Territories in Development (TiD):
Decentralized Platform for Social and Environmental Empowerment

Jordi Muro, Daniel Haigh Llopart, Gabriel Muñoz Moreno. 2019
contact@tid.coop
www.tid.coop

Key Words

Decentralization / Empowerment / Blockchain / Crowd lending / Transparency

Abstract. Decision making, project selection, and funding allocation for initiatives implemented in developing nations is highly centralized. This dedicates funds to bureaucratic processes rather than action and leads to a divergence in interests from project proponents and local communities, thus reducing the potential to have a long term positive impact on a region. While governmental, intergovernmental, financial, and corporate institutions provide their own funding and initiatives, nonprofit (NPOs) and non-governmental organizations (NGOs) offer foreign financing to fulfill their ambitions. The latter organizations strive to have a positive impact on various social groups and environments. They, however, drag traditional structures of governance, decision making, and fundraising, which dilutes their supporting capabilities. Moreover, the funding of NPOs and NGOs is increasingly coming from governmental entities.

Territories in Development (TiD) is a platform for developing countries to foster local initiatives aiming to drive sustainable progress and global inclusiveness. It serves as a tool for the decentralization of decision making in developing nations, which is made possible through a crowd-lending platform as its funding medium. This promotes the spread in ownership, removing centralization over the control of specific territories and projects. TiD removes the condescending mentality of first world nations towards third world nations by a) highlighting the value of human and ecological resources, and b) turning charity into an investment. The end goal is the enhancement of local cultures for a more culturally diverse, and inclusive world.

Through the use of Blockchain technology, TiD enhances transparency in funding allocation, enables the automation of ownership exchange with the use of smart contracts, and democratizes access to NGO funding, private equity, and venture capital investments.

1. Company Purpose:

Territories in Development seeks sustainable finance models for social and ecological developments. For this, TiD presents a platform that pursues investments on local initiatives working on sustainability, social diversity, and equality issues, with the end goal of empowering local development. TiD contributes to a more culturally diversified society that can sustain our population growth and biodiversity.

2. Background

TiD emerges from the need to revisit investment management in developing countries. Current investments are carried out via a series of intermediary entities (governmental, intergovernmental, financial, corporate, nonprofit, non-governmental, etc.), which makes the contribution process and project selection highly centralized. These entities are driven by donor or investor compliance, which can be individuals, corporations, governments, or financial institutions. Moreover, the

funding narrative might not align with the interests of the local community, lagging on a bilateral collaboration with more potential to have a long-term positive impact on the population of a developing region.

The historical origin of some of the significant intermediary entities occurred after periods of social disruption. This is, after events such as abolitionism [1], World War I [2], or World War II [3], among others. This historical heritage brings with it traditional structures of governance, which slows the involvement of new technologies. The usage of technology is aimed at empowering communities more efficiently, and to create new ventures which are more inclusive with the local communities.

Blockchain technology offers advancements in administration, communications, and transparency. Its application in this industry contributes to the efficiency of the funding allocation processes, leaving more resources to empower local communities. Its decentralized nature creates novel entities that democratize decision making in projects and policies carried out in developing nations [4]. Lastly, it presents transparency in the funding allocation process, providing confidence to the investor, previously treated as a donor. TiD stands at the forefront of this innovation movement and helps existing organizations adapt to new technologies.

A technological leap

TiD brings a robust technological layer to the intermediary entities and takes the lead in the decentralization process of investments within developing nations. TiD´s Blockchain as a service (BaaS) promotes transparency and accountability in funding allocation mechanisms, and its application with smart contracts [5] makes administrative processes more efficient. The peer to peer (p2p) nature of Blockchain [6], shortens the connection of local private entities or civil societies with the investor, which increases local involvement, decentralizes decision making processes, and democratizes the flows and access to funding. This process is the vision for TiD´s crowd-lending platform, denominated TiD´s Empowerment. Blockchain is the core infrastructure of TiD´s Empowerment, which is the result of TiD´s ROIE methodology: Research, Observatory. Initiatives and Empowerment (please refer to the section "(ROIE) methodology").

An example of embracing technology in TiD´s ROIE methodology is the application of Virtual Reality (VR). This technology plays an essential role in the learning process about the territory. It increases knowledge exchange flows between local entities and foreign ones to mutually contribute to projects. In this sense, VR will assist worldwide educational entities and technology innovators

---

[1] Creation of Anti-Slavery Society
[2] Creation of Save the Children
[3] Creation of Oxfam, CARE, United Nations, World Bank
[4] Blockchain with the usage of smart contracts enables the possibility to create Decentralized Autonomous Organizations (DAOs), which are organizations governed by the stakers of the platform. Rules of governance can be established such as in any other organization.
[5] Term coined by Nick Szabo, a computer scientist, legal scholar, and cryptographer.
Nick Szabo. (1997) The Idea of Smart Contracts. Retrieved from> Satoshi Nakamoto Institute.
[6] Satoshi Nakamoto. (2008) Bitcoin: A Peer-to-Peer Electronic Cash System. Retrieved from> Satoshi Nakamoto Institute.

in connecting with the dynamics occurring in the territories under study (leading regions).

Another example is the use of data gathering and its processing for analysis purposes. This aims at increasing the research and development effectiveness of the projects to be proposed. By making this data public, exists a bigger potential in the production of proposals in a specific territory and the consequent engagement with the dynamics of a region. TiD´s most valuable source of information is data collected on-site, which provides a holistic, unbiased view of the specific territory to study.

This process of displaying information and connecting entities occurs within TiD´s Observatory and TiD´s initiatives. The Observatory is the platform to display and stream territorial dynamics of the leading regions graphically. Initiatives is the platform to connect educational entities and technological innovators with the civil societies and project proponents of the leading regions.

Current status quo

Current funding allocation processes tend to indicate a narrative that communities in developing nations should follow according to a first-world perspective, that have their own interests. First world models and the centralization of decision making employ systems and interventions that many times are not adequate for a specific territory [7]. This dynamic hinders innovation by the inhabitants of developing countries, thus interfering with the development of cultural identity, the enhancement of local values, and the creation of local industry.

Moreover, how funds are gathered is by advertising "underdevelopment" or "poverty," terms that undermine the regional value and limit public interest in developing cultures. The way in which these conditions are instrumentalized is considered inefficient within TiD, as it results in a progressive disempowerment of local communities. This leads to a lack of representation of their regional development.

Potential status quo

TiD disrupts this model by providing a return on investment on developments which evaluate the human and ecological resources given in a specific territory. The developments are driven by, or are in collaboration with the regional experts or civil societies, and are meant to fuel the local economy with investors who seek to contribute to sustainable and resilient initiatives.

Current funding models

The typical funding flows of entities that help in developing regions come from two primary sources; foreign funds or own funds. However, the increasing flow of governmental and corporate funding towards NGOs and NPOs [8], blurs the concept of alien and own funds, contributing to

---

[7] Yarina, E. (2016) Post-island futures: seeding territory for Tuvalu's fluid atolls (Master thesis). Retrieved from> MIT Libraries

[8] See CARE International Statements, OXFAM Annual Reports.
Adelman CC (2003) The Privatization of Foreign Aid: Reassessing National Largesse. Foreign Affaits 82(6), 9-14

the centralization and privileging of intervening in developing regions. This makes important to revisit the inherent purpose and mechanisms of the funding by the entity´s type. For this reason, funding allocation flows are classified through the intervening entities:

a) Through NGOs and NPOs via a system of donations from the general public, governmental, and private entities. This system of charity brings a condescending mentality from first world nations towards third world nations and a structure of privatized experts that do not necessarily have a holistic understanding of the challenges to face [9]. When one of the entities in this group is heavily dependent on its donors, it mostly pursues the interests of the donor, thus becoming a centralized and interested gateway for funding projects. Occasionally, investment is directed towards administering resources and services that can be provided by local entities. This hinders the development of local entrepreneurship, which is key to the development of an economic identity and a regional industry.

b) Through governmental, banking, and corporate initiatives under the motto of ¨development¨. This investment model channels resources from taxes and national budgeting. These entities seek scalable business models that tend to foster generic solutions for globalizing purposes in territories with site-specific needs. The aid can come with or without compensation, the latter links to political and strategic purposes of the donor entity or country. This is considered as an interested way of funding since it does not necessarily seek the well-being of the inhabitants, but rather the value in territorial resources. China is an example by lending infrastructure to developing countries to create the new Belt and Road Initiative (BRI) [10], leaving smaller nations in debt [11] to be paid with their productivity and natural resources.

c) Intergovernmental entities which represent global alliances of countries. These entities provide the most resources for project proposal and intervention. They can have a general character (i.e., United Nations), development-oriented (i.e., IBRD), human-oriented (i.e., UNICEF), or economic-oriented (i.e. World Bank). In the face of natural or social disasters, the aid is prioritized for development, medical, and human purposes. In the case of redevelopment, projects consider first world solutions applied to third world areas, presupposing itself as the best option [12]. This systematic approach involves displacing valid development models that have served to grow and develop a specific territorial culture for centuries, or even millennia.

---

[9] Easterly, William. The Tyranny of Experts: How the Fight Against Global Poverty Suppressed Individual Rights. Perseus Books Group, 2014.
Bate, Roger "A Case of the DDTs: The war against the war against malaria" National Review May 14, 2001, Vol. LIII, No.9
[10] https://www.weforum.org/agenda/2017/06/china-new-silk-road-explainer/
[11] See dept-trap diplomacy. https://foreignpolicy.com/2019/04/25/chinas-debt-diplomacy/
[12] See Kiribati Adaptation Program (KAP) carried by the World Bank in collaboration to the government of Kiribati to contribute to Kiribati´s erosion challenge. The main way to solve it has been by implementing sea walls.

3. Context - Approach to Leading Regions

Territorial

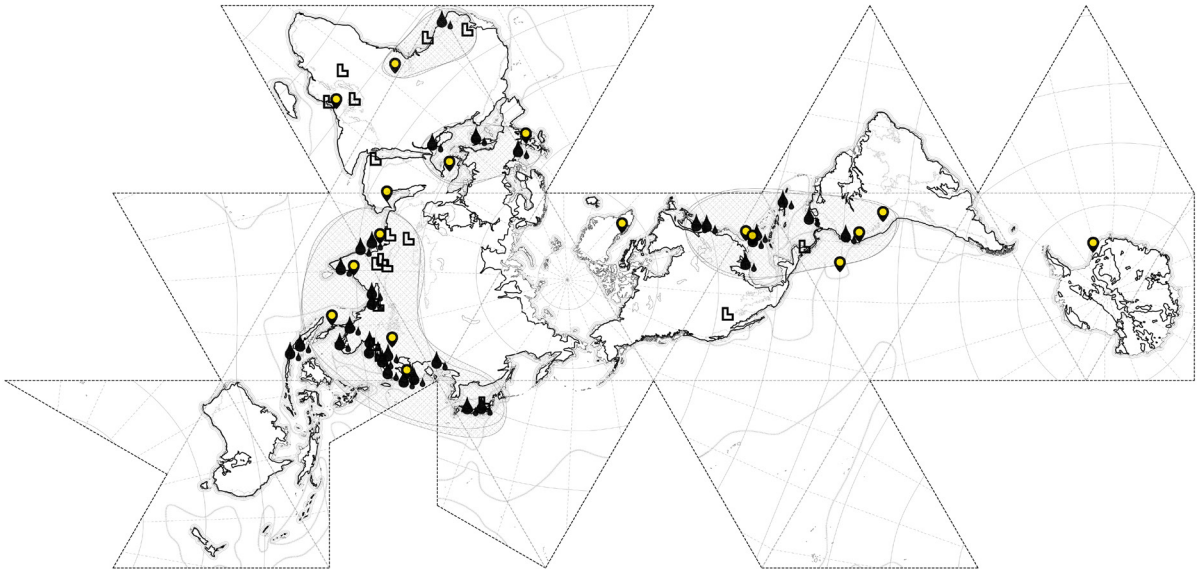
The societies to which TiD contributes and empowers show alternative living standards with resilient methods and sustainable developments in specific natural environments. These are indigenous, native, and local communities that provide development solutions with the knowledge of generations inhabiting particular territories. Only the indigenous group itself, representing 5% of the global population, are stewards of 80% of the total global biodiversity [13]. However, globalization is affecting their development and potential innovations within their environments. This continues to happen because traditional mediums of territorial intervention persist due to a constant search for resources to feed first world needs [14]. This contributes to the expansion of our anthropogenic footprint on land surface, water bodies, and atmosphere.

The ecological value of developing societies is measurable. While the northern globe, especially Europe, consumed its forests for its developments in agriculture land and wood fuel, now it depends on the health of worldwide ecosystems. Because of this, it is vital to take care of natural ecosystems that yield positive outcomes to our planet. Some ecosystems are critical to our atmospheric regulation through the absorption of CO2, others to the mitigation of sea-level rise effects, and most host the biota that nurtures our society. As an example, coral reefs were estimated to provide $375 billion per year in 1997 in goods and services [15], as about 25% of the ocean´s fish depend on coral´s health [16]. Most of the coral reefs are located near developing regions along the tropical belt, with a high presence in the Pacific Ocean and the Caribbean Sea [17]. Other ecosystems, such as forests absorb about 2 billion tons of CO2 every year [18]. Although tropical forests absorb CO2 more efficiently, they are subject to most of the deforestation; the main reason for this being agricultural purposes [19]. New initiatives are emerging to facilitate the need to trap CO2, such as the initiative of Norway, to pay Gabon for the regeneration of its rainforest, valued at $10 per ton of CO2 absorbed [20].

TiD´s proposes a mechanism to empower social and environmental communities that yield a positive outcome to global health. By contributing to local and indigenous communities, there is an increase in the protection of biodiversity and innovation within the preservation and cultural realms. TiD's blockchain layer enables to track the progress and impact of the projects being crowdfunded while providing data about social and ecological recovery.

---

[13] Eva Gurria (2017) Celebrating indigenous peoples as nature's stewards. Retrieved from > United Nations Development Programme Blog
Baher Kamal (2017) Indigenous Peoples Lands Guard 80 Per Cent of World's Biodiversity. Retrieved from > Inter Press Service
Gleb Raygorodetsky (2018) Indigenous peoples defend Earth´s biodiversity - but they're in danger. Retrieved from > National Geographic
[14] See Tuvalu's National Adaptation Programme of Action (aerial photo of Tuvalu in 1984 and 2003)
[15] Costanza, R. and C. Folke. 1997. Valuing ecosystem services with efficiency, fairness and sustainability as goals. In: Daily, G. (Ed.), Nature's Services: Societal Dependence on Natural Ecosystems. Island Press, Washington, DC, pp. 49-70.
https://reefresilience.org/value-of-reefs/
[16] https://www.noaa.gov/education/resource-collections/marine-life-education-resources/coral-reef-ecosystems



Ecological and social hotspots

Through kick-starting local initiatives, TiD offers a tool for local individuals and groups to decide the type of businesses, infrastructures, technologies, and economies that will drive them to the future.

Industry

The industry that TiD disrupts is the donation and funding allocation mechanisms within the social and environmental realms. Nowadays, these areas of intervention present projects funneled by middle entities (governmental, intergovernmental, financial, corporate, nonprofit, non-governmental, etc.) that pursue the interests of its donors and investors [21]. Given the private proposition, scrutiny, and initiation of these projects, this is considered as a non-democratize system. When an external agent proposes an initiative to have the support of one of the middle entities, it is heavily scrutinized, so it fulfills their narrative and statutes. In this sense, intermediary entities are a filter for innovation in the social and environmental realms. A filter is initially good to assess the quality of a proposal, but given its current centralized status quo, it does not necessarily have the best positive impact on an ecosystem.

---

[17] http://reefgis.reefbase.org/default.aspx?wms=RGWReefGIS&wmsbbox=-30,-90,330,90&bbox=-30,-90,330,90&layers=Countries,Coral%20Reefs%20WCMC,Mask,Land,Borders,Coral%20Reefs,Coastline,
[18] http://www.fao.org/state-of-forests/en/
[19] Union of Concerned Scientists (2011). The Root of the Problem. What´s driving tropical deforestation today?
[20] Mongabay (2019). Gabon could earn up to $150 million for forest conservation
[17] http://reefgis.reefbase.org/default.aspx?wms=RGWReefGIS&wmsbbox=-30,-90,330,90&bbox=-30,-90,330,90&layers=Countries,Coral%20Reefs%20WCMC,Mask,Land,Borders,Coral%20Reefs,Coastline,
[18] http://www.fao.org/state-of-forests/en/
[19] Union of Concerned Scientists (2011). The Root of the Problem. What´s driving tropical deforestation today?
[20] Mongabay (2019). Gabon could earn up to $150 million for forest conservation

Furthermore, there is also a lack of transparency in showing the successes and failures of initiatives carried out by NGOs and the private sector [22]. Given the need to continue gathering funds to pursue operations in developing nations, there is a trend to highlight, showcase, and in many cases, exacerbate the positive impacts that an initiative is having over a territory and a social group. The disconnection between donor and beneficiary contributes to this dynamic, as the donor is dependent on the reports prepared by the NGOs, or other intermediary entities, and has little to no communication with the beneficiary. In this regard, donors are dependent on information that is hard to audit, thus relying on the ethics of the middle entities rather than on clear facts to put economic resources into.

TiD, through its underlying blockchain infrastructure, provides transparency in communication and administrative processes for projects crowdfunded through its platform. This increases the connection between investors and beneficiaries, making the process highly auditable. Shifting donors to the investor seeks three main objectives: a) to change a condescending mentality of first world nations towards third world nations, b) to promote a system where work is rewarded, rather than passively waiting for resources provided by middle entities, c) and to expand public interest in supporting sustainable and resilient societies. This increases the volume of economic resources to be collected, accelerates funding rounds, and increases TiD´s potential of impact.

TiD is an open platform where everyone can publicly propose initiatives; this allows for the scrutiny of these projects to be open to the public. Investors and local communities are to decide if a project is worth their contribution. This democratizes project proposals, scrutiny, and funding allocation. Accordingly, TiD has the potential to avoid monopolization over territories and its resources, enabling a transparent way to manage our natural environment via its existing owners. It is through a viable economic model centered around local and ecologically knowledgeable communities where ways to reduce the current harm to our environment are found.

4. (ROIE) Methodology

TiD values and highlights the human, environmental, and material resources located in the so called Least Developed Countries (LDCs) [23]. This is done through a novel investment architecture which's goal is to benefit the owners of those material and environmental resources — local communities — and to reward entities who decide to pursue ethical investment in this platform. To achieve this, TiD proposes a novel crowd-lending platform (Empowerment) where transparency in funding allocation and efficiency in ownership exchange is a default thanks to the usage of Blockchain technology as TiD´s underlying infrastructure.

Supporting this investment methodology there are a series of phases which: a) pre-selecting territories (leading regions) that can benefit from this platform (Research), b) recollecting and representing the dynamics occurring in a territory in an unbiased fashion (Observatory), and c) consult entities who are interested in participating in local initiatives, or want to propose initiatives themselves (Initiatives). The ideal sequence for a particular initiative is to be channeled through TiD´s

---

[21] Tortajada (2016). NGOs and Influence on Global Public Policy. Asia & the Pacific Policy Studies, vol. 3, no 2, pp. 266-274
[22] Heins V. (2008) How Do NGOs Succeed (orFail)?. In: Nongovernmental Organizations in International Society. Palgrave Macmillan, New York
[23] https://www.un.org/development/desa/dpad/least-developed-country-category.html

Research, Observatory, Initiatives, and Empowerment platforms, all forming the ROIE methodology.

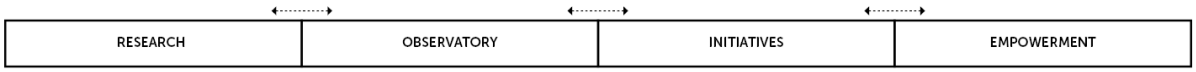
Given the specificity of each territory (cultural, climatic, geographic, etc..), TiD entitles locally driven initiatives in collaboration with local or foreign entities. This promotes the involvement of native, local, and indigenous communities, who are the experts in the field and are stewards of the knowledge to preserve their ecosystems. TiD contributes and supports local communities to become autonomous by embracing business models that will open their economic activity to the international ecosystem. This methodology has the potential to achieve a new paradigm in international cooperation.

The ROIE phases can be summarized as follows:

Phases:

1. Research - identify and present challenges via site-specific analysis.
2. Observatory - display and measurement of territorial dynamics to deliver potential solutions
3. Initiatives - due diligence on solutions and draw in call for proposals.
4. Empowerment - project management, investor support, and Blockchain-based crowdfunding

When linked together, the phases form the ROIE methodology. Depending on each project, the time set for each phase will vary. Participants in this platform will start at, but are not limited to, the Initiatives phase, receiving the support from TiD´s team to integrate the necessary Research, and the Observatory. The phases develop as follows:



ROIE average roadmap

Research

TiD has its own Research Lab (LAIA Lab), in charge of both; pointing regions where TiD´s platform would be useful, these are areas where governmental entities cannot handle the growth rate of their territories, thus are incapable of providing resources to its denizens (what usually happens is foreign entities buy the rights for development or extraction); and supporting projects, proposed by other entities through the Initiatives and Empowerment phases, who want to make use of TiD´s research method and its resources.

In this phase, an in-depth analysis with a holistic approach is performed for each territory, following a guided methodology to adapt to specific areas of study. The analysis is aimed at understanding the existing dynamics of a certain region, so each initiative can adapt to where it is proposed rather than adapting the territory (with its social, and ecological conditions) to the proposal. Some of the dynamics studied by this lab are within the social, ecological, geographical, climatic, historical, and political, realms. For this, a mix of external and proprietary sources are used, which are consequently delivered to the Observatory for its graphical expression and its democratic access.

The goal of this research is to achieve a symbiotic relationship between foreign and local entities where all can benefit, and non are privileged. Foreign entities benefit from the natural resources

and sustainable developments provided by developing nations, and developing nations benefit from the resources provided by first world nations to empower their culture. Nowadays, the way in which locals are compensated is in a minor way, prioritizing the project over the existing local dynamics. This results in an overlook of cultures, which are of value to increase our social diversity, which consequently feeds mediums of thought, showing alternative living standards that improve a general planetary health.

Observatory

TiD´s Observatory provides a holistic and intuitive understanding of the territories under study by displaying through graphics and data the status of a territory, information on the existing ecosystems, and the social and economic taxonomy of a certain region. The objective of this observatory is to display; a) the dynamics where there is space for improvement, thus a way to show opportunities to project proponents, b) the way in which locals tackle some of their challenges, hence valuable to the public to learn, c) and the general livelihood of the inhabitants of a certain territory, so project proponents can learn about the existing culture and adapt proposals to it. In this sense, ventures interested in a certain territory are able to gather information prior to making a proposal, and will present initiatives that are adapted to the existing ecological and social dynamics.

The observatory has two types of data; a) proprietary data gathering and production, b) and data gathered from public resources. Both types are combined in a single public portal, so everyone can access it and have an unbiased source to understand a certain region. TiD´s proprietary data production carries processes of data mining and data processing, pursued by a combination of local and foreign entities. This data includes a section for Local News, Drone Imagery, Meteorological Stations, and a Webcam Network, all in charge of local ambassadors that may use foreign technology. Data gathered from public resources will connect APIs into TiD´s Observatory platform. Some of the main sources are entities such as the World Bank, or the United Nations. This information will be remapped to display it in the most intuitive way.

With this tool, we display a series of unbiased information which is democratized for everyone´s use. The unbiased nature of this information is meant to support the Empowerment phase of this platform. TiD uses this information to measure, assess, evaluate, and trace the progress of opportunities developed during the Initiatives phase. At the same time, the information gathered here will retrofit the Research phase for further studies, and the kick-start of new projects.

Initiatives

TiD´s Initiatives is the result of the Research and Observatory phases, and provides an enterprise layer to the Empowerment phase. Initiatives is in charge of connecting foreign and local entities with the objective to reach bilateral agreements so ventures that are adapted to regional characteristics, and which involve the local community, can emerge. Some of the entities to connect are educational bodies, business incubators, technological innovators, and construction companies to support the necessary infrastructures to carry these activities on site.

Educational entities are involved to increase knowledge exchange between local and foreign entities through a series of educational modules that educate in regional characteristics. For example, learning how to intervene in atoll islands, since despite being formed by land, it performs very differently than continental land and it is much more susceptible to change through time. These programs

are oriented to join educational excellence in technology and vernacular culture. Additionally, collaboration extends to further investigate the areas under study for initiatives, with scholars and researchers from around the world [24].

Business incubation represents TiD´s network to support, accelerate, and propel the success of ventures in a specific territory within the formats of a company, or entrepreneurship. Some of the resources that can be provided are physical spaces, capitalization, coaching, networking, and other basic elements such as telecommunications and on site resources. Business incubation, with the involvement of a technology layer, are meant to improve the well being of denizens of each region. There is an initial interest in mixing this with technological innovators, since TiD Observatory, on top of the proposed technological solutions to gather proprietary data, seeks novel ways for data gathering and mining. In this sense, there is a certain level of scrutiny, so ventures follow the guiding principals proposed by TiD [25]. TiD will focus in the following technologies:

Data Science, Data Mining, Data Imaging, Real-time mapping, VR / AR / MR, Sensors, Unmanned Aerial Vehicles (UAVs), AI, Machine Learning, Deep Learning, Neural Networks, Big Data.

Besides potential partnerships with technologies already consolidated, TiD´s investment strategy lies in the opportunity to invest at low valuations (Seed/Early Stage) yet increment the intrinsic value of these companies by immediately rolling out their technology through TiD´s Observatory. This is a novel approach since TiD will essentially bridge together in time the seed and roll-out (business development) phases.

Infrastructures are the necessary basic services to develop the above mentioned initiatives, on site. TiD´s Research, in tandem with LAIA Lab., presents a series of elements to establish in each territory. Initial logistics such as the establishment of a local agent to manage communications with TiD, or providing technological education, are necessary. Later, infrastructure of an urban nature, such as basic lodging, work center, commerce, and other on site personal support, is required.

Empowerment / Investment Architecture

TiD´s Empowerment phase uses decentralized crowd-lending as a social platform, where public and private investments are gathered. This platform provides the opportunity to finance initiatives which —with an investment return— aim to improve the territory and livelihood of local communities. This is done through fostering local initiatives with means or will of production, and ecological initiatives that will improve the regional ecosystem services. Through financing local initiatives, this platform increases the leverage of local communities, whereas by financing ecological initiatives, this platform improves the productivity of the region, and the protection of their natural ecosystems.

Empowerment is achieved through a novel investment mechanism designed by TiD; powered by a Blockchain layer for its decentralized, automated, transparent, and peer to peer nature (please refer to Blockchain infrastructure section). Its architecture provides funds to local entities, so they can be part of the proposed venture and benefit from its productivity. The nature of crowd-lending enables a disinterested investment, disabling the will of power of foreign entities over specific

[24] See structure of Santander Universia
[25] Norad (2018). Norad´s Support to Civil Society: Guiding Principles

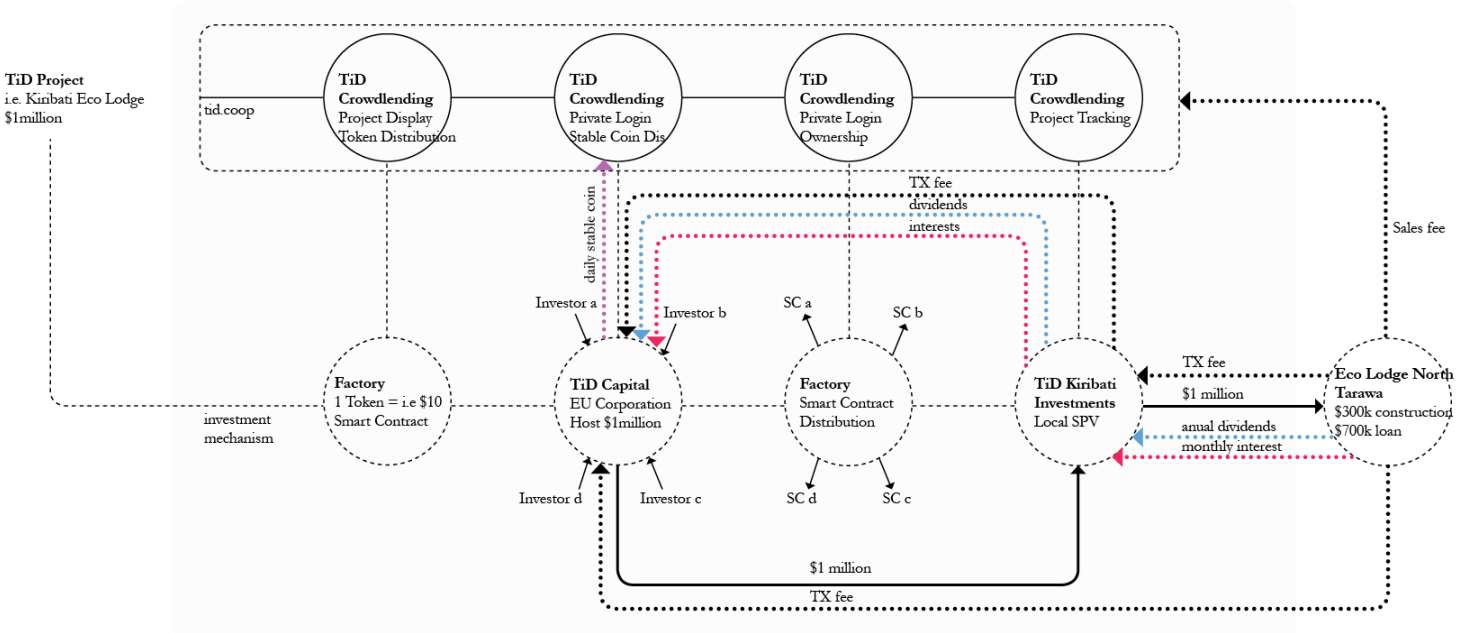
territories.

A summary of the current investment process is as follows:

The investor pool (TiD Crowdlending), loans the total investment to a local entity (TiD Territory Investment Co.), which subsequently loans a percentage to a local foundation (Territory Foundation). These fund the proposed venture. The local foundation, once it pays its loan to TiD Territory Investment Co. via recollection of dividends, remains part owner (33.33%) of the crowdfunded venture. The other local entity, TiD Territory Investment Co., once it pays its loan to TiD Crowdlending with interests, remains part owner (66,67%) of the crowdfunded venture. The result after the loans are paid, are two local entities owners of the crowdfunded venture, which with the dividends received, can continue to invest in the given territory. Specifically, the foundation has to invest in local progress, such as education, health, gender equality, etc.

For this to happen, this platform welcomes worldwide initiatives which propose ventures with TiD´s ethics. If required, the proposing entities can have the full support of TiD´s Research Lab, and its Observatory. Since this venture is located in a certain territory, the support of local businesses and human resources will be prioritized against foreign resources. However, to assure a healthy project development, a successful venture, and a return for the investors, it might be necessary to bring foreign resources to support a specific expertise.

5. Investment Architecture



Investment flux diagram

6 Blockchain infrastructure

Blockchain technology represents the underlying infrastructure to power TiD. The main interest in this technology comes from its potential to decentralize an industry where intermediary entities have such an influential role. Blockchain provides several characteristics that makes TiD unique:

-Decentralizes decision-making processes in project proposal, funding and scrutiny. The peer to peer nature of blockchain provides a direct connection from investors to project proponents, being an alternative way to fund development. The middle agent would be the digital platform, in charge of evaluating, asset tokenization, and filtering projects which do not fulfill TiD´s guiding principals. Most of the scrutiny is now in the hands of the investors, who decide if a project is worth their contribution.

-Enables automation on ownership exchange. The invention of smart contracts by Nick Szabo makes possible the automation of administrative processes thanks to digital signatures. It represents an agreement between the end entities; in this regard the investor and project proponent, or between two investors. What is exchanged is the value of the project expressed in tokens, which are divided and distributed by TiD. This tokenization makes feasible ownership exchange on the project in secondary market places.

-It is a technology that provides transparency and traceability to the nowadays opaque methods of funding allocation. Through a Know Your Customer (KYC) system, this platform attaches transactions and smart contracts to the entities involved in it, hence funding flow is traceable along its full path. Moreover, the usage of this platform for illegal activities, such as money laundering, is highly traceable, making it a difficult system for criminal usage.

-Tracks the evolution of projects crowdfunded in TiD by a constant update of information in the smart contract attached to each project. In this way, investors can decide what to do with their assets according to what is established in each smart contract (i.e. lock up period). This provides a more transparent evaluation of projects than what is proposed nowadays by the above-mentioned intermediary entities. This brings public understanding of what is working and what is not for further action.

-Facilitates border-less investment at a global scale thanks to its operative medium, the WWW. This extends the decentralization capabilities of TiD by involving all countries worldwide. Networks such as Bitcoin or Ethereum are not subject to nation boundaries, nor are in possession of any country. This makes them ideal for creating transactions globally, which is a payment medium in TiD. Other financial innovations will be studied for the purpose of a more just marketplace.

Tokenization

The value of each project to be crowdfunded will be tokenized through a stable and secure Blockchain ecosystem. This is done for the following main reasons:

-to divide the evaluation of projects in tokens, which are native to TiD´s blockchain infrastructure. If a project is evaluated in $100,000, and it wants to be divided in 100 parts,

each token will carry 1% of the information and ownership of that project.

-to distribute the tokens of a project to different users and amounts in a digital way. Investors can decide the amount of tokens to be purchased, this representing the ownership on each project. In the above scenario, if an investor purchases one token, it will own 1% of the project.

-to link each project to a type of smart contract. The nature of each project to be crowdfunded will define the type of smart contract that will define it. This can be selected between investors and project proponents, making propositions until a consensus is reached.

-to make each project currency agnostic. This is so investment can be done from all around the world, without limitations in the currency to be used, being able to crowdsource different currencies that can be converted into the native currency of each country. The KYC process required to participate at TiD´s platform, enables the traceability of the currency used for investments.

-to transfer and automate documentation which makes use of the storage system and transactions per second (TPS) designed by the underlying decentralized ledger.

It is important to highlight that this token it is not meant to transfer value, but it is intended to transfer documentation about the ownership of shares of each project. We want to avoid as much speculation in secondary markets as possible to center the value on the yield that each project produces.

Protocol

The protocol where TiD is built allows decentralized applications (dApps), it is of public nature, it has stability in its network (PoS, PoW), and it allows a certain number of transactions per second (TPS). The most established network is Ethereum, but new protocols aiming to solve scalability solutions and business integration are emerging. This platform should be accessible by anyone in the world who is interested in funding projects. We propose a Proof of Citizenship (PoC) or digital ID system to validate the residency of its project proposers.

This platform allows for the issuance, transfer and exchange of assets with a high level of auditability and accountability, complying with regulations of local and international jurisdictions.

Potential Investors and collaborators

TiD is collaborative by nature. TiD will be promoting these initiatives across all its network, including: University programs, Foundations, NGOs, Technology partners and leaders, Telecommunication providers, Financial services, Business incubators, etc.

More on TiD

TiD is an independent legal entity founded and registered in Madrid (Spain) with offices in Barcelona and New York.

Physical Infrastructure

Our aim is to establish local spaces at each of the landings covered by our projects via a physical local Observatory supported by our HQ on behalf of our investors.

Resources provided

Through the Observatory and guidance from out HQ offices we will be offering different resources ranging from: Work-spaces, development assistance, partnerships, human talent acquisition, mentorship and open channels for funding.