
XINFIN REAL WORLD APPLICATIONS WHITE PAPER



Contributors: XinFin Team, Nakul Shah
Website: <http://www.xinfin.org>
Email: info@xinfin.org

1. Summary	3
2. Abstract	4
3. Why XinFin.org ?	5
3.1 Problem	5
3.2 Solution	5
4. Use Cases	6
4.1 Infrastructure Financing	6
4.2 Retail/Consumer Financing	9
4.3 Institutional Financing	15
5. New Opportunities in Financing and Trade	18
6. Token Allocation	19
6. Utilization of Funds	21
7. Legal Considerations	22
8. About Us	23
9. Team	23
10. Conclusion	24
11. References	25

1. Summary

Blockchain is the fastest growing technology at the moment. The world's smart and powerful people agree it is indeed a remarkable evolution and are spending enormous resources in order to harness its potential disruptive power. With this level of focus and hype, we want to help demystify what Blockchain is and how governments can leverage its key features (security, transparency, full life-cycle transaction history, real-time, immutability and cost efficiency).

Blockchain technology can serve as a decentralized permanent unalterable database of all types of information. As the name suggests, it is a chain of "blocks" containing the transactions/information and as it gets longer, older information becomes more reliable, as each block has a cryptographic reference to the previous one. It is a technology that consists of a 'distributed database' – a database distributed across several computers and geographies. All these databases store a copy of the exact same dataset, in chronological order. Thus, in order to fraud this system, each dataset will have to be hacked at the exact same time, which is practically impossible. It records that a transaction happened, when it happened and that it happened correctly, without exposing any confidential details about the subject or the parties' involved.

2. Abstract

Globally, the governments strive hard to provide good infrastructure facilities for all its people. In order to do so, they keep borrowing and financing various development projects. Due to huge gaps and the inefficiencies in global supply chain finance, it becomes very expensive for the governments to borrow in order to support infrastructure development. Consequently, the cost of project increases, thus creating a surge in taxes for the citizens.

A globally efficient supply chain channel coupled with efficient financing mechanism can significantly push the financing cost down, for the government, thus reducing citizens' tax burden.

Xinfin.Org leveraged the power of blockchain technology as a tool to create the next generation of money and finance. We have created an efficient solutions between the institutions, governments and global suppliers which acts as a finance mechanism called XDC token. The platform runs the XDC tokens on a private permissioned blockchain, developed on ethereum, to enable global real-time trade and financing. Thus, we plan on using this platform as a much-needed bridge to overcome infrastructure deficit.

3. Why XinFin.org ?

3.1 Problem

The evolving state of the world has seen a great deal of proliferation in the internet, IT and smartphone industries. This is because investors tend to choose glamour over basic needs. As a result,

- There is an enormous gap in public infrastructure needs of the government
- There is over \$1 trillion in annual infrastructure deficit
- Over 1.3 billion people – almost 20% of the world's population – still have no access to electricity
- About 770 million people worldwide lack access to clean water
- 2.5 billion people in the world don't have adequate sanitation
- 2.8 billion people globally still cook their food with solid fuels (such as wood)
- 1 billion people worldwide live more than a mile from an all-weather road

3.2 Solution

Xinfin.org has built a private permissioned blockchain platform over the Ethereum network. The smart contracts have been mapped to real world contracts for project financing except for one major change - Xinfin.org has allocated up to 25% of the underlying blockchain tokens that are available to financiers as a bounty/cashback for financing infrastructure projects. The native token XDC also acts as a real time gross settlement mechanism for the transfer of funds and trades. This will add glamour to what has been a highly critical, need-based yet unattractive industry. The bounty or cash back of up to 25% of the tokens motivates financiers to take up financing projects. When Blockchain tokens are created they are defined with the fixed set of supply over the period. Thus it would create a scarcity in the market and resulting in a multifold appreciation of value in almost every blockchain-based token that is launched, due to the urgency shown by its buyers over the limited supply. We believe that the bounty of cash back tokens and its inflation proof nature and potential for increasing in value will let the financiers offer easy terms to finance real world infrastructure projects. Our initial discussion with buyers, suppliers and financiers has given positive feedback to the business model.

4. Use Cases

4.1 Infrastructure Financing

Even though the potential supply of long-term finance is ample, infrastructure investment lagging significantly. This is an issue of great concern to policy makers.

While there is a consensus on the existence of infrastructure bottleneck, the underlying reasons for the lack of infrastructure finance by the private sector seem to be less debated.

Overcoming the infrastructure bottleneck would boost long-term economic growth for countries, communities and a wide range of industries, thus being an important driver of long-term growth.

In some emerging markets, the lack of investment in well-designed transport, renewable energy, and social infrastructure is becoming more and more evident.

The primary impediment to greater infrastructure investment is not the lack of available financing – given abundant funds in world markets and very low long-term interest rates. The problem is inefficiency in systems to match the supply of finance from the private sector with investable projects.

The XinFin team has developed a blockchain infrastructure suitable for a private distributed network of participants (investors, governments, institutions and suppliers) spread across the world. Following are the key benefits of using XinFin's platform for solving the supply chain deficit in infrastructure finance:

- a. It provides an instant cross-border settlement mechanism through its native token XDC
- b. The smart contracts created on the ethereum platform can be mapped to real world contracts
- c. XDCs can be used to incentivize financiers to fund projects with low buyer and seller rating
- d. An equity exchange can be built over XDC for projects that want to raise capital

4.1.1 Project Illustration

Problem

State government A wants to finance a road that will cost \$4 million to build. With the current system of financing, no financier will show interest in the project because of the underlying depreciation of unlimited issued fiat currency. Government A needs to fund the project anyway, so it borrows the money at a high interest rate and increases taxes on its people to finance the project.

XinFin's Solution

Government A can source the best technology available for building the roads.

It can source a new technology that provides significantly lower costs to build.

It can either finance its own project with the 25% cash back bounty or other financiers can do so.

The standard financing term can even be at 0 percent and linked to source or destination fiat currency.

It can enable global trade finance using XDC tokens with its real time gross settlement mechanism on the tradefinex.org platform.

With the limited supply of XDC tokens gradually appreciating in value, the financier will realize significantly higher returns on investment.



Figure 1

Process Flow

- Investors use the XinFin platform to convert Fiat currency into XDC
- The transaction is recorded on an unalterable smart contract system, which runs on ethereum
- The XDC serve as entry credits for investors to fund infrastructure projects
- The money collected is used to pay contractors and service providers who build the toll road
- The entire development uses IoT devices that are linked to a cloud based data server, providing real time updates to the government and investors alike
- Once the road is constructed, people start using it, in return for toll fees
- The toll fee collected is used to repay the investors through a Contracted Bank Account
- Thus, a transparent and unbiased system like this ensures quicker financing of government infrastructure at a cheaper price with repayment assurance for investors

4.2 Retail/Consumer Financing

In a balanced economy, both consumers and banks are entitled to financial and legal rights, which is an indication of a developed economy. However, most developing nations struggle to strike this balance by making consumers a weaker party vis-à-vis the financial sector. The financial sector's capacity to influence administrative sectors owing to their unlimited financial resources, coupled with knowledge, technology and lobbying can put consumers and retailers at their mercy.

Thus, the use of traditional financing mechanism poses significant challenges for consumers, the key being High Interest rate Spread

A low spread in interest rate is indicative of an efficient and competitive financial system that aids economic development through a surge in investments.

However, an analysis of economy of a randomly chosen developing country over a 5 year period (as shown in *figure 2*) depicts the spread has vacillated between 2.25% and 3%. One would expect that with a surge in the number of banks in the past 5 years, the spread would decrease, however, an increase in spread depicts a cartel like pattern, which is not good for a country's economic growth

Year	Inflation Rate	Average Lending Rate	Average Deposit rate	Interest Rate Spread
2012	9.30%	10.75%	8.50%	2.25%
2013	10.92%	10.50%	8%	2.50%
2014	6.37%	10.25%	7.90%	2.35%
2015	5.88%	10.25%	7.80%	2.45%
2016	4.97%	9.65%	6.75%	2.90%

Figure 2

A comparison of the world's least developed countries around the world, as shown in *Figure 3*, depicts the interest rates which are in excess of 7% for majority of the countries.

	Country	2010	2011	2012	2013	2014	2015	2016
AFRICA	Angola	9.79	12.45	13.05	12.66	12.86	13.57	..
	Benin	6.17	2.73	3.55	1.74	1.78	2.35	..
	Comoros	8.75	8.75	8.75	8.75	8.75	8.75	..
	Djibouti	8.72	9.71	9.65	9.90	11.45	10.56	9.98
	Dominican Republic	7.28	7.68	7.99	7.57	7.18	8.32	7.90
	Gambia, The	12.38	16.25	16.50	14.56	11.99	..	..
	Guinea-Bissau	6.50	6.39	5.50	3.63	..	5.28	..
	Lesotho	7.54	7.73	7.27	7.07	7.61	8.25	10.47
	Liberia	10.70	10.72	10.02	9.62	9.34	9.56	..
	Madagascar	38.50	41.85	49.50	49.25	47.60	45.00	..
	Malawi	21.02	19.64	21.25	27.60	31.12	32.79	..
	Mauritania	9.00	9.00	11.19	..	..	..	..
	Mozambique	6.58	6.12	5.38	6.53	6.22	6.33	10.40
	Niger	4.42	5.60	6.16	3.14	4.38	2.93	..
	Rwanda	9.84	8.77	6.45	8.35	9.90	9.44	..
	Sao Tome & Principe	17.76	14.59	13.28	13.90	14.25	16.41	15.45
	Sierra Leone	11.78	10.69	10.61	11.65	12.81	14.24	..
	Tanzania	7.98	8.18	5.95	6.02	6.41	6.21	..
	Uganda	12.49	8.81	10.08	11.41	10.72	9.83	..
	Zambia	13.52	11.81	5.15	3.03	3.70	4.26	..
ASIA	Bangladesh	5.01	4.48	3.73	1.87	3.14	3.47	4.21
	Bhutan	9.50	9.50	9.00	10.15	10.15	10.15	10.15
	Lao PDR	19.61	..	..	..	..	..	..
	Maldives	6.33	6.02	6.75	7.34	7.28	6.98	6.98
	Myanmar	5.00	5.00	5.00	5.00	5.00	5.00	5.00
	Nepal	4.38	..	..	..	..	..	..
	Timor-Leste	10.22	10.20	11.30	11.51	12.01	12.72	13.47
	Yemen, Rep.	5.17	5.00	5.00	6.83	..	..	..
AUSTRALIA & PACIFIC	Samoa	8.02	7.68	7.39	7.32	6.96	6.91	..
	Solomon Islands	11.15	11.17	10.42	10.48	10.66	10.17	..
CARIBBEAN	Haiti	16.75	11.33	8.48	8.04	8.16	8.64	7.60

Figure 3

Similarly, charting the interest rates of some other countries around the globe we can see that Nigeria's spread has been over 7% and Argentina's spread has grown to almost 5 times its value in the past 7 years.

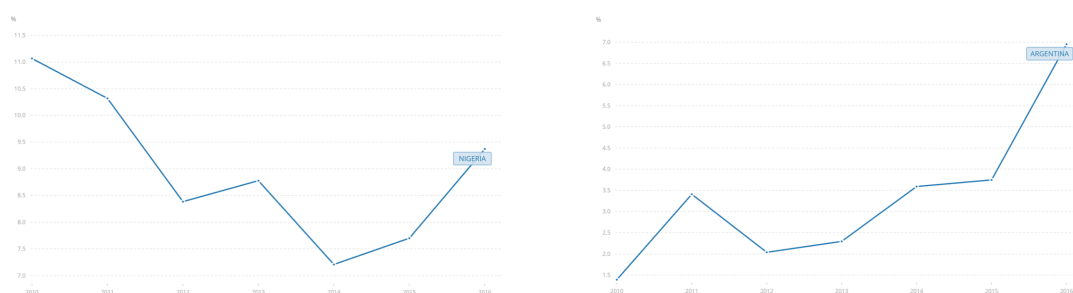


Figure 4

Thus, computing and collating world data for Interest Rate Spread, we can see in the graph in *Figure 4*, that the spread has been on a rise since the past few years and the global average has been around 5.9-6%

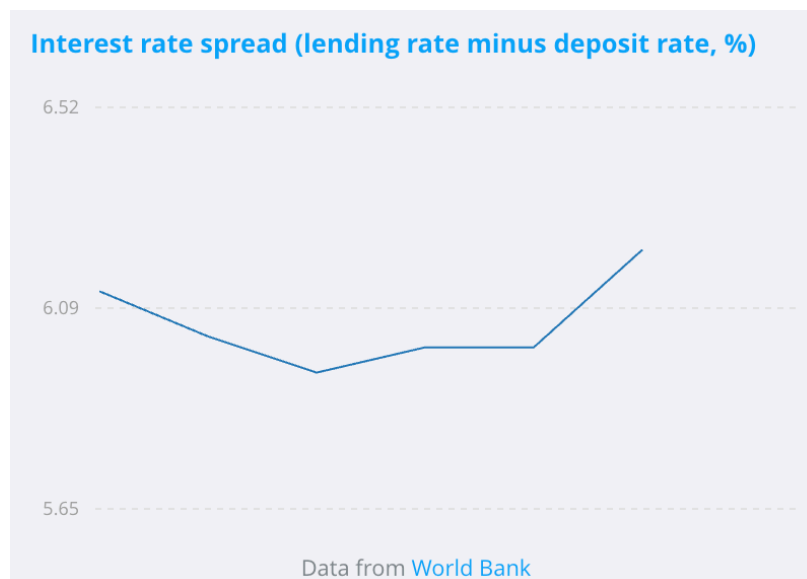


Figure 5

XinFin's platform not only provides a transparent financing mechanism, it also protects consumers and retailers against the deteriorating quality of service in traditional financing systems. Thus, consumers and retailers can compete with their counterparts in international trade without being a victim to poor regulatory framework of organizations.

4.2.1 Project Illustration

Problem

A remote village in Africa and Asia wants to install a water ATM machine that purifies water, thus providing clean water to its citizens at a subsidized price. The current system of financing requires individuals/organizations to bid for the project and compete to earn profits. This kind of a capitalistic arrangement soon converts the water ATM into a money-absorbing machine disregarding the interest of the users and the intent of the government to uplift the poor.

XinFin's Solution

XinFin.org will setup a system through which global financiers can finance the water ATM through XinFin.org native cryptocurrency XDC. The interest rate could be as low as 0% using XinFin's state-of-art technology that has transparency and security ingrained due to its distributed nature. The water ATM, once installed, would be connected to a cloud based data center through an IoT device. The machine would then accept payments through coins and prepaid cards that are linked to a bank account. The financier gets 25% cash back from the XDC tokens for funding the infrastructure (water ATM). The repayment happens by using water ATM machine linked bank account that transfers FIAT currency to XDC cryptocurrency through a local Digital Currency market maker at the market-rate of date of repayment. The XDC received is paid back to financiers.

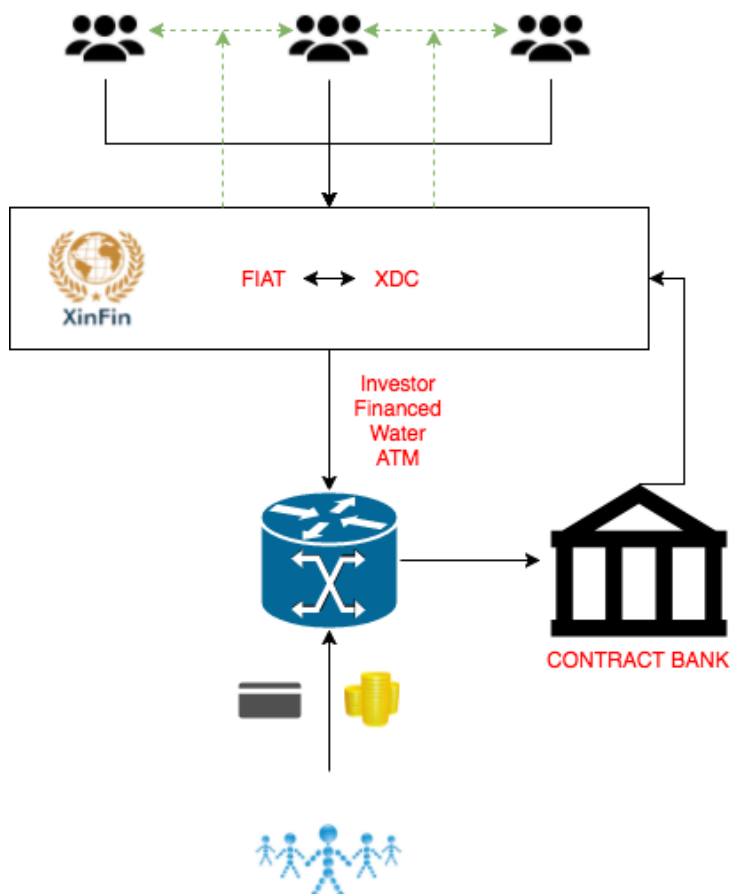


Figure 6

Problem

Lets consider the situation where a farmer wants to buy a Tractor. In order to be up to pace with the world, farmers in developing nations need to upgrade their technology and machinery to improve quality and productivity. Even though a lot of governments provide subsidy on farm equipment, affordable is still a relative term. Applying for loans from Corporate Banks or NBFIs is a lengthy process, coupled with high interest rates.

Solution

XinFin.org's system is not just designed for institutions, but it can benefit small time farmers as well, to finance tools as simple as a tractor or other machinery. Global financiers can finance the tractor using XinFin's platform. Their bounty (or bonuses) will be decided by open voting which would use the farmer's need as the prime criteria to determine the extent to which the financier will receive bonuses. Thus, the farmer can receive the tractor at an interest rate of as low as 0% and the financier receives bounty along with the original money invested and real time updates on his investment using the IoT device attached to the tractor, making it a win-win situation for all.

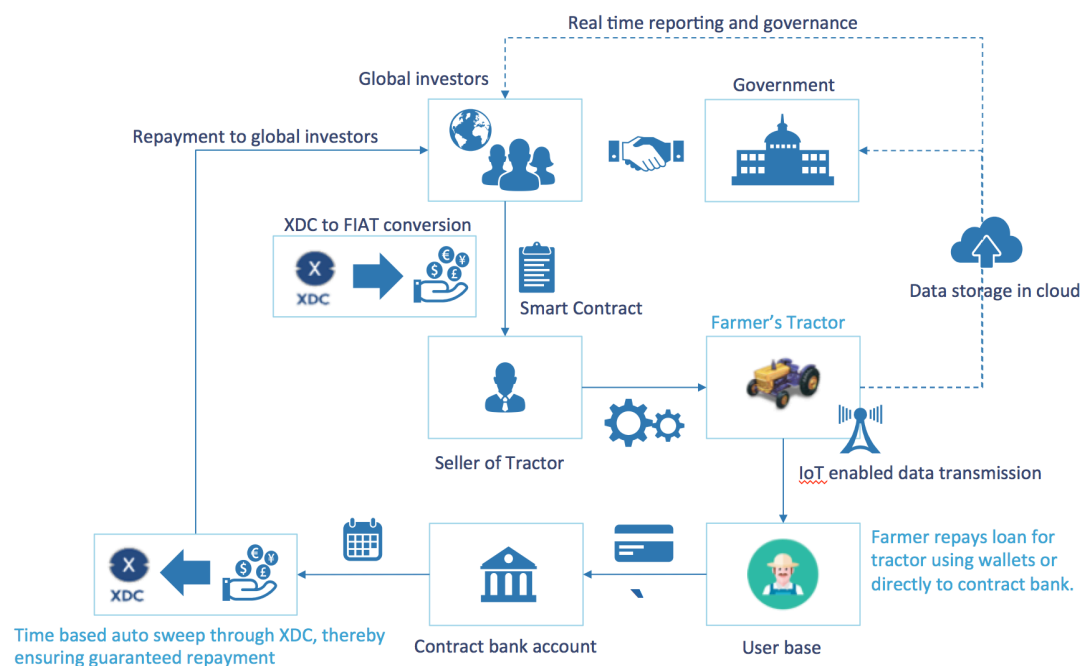


Figure 7

4.3 Institutional Financing

Institutional financing sector has been marked by the following key challenges:

- 1) **Subdued Investments Institutional Financing Projects**
The capex cycle is now going through a trough, after having seen a peak in institutional financing projects about a decade ago. Moreover, weak balance sheets; legacy issues and subdued interest rates are driving away private investors.
- 2) **Limited Appetite of Equity Investors in Institutional Finance Sector**
Limited successful exits in the institutional sector over the last decade have made investors weary of further risk.
- 3) **Negative Publicity in the Community**
The surge in the amount of Gross Non-Performing Assets of banks, has made investors reluctant to further block their capital

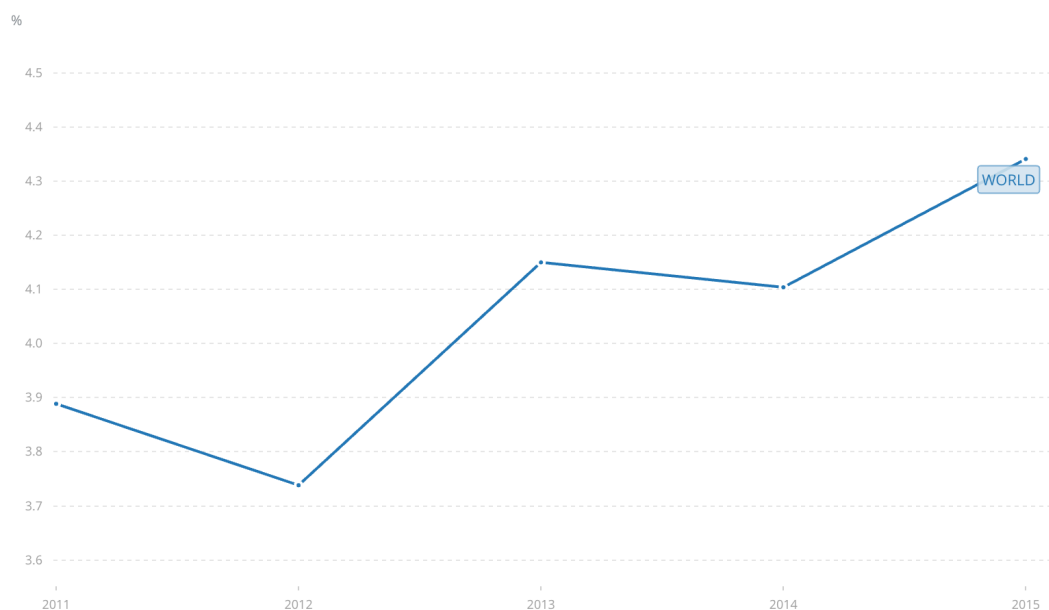


Figure 8

As a result of the aforementioned issues, a number of need based viable projects, especially in developing nations lack funding.

4.3.1 Project Illustration

Problem

A hospital in a small village/city needs medical equipment. The current system of financing requires hospital to approach multiple banks and financing companies with proposition to invest in their services, thus delaying the acquisition of the required equipment and in many cases, a failed attempt to collect the necessary funds. Consequently, the hospital has to increase their service fee in order to cope up with the high cost of borrowing

XinFin's Solution

A XinFin Financed Hospital collects all bill payments electronically which are linked to a bank account and the bank account has a smart contract coded that converts the FIAT currency to XDC cryptocurrency through a market maker and is sent back to the financier at the market rate conversion of the time of repayment.



Figure 9

Advantages

For Borrowers: Borrower doesn't charge heavy service fee to its users who are incapable of paying high fees. Thus, the price of the service/product stays stable and the borrower can borrow at a rate of as low as 0%, thus having to repay only the original amount.

For Financier: The financier is able to offer easy repayment terms for its loan by charging an interest rate as low as 0%. Financier gets 25% of the underlying cryptocurrency as cashback, which is a globally tradable digital asset, and grows in value because of its limited supply.

For Global Economy: The use of Xinfin's XDC fueled tokenization scheme, permits trade and financing to be truly global in nature eliminating the funding gap owing to disparate currencies spread across the world. Moreover, investors in developed countries are averse to financing underdeveloped countries due to high currency depreciation risk, but with XinFin's common world currency it makes it easier for them to lend money proving more stability and confidence to any cross border investment or debt.

Thus, Investors in Japan can invest money in a project being executed in Africa's remote village, using XDCs. Xinfin enables the world to share value, just the way Internet is used to share information.

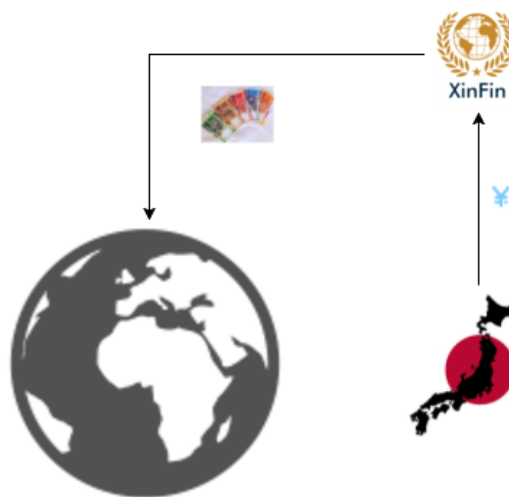


Figure 10

5. New Opportunities in Financing and Trade

We hope this paper helps business and public sector leaders understand the new opportunities and paradigm shift in the distribution of value, which blockchain technology provides. The adoption of this disruptive innovation is inevitable, thus preparing for its implementation should be top priority for them as they formulate plans for the coming months.

Besides disrupting existing infrastructure in financing and trade, Blockchain also presents new and emerging opportunities for organizations, individuals and communities in all sectors to create and deliver compelling services using this innovative technology.

One such opportunity is to finance the sourcing of components for various projects. Lets consider the example of a Water ATM that we considered earlier in this paper. Our assumption was to purchase a ready to use Water ATM from supplier by tokenizing the funds required for the same. However, XinFin's platform also presents the opportunity for communities to develop their own water ATM, by sourcing the funds for individual parts required to assemble the infrastructure. Thus, buyers, sellers and financiers can complete entire project lifecycle using blockchain technology. Refer figure below to understand the project lifecycle.

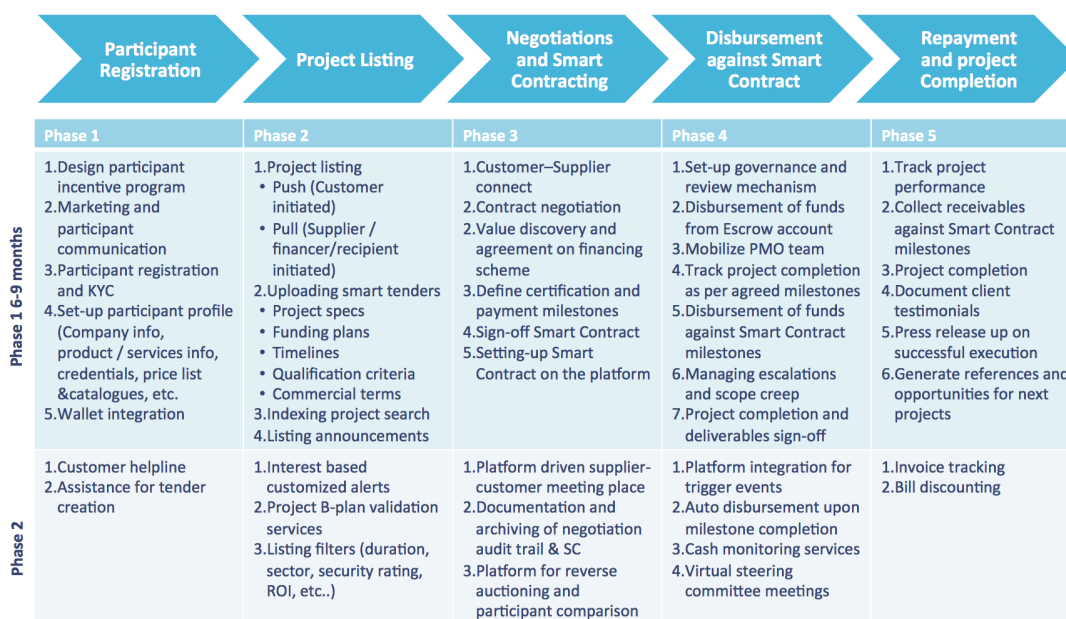


Figure 11

6. Token Allocation

A total of 100 billion tokens will be ever created using the platform

Figure 10 shows the token allocation mechanism used for XDC

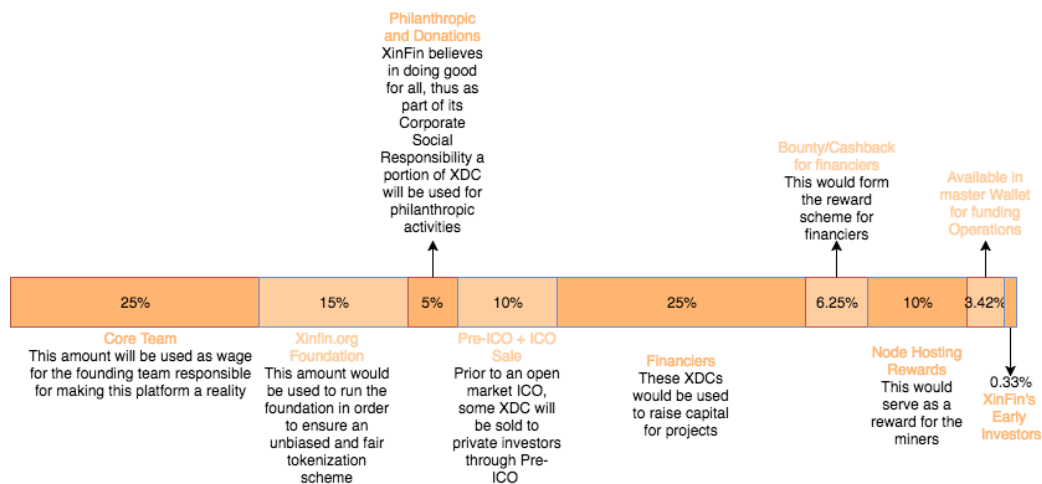


Figure 12

NOTE: In order to ensure correct and transparent use of platform, the bounty will be voting based. Thus projects need to come on an open platform for global investors or general public to vote to ensure that it is a project of critical importance and deserves a bounty to investors. The bounty can change to lower or higher percentage i.e. anywhere from 0% to 100% (of its 25% allocation) depending on the importance for the project.

Out of the Financiers' Pool shown above, not more than 3% will be available every year in the open market.

NOTE: The financiers' pool will open only after the first successful pilot.

Mathematical computation of depletion of tokens

In order to compute the depletion of tokens, we make use of the ‘Reducing Balance Method’ shown below:

$$r = 1 - \left(\frac{R}{O}\right)^{\frac{1}{n}} \quad \dots \text{eqn 1}$$

Where,

$$\begin{aligned} r &= \text{Rate of Depletion} \\ n &= \text{Estimated time (years)} \\ R &= \text{Residual Value} \\ O &= \text{Original Value} \end{aligned}$$

Thus, in order to determine the number of years it would take for the tokens in the residual pool to depreciate to a certain value, we can rewrite the above equation, with the use of natural logarithm, as follows:

$$n = \frac{\log_e \left(\frac{R}{O}\right)}{\log_e (1 - r)} \quad \dots \text{eqn 2}$$

Thus, we can draw a graph showing the controlled depletion of financiers’ pool ($r = 3\%$ for plotting the graph).

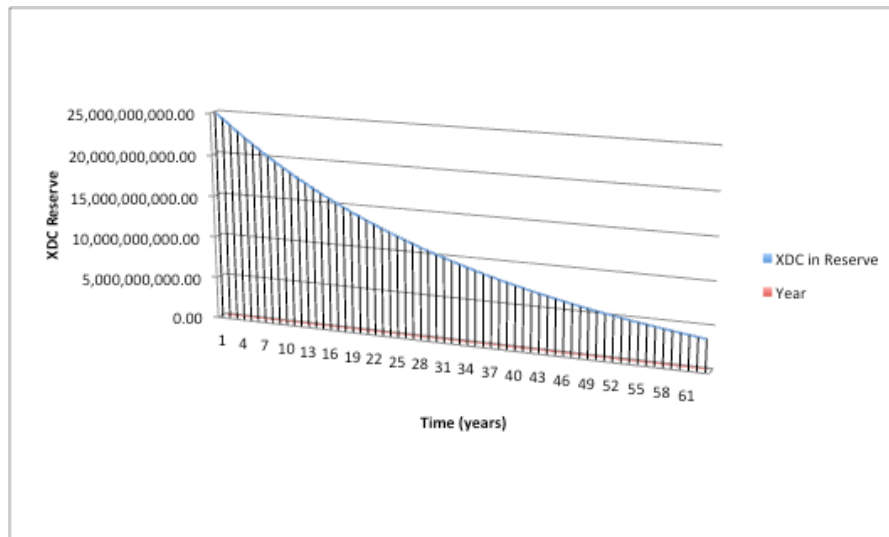


Figure 13

6. Utilization of Funds

Utilization of Pre-ICO and ICO funds will be largely towards the following developments.

1. Evolving Blockchain as per Application layer

The blockchain platform powering XinFin XDC network is derived out of the Ethereum codebase, and is currently under development. The details can be found in our Technical Summary paper. XinFin needs to fund its blockchain development at community level to evolve an enterprise grade blockchain for global trade and finance that provides military level security and real world transaction scale.

2. Robust API Layer

XinFin XDC network will be connected to real world enterprises through a robust and comprehensive API layer. Regulated and authorized entities can interact with XinFin XDC network through these APIs. APIs will support the following functionality :

- | | | |
|------------|-----------|---------------|
| a. Buy | b. Sell | c. Send |
| d. Receive | e. Escrow | f. FXRateLock |

The APIs will continuously evolve and grow to facilitate connectivity with real world enterprise solutions.

3. IoT and Cloud Connectivity

XinFin API connectivity will be developed with Specific Internet of Things enabled equipment and projects. The IoT connectivity layer will provide seamless connection and interaction with some of the following equipment and projects that are very critical in Public Space.

- a. Water Purification ATM Machines
- b. Industrial Equipment
- c. Hospitals and Machinery
- d. Farm Equipment
- e. Construction Equipment
- f. Toll Collection Equipment (e.g. Toll Roads for Public Private Partnerships)
- g. E-Education Equipment
- h. Retail/Consumer Electronics and Equipment

4. Application layer

The Application layer of XinFin XDC network will allow development of following use cases:

- a. Peer to Peer Financing
- b. Internet of Things connectivity
- c. Real time Reporting
- d. Lending and Financing
- e. Fool-Proof Repayment through XinFin Smart Contracts
- f. Direct market making with FIAT currencies in selected and authorized geographies

5. UI Layer/Business Layer

The User Interface layer is an independent business entity that will connect participants to XinFin XDC blockchain to demonstrate and facilitate transactions like:

- a. TradeFinex.org, which is being developed into a fully functional global trade and finance marketplace
- b. A Peer to Peer Financing mechanism and entity that can facilitate lending and repayment directly linked to an IoT connected device

XinFin will incept with demonstration of a minimum viable product and will gradually grow into a full-fledged ecosystem along with participation of regulated/authorized entities.

7. Legal Considerations

While blockchain based tokens currently fall in unregulated markets and have no regulatory clarity, some countries like Japan have legalised payments through Bitcoin. Many other countries have taken an open stand on cryptocurrencies and may regulate them in the future. XinFin does not aim to be an end to end player in Banking and financial services industry but only aims to provide community driven tools to the existing or authorised entities to solve real problems. XinFin aims to be fully compliant with the laws of the land and work with authorized/regulated entities in various geographies where it can provide its cloud based platform. XinFin also plans to work with the Governments, regulators and lawmakers to define various aspects of the blockchain applicability to the financial sectors.

8. About Us

XinFin was started and supported by two teams working together. A skilled Blockchain engineering and development team working on Ethereum codebase and a seasoned marketing team that has been involved in international project financing business since 15 years. The two teams realized that Blockchain's application in real world, including but not limited to trade and financing, would require the development of a specialized application layer, as Blockchain has been primarily involved in merely peer to peer cash mechanisms.

XinFin team is concurrently evolving the underlying blockchain architecture along with the development of an application layer that is specifically designed for real world use cases. Real world application of blockchain demands solutions to existing problems, and XinFin has taken the onus to solve the following major problems.

1. Bridging the global supply chain inefficiencies by optimal use of blockchain based digital assets for trade and financing between two untrusted (and sometimes unrated) business peers with real time settlement needs.
2. Bridging the \$5 trillion Global infrastructure deficit by letting institutions and/or governments connect blockchain based digital assets to IoT enabled equipment in order to raise foreign direct investments and enable peer-to-peer financing.
3. Design an efficient repayment method and Fintech instrument to enable consumer, institutional and government level financing using a globally liquid digital asset.

XinFin team is currently working with institutions and Governments to demonstrate the use of blockchain based digital asset in solving problems that could not be addressed by limitations of Sovereign backed FIAT currencies.

9. Team

XinFin is a growing community, committed to evolve it's blockchain into a military grade enterprise ready solution along with establishing an application layer to enable global trade and financing.

More information on XinFin team can be found [here](http://www.xinfin.org/about-team/) :

<http://www.xinfin.org/about-team/>

10. Conclusion

Thus, Xinfin.org is a marketplace, under construction, with comprehensive functionality for buyers and sellers mentioned above. With a goal to bridge the global Infrastructure deficit of \$1 Trillion by overcoming the gap in global supply chain or connectivity to supply chains on a real-time basis, XinFin has a long road ahead. But, with the use of its native token, named “XDC”, which has been set up on an Ethereum blockchain in a private cloud environment, XinFin has started this journey to resolve the global supply chain problem and provide a global real-time gross settlement networks.

In order to support this endeavor, Xinfin is raising funds using the Initial Coin Offering (ICO) strategy in lieu of venture capital, by crowdsale of its XDC tokens during the pre-ICO and ICO.



Figure 14

11. References

<http://www.inflation.eu/inflation-rates/india/historic-inflation/cpi-inflation-india.aspx>

<https://tradingeconomics.com/india/bank-lending-rate>

<https://tradingeconomics.com/india/interest-rate>

<http://www.rediff.com/business/special/in-graphs-the-grim-story-of-indias-bad-loans/20170310.htm>

<https://pixabay.com/en/african-currency-currency-notes-1219146/>

<https://pixabay.com/en/japan-japanese-map-flag-red-112722/>

<https://rbi.org.in/scripts/PublicationsView.aspx?id=15518>

<http://data.worldbank.org/indicator/FR.INR.LNDP?end=2016&start=2010&view=chart>

<http://databank.worldbank.org/data/reports.aspx?source=2&series=FR.INR.LNDP&country=#>

Contact Us

For questions, please contact us at
info@xinfin.org

For further information on our services visit
<http://www.xinfin.org>

DISCLAIMER AND LIMITATION OF LIABILITY

VIRTUAL CURRENCY IS NOT LEGAL TENDER, IS NOT BACKED BY GOVERNMENT AND ACCOUNTS AND BALANCES ARE NOT SUBJECT TO CONSUMER PROTECTIONS. THIS PAPER (INCLUDING WITHOUT LIMITATION ANY CONTENT OR OTHER PART THEREOF) CONTAINS GENERAL INFORMATION ONLY, AND WE ARE NOT, BY MEANS OF THIS PAPER, RENDERING INVESTMENT ADVICE OR AN OFFER TO INVEST. BEFORE MAKING ANY DECISION OR TAKING ANY ACTION THAT MIGHT AFFECT YOUR FINANCES OR BUSINESS, YOU SHOULD CONSULT A QUALIFIED PROFESSIONAL ADVISOR. XINFIN.ORG DOES NOT TAKE RESPONSIBILITY OR GUARANTEE RETURNS BY USE OF SOLUTIONS MENTIONED IN THIS PAPER. THIS PAPER IS PROVIDED FOR DISCUSSION PURPOSE, AND WE MAKE NO EXPRESS OR IMPLIED REPRESENTATIONS OR WARRANTIES REGARDING IT. WITHOUT LIMITING THE FOREGOING, WE DO NOT WARRANT THAT THIS PAPER WILL BE ERROR-FREE, OR WILL MEET ANY PARTICULAR CRITERIA OF PERFORMANCE OR QUALITY. YOUR USE OF THIS PAPER AND ITS INFORMATION IS AT YOUR OWN RISK AND YOU ASSUME FULL RESPONSIBILITY AND RISK OF LOSS RESULTING FROM YOUR DECISIONS BASED ON INFORMATION IN THIS PAPER. WE WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES OR ANY OTHER DAMAGES WHATSOEVER, WHETHER IN AN ACTION OF CONTRACT, STATUTE, TORT (INCLUDING, WITHOUT LIMITATION, NEGLIGENCE), OR OTHERWISE, RELATING TO OR ARISING OUT OF THE USE OF INFORMATION FROM THIS PAPER, EVEN IF WE KNEW, OR SHOULD HAVE KNOWN, OF THE POSSIBILITY OF SUCH DAMAGES. THE ABOVE DISCLAIMERS AND LIMITATIONS OF LIABILITY SHALL BE APPLICABLE NOT ONLY TO US BUT ALSO TO EACH OTHER ENTITY AND INDIVIDUAL ASSOCIATED WITH XINFIN.ORG. AND TO OUR RESPECTIVE PERSONNEL. THE ABOVE DISCLAIMERS AND LIMITATIONS OF LIABILITY ARE APPLICABLE TO THE FULLEST EXTENT PERMITTED BY LAW, WHETHER IN CONTRACT, STATUTE, TORT (INCLUDING, WITHOUT LIMITATION, NEGLIGENCE) OR OTHERWISE.