

PART 1. COLLABORATION ANALYSIS & SOLUTION SUMMARY

SOLUTION SUMMARY

The trickle-down economics of ecotourism in Mexico is failing to protect the environment and to truly enhance the indigenous peoples' welfare. **Rutopia** is an online platform that facilitates the transition to a fair, regenerative and circular tourism system for indigenous communities. On the one hand, it adds value to indigenous-run tourism initiatives through a **remote experience co-design system** and by **connecting them to their target market**. On the other hand, it provides travelers with easy access to indigenous tourism cooperatives in areas that are ecologically rich, while ensuring every single visit they make has a positive impact through the establishment of a system of incentives linked to **direct payment for environmental services**.

THE TEAM

Having a diverse and interdisciplinary team has proven to be essential for Rutopia. We have had multiple design sessions and debates in which every point of view has been important in defining our model. A crucial aspect of our team is the variety in backgrounds, we would not have developed our idea so comprehensively if we had all been from the same region or had the same ideology or experiences. The whole team's participation in visiting the communities has been critical for field research, since we complement each other very well when working with different community members.



Diego
from Oaxaca
*Sustainable
Development
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Irene
from
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*Graphic
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CDMX
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Eduardo
from
Cancun
*Actuarial
Sciences
(ITAM)*

OUR MENTORS

We understand that in order to design realistic solutions we have to approach not only the academic experts in the field, but also stakeholders who are on the ground and who, through their experience, can relate to both the challenges and opportunities of this project. We are glad to have four mentors that offer us valuable advice.



Carlos Muñoz Piña
Lecturer at ITAM, Policy Director for Revenue at Mexico's Ministry of Treasury. Ph.D. in Agriculture and Resource Economics at the University of California, Berkeley. Designer of Mexico's Payment for Environmental Services of Forests program.



Cecilio Solís Librado
Mexican Delegate of Indigenous People at the UN. Political leader at Mexico's Indigenous Movement in the 90s. Founder of the Indigenous Network of Alternative Tourism Mexico (RITA).



Bibiana Bautista Gaytán
Founder of the indigenous women group "Mujeres Milenarias" that aims for the conservation of soils and ecosystems. Winner of the government grant FONCA for cultural co-investments.



Isaac Lucatero Castañeda
Ph.D in Social Economy by the International University of Andalusia. At present Director of the Eugenio Garza Lagüera Institute of Entrepreneurship of ITESM.

PART 2. THE WICKED PROBLEM

THE CONTEXT OF OUR WICKED PROBLEM

There are more than 12 million indigenous people in Mexico from 66 different ethnic groups, the majority of them live in rural areas in close relation with their ecosystems (CDI, 2015).

More than 70% of indigenous communities' owned land is considered by the National Commission of Biodiversity as a priority area for conservation (Boege, 2008).

Even though indigenous populations live in the richest areas of the country in terms of natural resources, 73% of them live in poverty (CONEVAL, 2012).

The development of their lands often threatens biodiversity and is closely related to ecosystem degradation; this is due to the lack of alternatives for generating income sustainably (SEMARNAT, 2013; García Sarmiento, 2013).

Ecotourism has been proposed by the government as a possible source for income while achieving nature's conservation (CONAFOR, 2015).

However, even though ecotourism generates more than 3.5 billion USD in Mexico each year and is growing 17% yearly (XOLA, 2009), indigenous communities' standards of living have not significantly improved, nor has the degradation of ecosystems around their settlements ceased.

This is because the current system for developing ecotourism in indigenous areas is built on a model in which most of the income generated goes to the tourism retailers and tour operators, leaving the indigenous communities with few gains and failing to increase local empowerment (Ofosu et al, 2017; Pollok, 2013).

“Outsiders come with tourists and at best provide only a few jobs for the local economy. At worst they reinforce existing power dynamics by putting indigenous people on display.”
—Cecilio Solis, Mexican Delegate of Indigenous People at the UN (Personal interview, 2017).

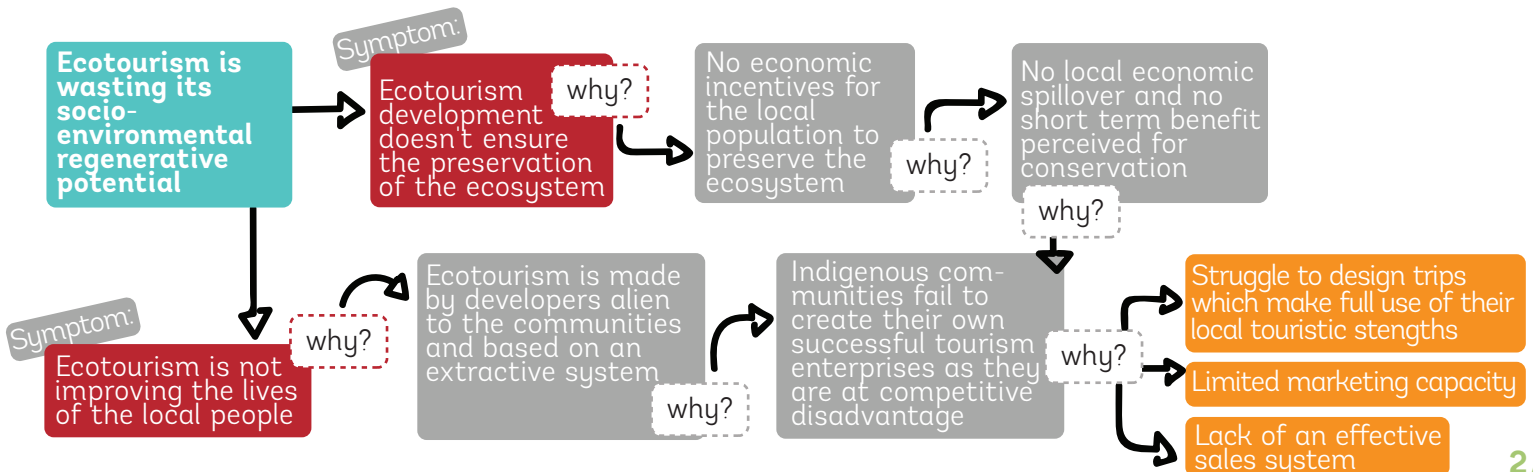
Ecotourism is a major source of national income and could represent an important incentive for indigenous communities to preserve their ecosystems while improving their own welfare. However, due to the current extractive model, **ecotourism is wasting its socio-environmental regenerative potential.**

OUR WICKED PROBLEM

Ecotourism is wasting its socio-environmental regenerative potential.

A CLOSER LOOK AT OUR WICKED PROBLEM AND PREVIOUS SOLUTION ATTEMPTS

Two government agencies (CDI & CONAFOR) and several NGOs have launched programs to develop small-scale, indigenous-run enterprises. However, more than 70% of the nearly three thousand projects launched over the past decade have failed to create a viable product for the ecotourism market (Rodriguez Máximo, 2018). Our field research showed that isolated co-ops carry a competitive disadvantage against external enterprises, as they often struggle to identify their local touristic strengths needed to design attractive experiences and lack the tools and marketing resources to reach a wider audience. Moreover, communities with successful tourism enterprises often lack the mechanisms to create a positive impact. This is because the short term incentives for conservation are not clear and the business model does not benefit the whole community right from the start.



PART 3. SOLUTION OVERVIEW



NEEDS:

A sustainable economic income

HAS:

Natural and cultural attractions



NEEDS:

Authentic and safe experiences

HAS:

Travel budget

We are designing and testing a social business that will facilitate the transition from the current extractive tourism system to a regenerative one which will allow communities to create a circular tourism-economy. Rutopia is a platform cooperative that will offer to indigenous-run, community-based co-ops the tools they need to overcome the obstacles they face when competing in the ecotourism marketplace. Simultaneously, it will give travelers the opportunity to take trips that feature authentic experiences while ensuring they have a positive impact on the environment, which is something they seek. It will be done through a system of direct payment of environmental services to the communities that we have called *Sustainable Tourism Credits* (STC). **Rutopia is NOT an enterprise that brings tours to indigenous communities; Rutopia is a collaborative tool that builds communities capable of generating and operating their own tours.**

KEY CONCEPTS

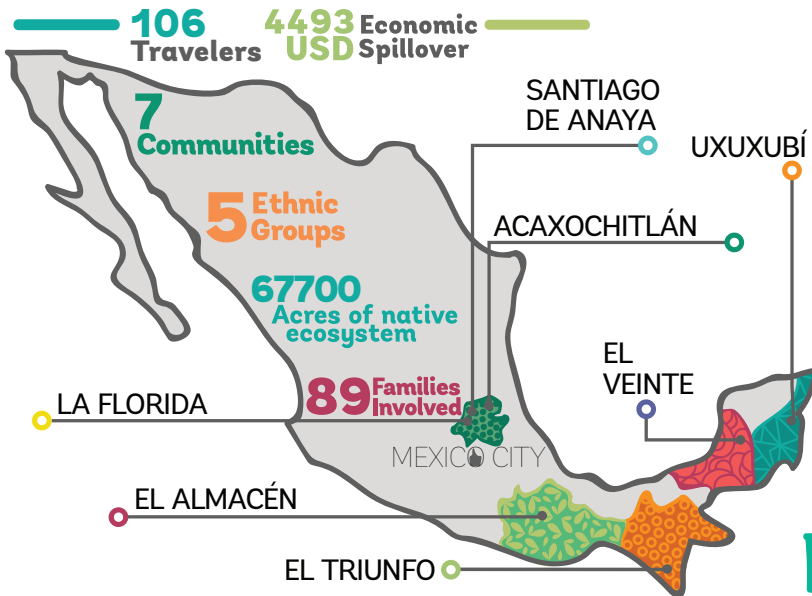
Indigenous Community: A social, political and economic entity which identifies itself as indigenous and works under a communal government system, in which decision-making involves the whole community.

Local Tourism Co-op: Managed by a committee designated by the indigenous community. They are in charge of managing local tourism activities under an agreement that also seeks to benefit the whole community.

Platform Cooperative: "A cooperatively-owned, democratically-governed business that uses a protocol, website or mobile app to facilitate the sale of goods and services" (Coop, n.d). In this case, Rutopia is a platform cooperative composed by a network of Local Tourism Co-ops.

OUR MAIN SOURCE OF INSPIRATION AND INSIGHTS: OUR PROTOTYPE TRIPS

In order to validate and retrieve information from our model, we built an initial network of 7 indigenous communities and carried out ten prototype trips co-designed with them.



MAIN INSIGHTS:

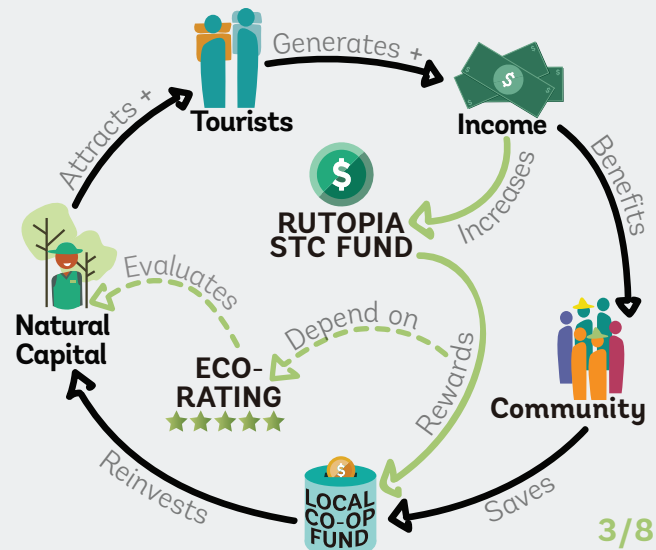
- Local tourism co-ops are capable of significantly improving their touristic products by applying design thinking methodologies
- What travelers value most are the human interactions with local families and hosts
- Local indigenous co-ops struggle to calculate costs and set a price for their services
- A "Rutopia travel guide" for tourists can help overcome problems regarding language and cultural differences, each adapted for different regions and ethnicities
- Local co-ops prefer a basic site as their internet connection is mostly through mobile data and loading heavy content is expensive for them. A simpler site with a shared backend will solve this

Prototype of Rutopia's platform: www.rutopia.com.mx

ZOOMING-IN TO OUR DESIGN

STC (Sustainable Tourism Credits):

A touristic project might be so focused on its economic cycle that it might not have enough incentives in the short-term for the conservation of the ecosystem, especially if there are no community mechanisms to invest in it as if it was "natural infrastructure" for tourism. STCs is a system of direct payment of environmental services in which 10% of what each tourist pays goes to a fund that periodically rewards communities that prove that they conserve their environment according to a set of indicators, some of them easily rateable and verifiable by tourists (locally sourced food, waste management, preserved landscape, etc.) and some others verifiable using low cost mechanisms of verification (satellite images, random checks, etc.) which could be carried out with alliances such as Mexico's National Forestry Commission. Co-ops would then be free to use the STCs to pay for additional conservation actions, to improve their competitiveness in other ways, or even to buy Rutopia shares.

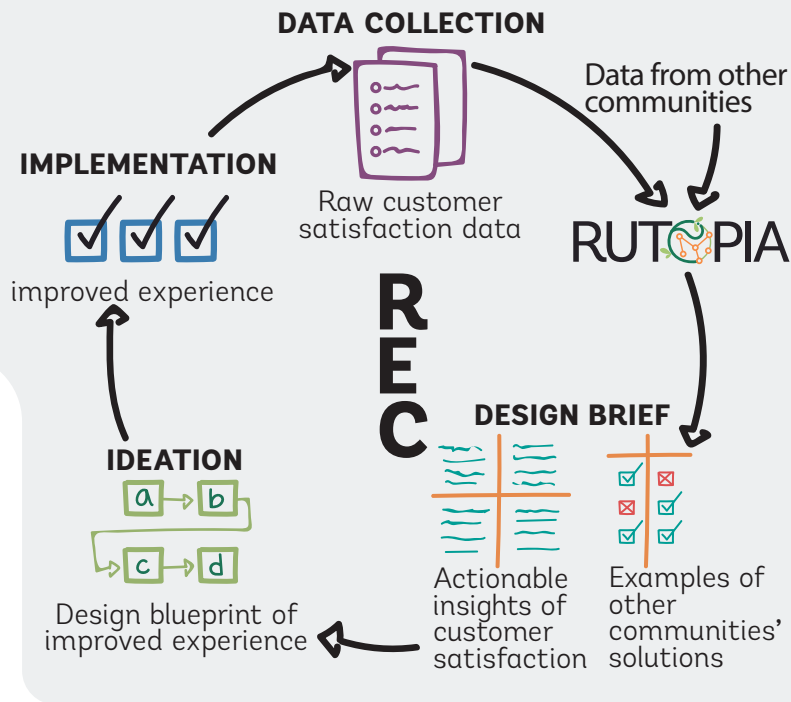


REC (Remote Experience Co-Design):

A design-based system to allow communities to continually improve the experiences they offer. The cyclical process starts by obtaining online feedback from tourists after their trips, and then providing synthesized and analyzed insights to local co-ops, also using data collected from similar communities. The local co-op then brainstorms and proposes improvements to the experiences they sell. Each trip would be an improved iteration that increases overall competitiveness.

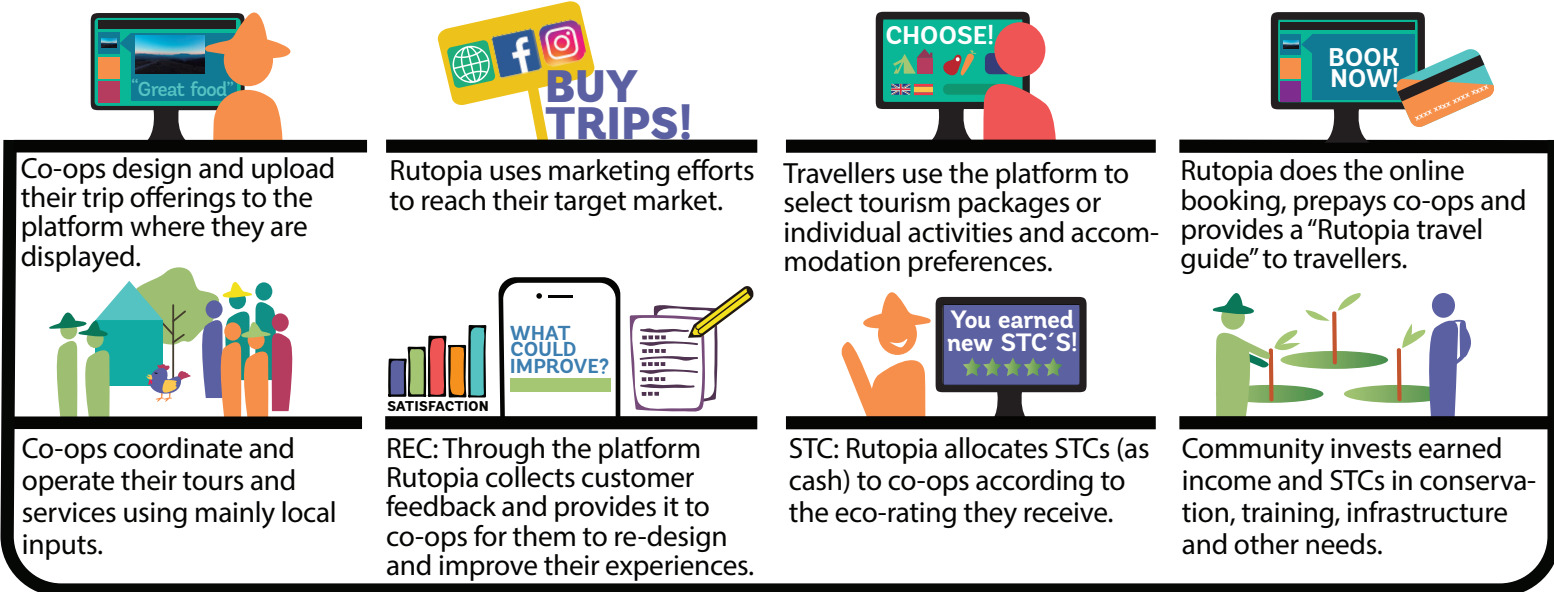
Online Platform:

Our model capitalizes on the internet's significant expansion in Mexican indigenous communities. Rutopia integrates most of its functions in a community-based platform, allowing tourists to easily access the tours and services offered by its members. The platform will allow tourists to book trips, pay online, rate experiences and offer reviews and advice. It will also allow Rutopia to gather valuable data regarding trends and tourist satisfaction for the REC system. Rutopia will use different channels to communicate the platform's activity to the local co-ops, which will be responsible for all the local logistics and communication.



Out of the 2,413 municipalities in Mexico that have indigenous presence, 2,087 (86%) had at least one computer with internet access in 2015 (CDI from INEGI, 2015)

Internet expansion in Mexico has been increasing by an average of 15.9% annually from 2015 to 2017 (Asociación de internet.mx, 2017)



AN INTEGRAL SOLUTION



INNOVATION AND ECONOMIC FEASIBILITY

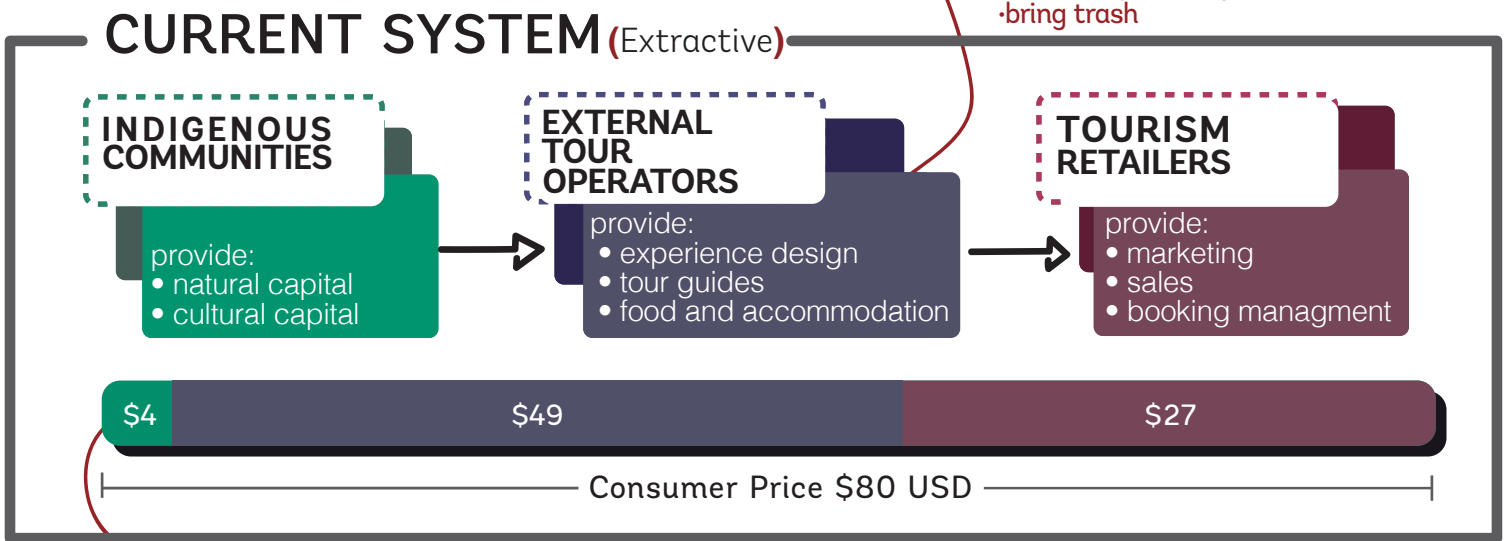
Unlike the previously attempted solutions, we fully co-designed our model with indigenous entrepreneurs, using economic and social structures that they have historically used, such as the tequio or the tanda. Rutopia's model proposes a horizontal relationship with the communities, through which we offer them the tools and services for a collaborative business partnership in which they can also become member-owners, under certain conditions.

We will assure the economic sustainability of Rutopia itself by charging a 15%-25% commission on the booking price to every tourist, allowing us to be in continuous improvement and expansion. The final prices of the experiences offered through Rutopia's portal will be equal or lower than the existing market price, due to a greater appropriation of the value chain by the communities as well as reduced costs from acting as a retail portal, operating in a technology-based, automatized and remote way, sharing fixed costs and allowing synergies to form across the entire network.

TEQUIO: A prehispanic practice, refers to the work that each family gives to the whole community for collective benefit. (The platform cooperative and local co-op models are based on a Tequio system).

TANDA: An informal collective fund to develop community projects. (STCs were designed based on this ancient practice).

VALUE CHAIN OF RURAL TOURISM ENTERPRISES

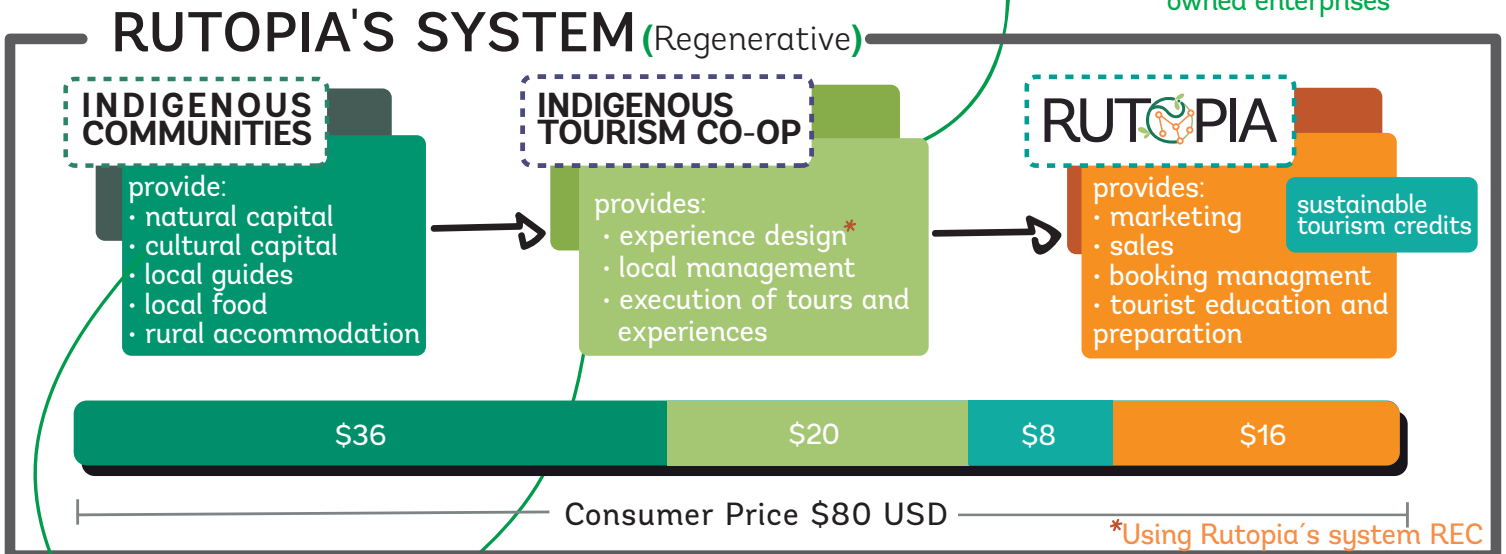


- put indigenous communities "on display"
- don't create local human capital
- generate few jobs
- reinforce power dynamics
- bring trash

little income =

- migration
- ecosystem loss
- crime

Based on the studies made by Ofofu (2017) and simulated for an all included 2 day trip.



- human capital generation
- cultural exchange
- promotion of community owned enterprises

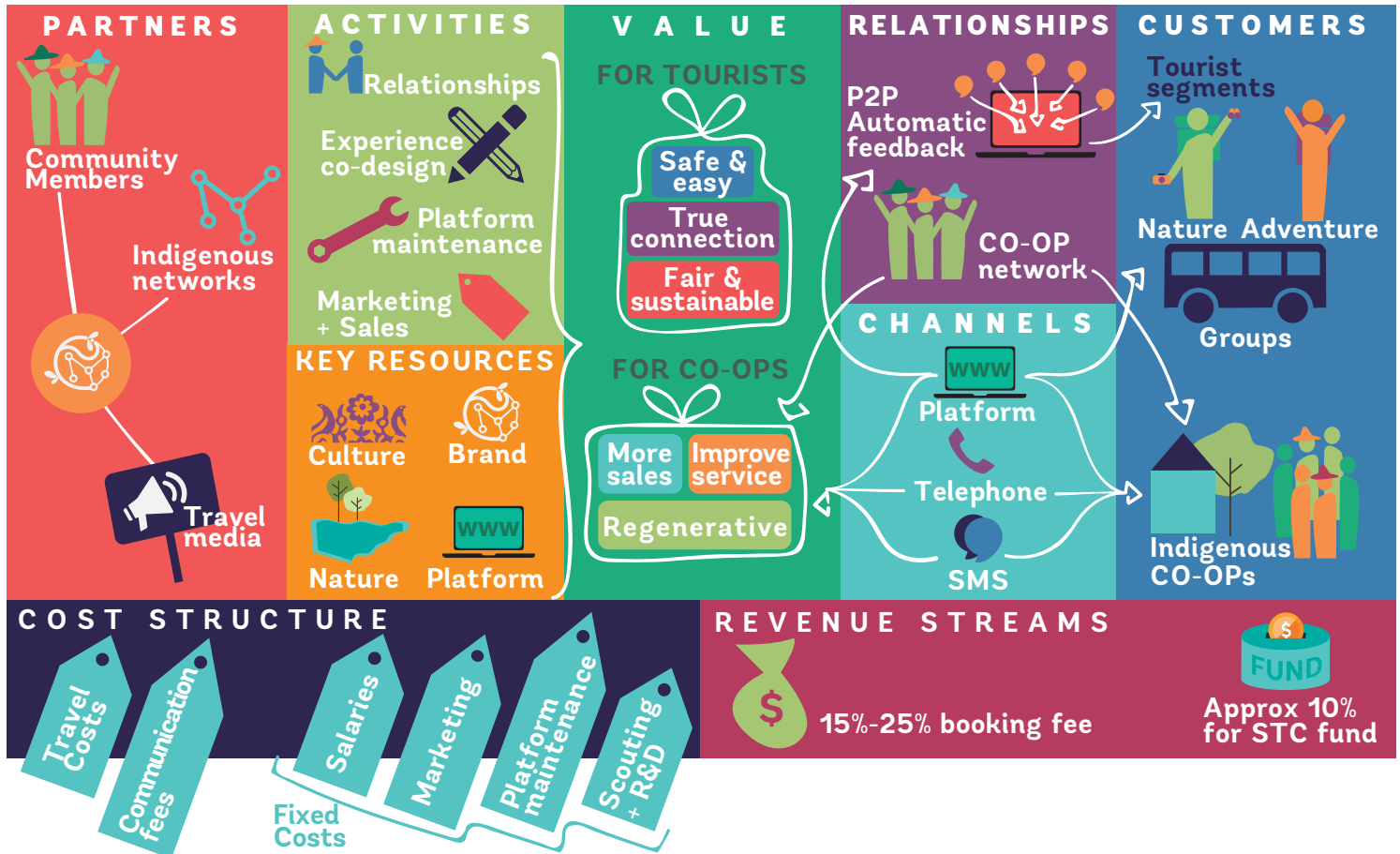
- job creation
- incentives for conservation
- waste and trash reduction
- economic spillover

*Using Rutopia's system REC

PART 4. DETAILED ECONOMIC ANALYSIS

Rutopia is built as a platform cooperative. This means that local co-ops engaged with a long-term perspective for the success of Rutopia are offered the right to buy a share of the company. Additionally, each successful member increases the value of Rutopia for the rest, so it makes sense that they fully participate in this value sharing. In order to implement this, our system must be based on a restricted self-capitalization program. In this sense, the local tourism co-ops can use their funds to gradually buy equity participation. This proposed system naturally selects only the most active and responsible co-ops to buy shares. Having a shared equity not only creates a sense of vested interest among indigenous communities of the Rutopia network, but it correlates the success of separate co-ops, thus encouraging active collaboration and synergies between communities.

BUSINESS MODEL CANVAS



SWOT ANALYSIS

STRENGTHS:

- We cause accelerated quality improvement thanks to REC (Remote Experience Co-design) innovation
- We require relatively small initial investment (approx. 24,000 USD for permits and platform development)
- We use a highly scalable model, which could allow Rutopia to rapidly expand across the whole of Latin-America and other regions of the world

OPPORTUNITIES:

- There is a rapidly growing telecom presence in indigenous communities
- Tourism demand is abruptly shifting towards a more experiential one of true connection with nature and people in Millennial and Z generations. (Rodriguez, 2018; TREKKSOFT, 2018)
- Online trip planning and booking will double its share in the market by 2020 (TREKKSOFT, 2018)

WEAKNESSES:

- Communities are sometimes hard to access, rising transportation costs and making our trips less competitive.
- Communication with co-ops can be slow. We can't do immediate bookings as other platforms do
- As a new eco-tourism provider, much time and effort is needed to gain clients' trust

THREATS:

- Big firms of the "sharing economy" are trying to access this segment without being sensitive of local dynamics.
- There are possible sudden tourism drops in regions due to political tension, organized crime presence or harmful mediatic campaigns
- There is loss of human capital in communities due to migration to urban areas or the USA

RISK ANALYSIS

2 MAYOR INHERENT RISKS OF OUR MODEL:

High dependence on the tourism flow in Mexico, which is a variable that can suffer downfalls due to political, social or economic factors.

Mitigating measures: diversifying our target markets to reach national and international tourists. Plus the creation of strong marketing campaigns that highlight and document the security of travelling with Rutopia.

A fast increase in tourism flow in certain communities could overpass the loading capacity of their ecosystems.

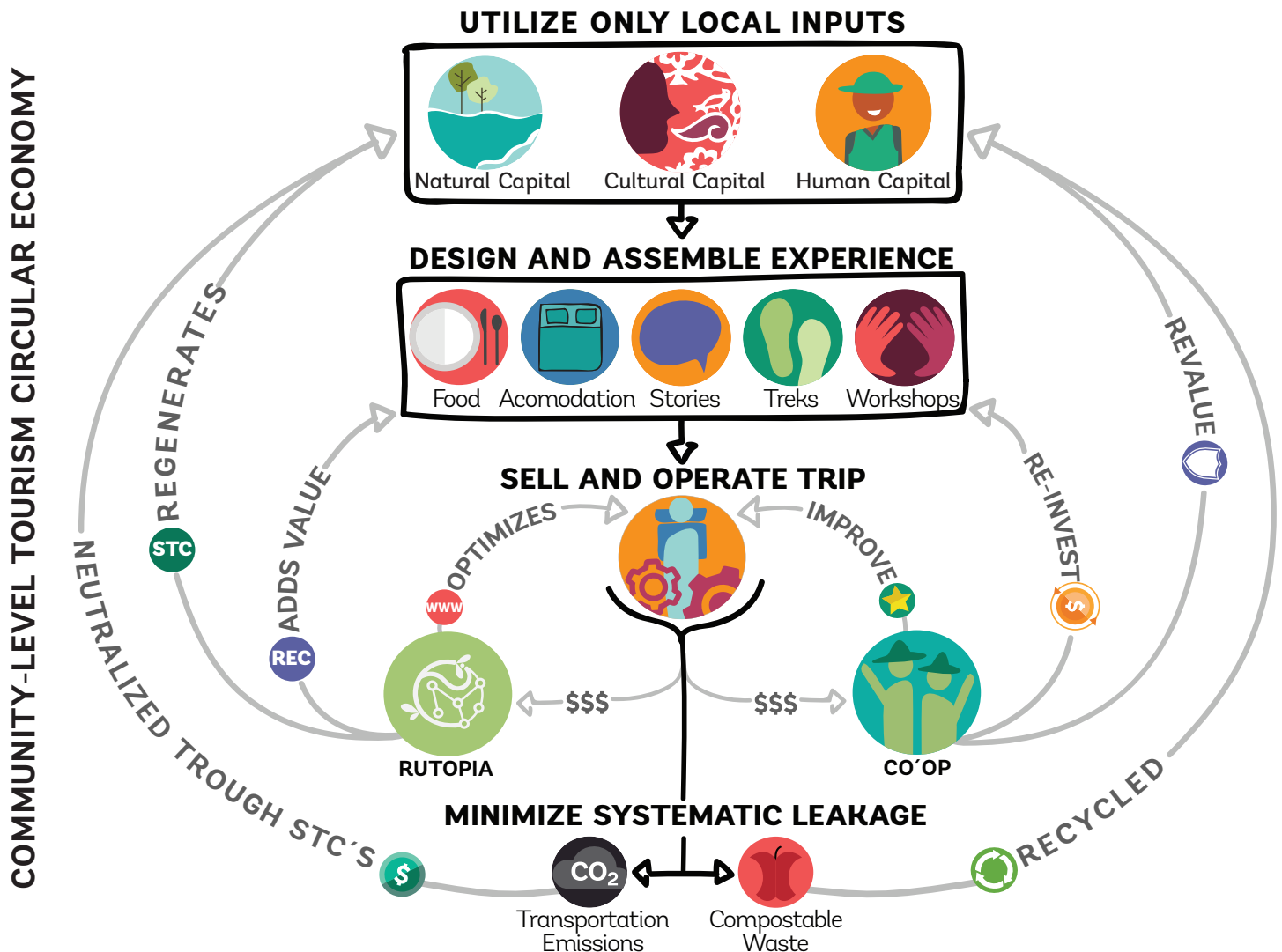
Mitigating measures: we always encourage and help network members to stay within their ecosystem's maximum loading capacity by planning for "fewer volume, higher quality."

PART 5: DETAILED RESOURCE ANALYSIS

The central asset of Rutopia will be an online platform which integrates:

- Booking System:** It is low-cost when sourced from Mexican programming firms that own pre-made templates
- REC:** We will need to hire a programmer to automate this innovative system of gathering and analyzing information based on design thinking
- STC:** We will need self reported and external verification systems, a data analysis tool, and a resources allocation system

Each of the tools specified on the left are designed to create a shift to a tourism that builds circular economies at a community-level. Together they optimize resources, internalize externalities, generate value for each step of the trip's life cycle, regenerate ecosystems and leverage cultural, natural and human capital. They keep the ecosystems alive, allowing for continuous value creation for the indigenous communities living within them. The new model is regenerative by design and is illustrated in the following diagram:



PART 6. BARRIER ACKNOWLEDGEMENT

BARRIER #1!

Language barriers for foreign tourists: We have found that, for our target market, language barriers barely affect the quality of the trips. Anyway, the platform will display the local guides' English proficiency to allow tourists to make accurate decisions. Another promising option, Google Translate, continues to be increasingly viable. It uses real-time translation between tourists and local guides, making it a feasible and fun option in a growing number of communities today thanks to the expansion of internet access.

CHALLENGE #1!

Grow demand quickly: As a bilateral platform like Rutopia, our main challenge is to rapidly grow the demand of tourist experiences to engage and support our local co-ops. Without this, communities could lose trust and motivation to collaborate with us. We plan to address this by fundraising money to launch the platform with a reduced number of highly monitored experiences simultaneously with an effective marketing campaign.

CHALLENGE #2!

Insecurity perception: Even though the number of international tourists in Mexico rises each year, there is a general fearful perception of insecurity regarding the rural areas of the country. We plan to overcome this barrier by working with safe communities with strong social ties and by remaining transparent about any possible concerns about tourists' well-being and safety.

CHALLENGE #3!

Adoption and use of ICT: Many communities might lack members with information technology skills. If they do, we propose to use current basic communication channels such as SMS and telephone calls to minimize communication obstacles, while building enough local IT capacity.

PART 7. RESOURCE LIST

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ACADEMY AND RESEARCH

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FIELD RESEARCH

16. Rodríguez Máximo Alejandro, Head Coordinator of tourism operations at the Indigenous Network of Alternative Tourism of Mexico between 2012-2015 . Personal interview in Mexico City, January 2018
17. Solis Librado Cecilio, Founder of the Indigenous Network of Alternative Tourism. Personal interview in Mexico City, January 2018.
18. Interviews and surveys to 11 community members of 5 different communities in 4 states of Mexico (March - November 2017)
19. Qualitative (focus group) and quantitative market research to 121 potential clients of Rutopia <https://drive.google.com/file/d/1899X1tGgxM0D8oRWLkFgxmGxCqdRsRu/view?usp=sharing>