial-inclusion-findex/)

**4. Regulatory and Structural Challenges:**

* **Bureaucratic Barriers**: In some cases, the process of opening a bank account is seen as complicated or burdensome due to documentation requirements or lengthy procedures. For those without formal identification or stable employment, meeting these requirements can be difficult.
* **Gender Disparities**: In many developing countries, including Morocco and Vietnam, women are disproportionately unbanked due to cultural norms that limit their access to financial services. Women may also have less control over financial decisions within the household, further limiting their access to banking.

**5. Alternative Financial Services:**

* **Informal Financial Systems**: In some cultures, there are well-established informal financial systems that people rely on instead of formal banking services. These might include local money lenders, community savings groups, or family-based financial support systems. These informal systems are often more familiar and accessible, despite the lack of security and formal regulation.

Understanding these barriers is crucial for developing strategies to increase financial inclusion and reduce the number of unbanked individuals in these regions.

**Challenges of paying international employee**

Here are some common challenges of paying international employees:

**Compliance issues**

The most common issue you'll encounter when paying international employees is compliance. That’s because paying international employees is not the same as paying employees in your home country.

You must pay employees according to their country's payroll and employment standards, not yours. Because labour laws differ from country to country, this can quickly become complicated, but it does not have to limit the talent pool available to your company.

Among the primary compliance concerns are:

* Providing adequate compensation and other statutory entitlements to employees
* Observing labour laws regarding notice periods, fair termination, and severance pay
* Making appropriate social contributions as an employer
* Avoiding penalties for misclassification when hiring contractors
* Adhering to international data privacy laws

If you don’t comply with these regulations, your company may face severe financial penalties.

**Tax issues**

Tax laws are another murky area to consider when you’re handling a global payroll. On the one hand, an employer must withhold the appropriate taxes from a foreign employee's paycheck. On the other hand, the company must pay taxes to the relevant government body by specific stipulated dates.

Your company must also keep accurate records of taxes paid, as the tax authority in a foreign country may conduct an audit of the company at any time. This means that your company must keep all tax documents and receipts for years or risk paying hefty fines if an audit reveals that you weren't withholding or paying the correct tax amounts.

**Currency differences**

Paying your international team in the currency of their respective countries is beneficial for them but can be difficult for you. There are exchange rates to worry about. Especially considering they may fluctuate depending on your payment platform of choice (or your employees’).

For example, when you pay international employees through your bank, the exchange rate is set at the bank’s discretion. Typically, this is an inflated exchange rate designed to profit the bank from the transaction. Your company could end up spending more to pay the same amount.

Also, if the value of a foreign currency rises concerning the dollar, your company may end up paying your international employees far more than you originally agreed.

**Cultural differences**

Some cultural differences in payroll may affect how you pay your overseas personnel. For example, paying employees a 13-month salary is a standard practice in many South American, European, and Asian countries.

Your multinational workforce may begin working for your company with the expectation of being paid more at the end of the year. But, if your company is unfamiliar with the tradition, you risk disappointing your team.

**Differences in overtime limits**

When it comes to paying international employees, timekeeping can be a more significant challenge than your company expects.

Non-exempt employees in the United States are entitled to overtime pay if they work more than 40 hours per week, but there is no upper limit on the number of hours a person over the age of 16 can work per week. This is not the case in other countries. The working week in many EU countries, for example, is limited to 48 hours. Yet, the working week in Israel is legally restricted to 42 hours per week. And they don’t work a full day on Friday. It’s improbable that these terms would pop up during the hiring process, yet they’re super important to a seamless relationship between your company and its workforce. [oyster](https://main.oysterhr.com/library/how-to-pay-international-employees-overseas)

According to a study by the British research platform [Merchant Machine](https://merchantmachine.co.uk/most-reliant-on-cash/), Morocco has proportionally speaking the largest population of unbanked citizens, standing at 71%.

The study takes “unbanked” to mean any individual who does not have access to the services of a bank, or other similar financial institutions. By this metric, approximately **26.2 million Moroccans do not currently have access to a bank account**.

Cost Analysis: -

* The office space selected is “Veena Space Exeter City” with a total annual rent is 1500 GBP annually.
* IT infrastructure cost – It includes the price of the server required to run smart contracts. Each server cost is 750 GBP annually (Cost was taken from the digital-ocean server platform) and 50 servers will be required to run the platform. This infrastructure cost also includes the cost of the laptop (laptop price is 499\*9 = 4491 GBP Acer swift3). The laptop price was mentioned on amazon.co.uk.
* Marketing cost – It includes the cost of conference attendance, Industry events and Ads on Google budget
* Financing and accounting cost –DNS accountants for financing and accounting. The total budget for financing and accounting was set to 200 GBP.
* Legal cost – The legal firm which will be used for legal-related queries is **Ignition Law.**
* The budget for Legal costs was set to 2000 annually.
* Stellar’s **Fee:** The fee for processing a $100 million transaction on the Stellar network is extremely low, around **0.0000015 USD** per operation, regardless of the transaction value.
* **Server Capacity:** Your 50 servers should have no issue handling a $100 million transaction on Stellar, given the network's design and your server setup's adequacy for high transaction volumes. The primary limitation would be the number of transactions per second your servers can process, not the transaction amount.
* For a transaction value of **$100 million**, your startup could earn **$1 million** from a 1% fee on that transaction.
* As total fees charged by MoneyGram will be 1%.
* So total fees through our platform are 2% to unbanked customers.

**. Stellar Network Transaction Capacity:**

* **Transaction Speed:** Stellar can handle approximately 1,000 transactions per second (TPS) under optimal conditions.
* **Transaction Capacity:**
* This calculation assumes the network operates at full capacity 24/7, which may not always be the case in real-world scenarios due to varying load and network conditions.
* If we charge a 1% fee for each transaction, our startup could potentially make **2.592 billion USD** in profit each month, assuming the conditions are ideal, and we achieve the maximum transaction capacity as estimated.

**Using 50 Servers:**

* The 50 servers combined can theoretically process all the available transactions per month if properly optimized and utilized.

**100 million amount transactions in a single year is our target.**

Given the network's design and our server setup's adequacy for high transaction volumes, 50 servers should have no issue handling a $100 million transaction on Stellar. The primary limitation would be the number of transactions per second our servers can process, not the transaction amount.

**Fee Calculation:**

* **Transaction Value:** $100,000,000
* **Fee Percentage:** 1%

**Potential Earnings:**

For a $100 million transaction, if your system charges a 1% fee, your startup could make **$1 million** in revenue from that transaction.

This figure represents the gross revenue, and it assumes that there are no additional costs or fees that our startup would need to cover (such as MoneyGram's fees or other operational expenses).