Journey started in 2008 by Husband and wife Gerard and Edelweiss

Initially their motivation was to help clean the environment for their children and future generations
General Background

Gerard

Consultant
EV Expert
General Background

A Corporation classified as a medium size company in the Philippines

EQUITY PARTNERS

Management Team / Investors

Gerard and Edelweiss Villoria (Filipinos)
Pioneers in Electric Vehicle local design, manufacturing, and operating in the Philippines.
Designed and manufactured an e-trike model that the Asian Development Bank funded with $500M.
Designed a unique and expansive e-trike ecosystem. This ecosystem convinced local banks to provide 100% financing to all its buyers.

George Petty (Swiss)
Over 25 years of professional experience providing results and earning trust from colleagues and clients. Extensive experience in operations, strategic and financial planning, business planning, public speaking, client, investor, donor and board management. Has served as an adviser and consultant for numerous organizations. English, French and Spanish working languages.

Cristian Federico Canis (Swiss)
Experienced investment manager with an international track record in development finance, real estate, project management, portfolio and risk management.

Charles Cole Navarro (Filipino)
Investment Specialist, Project Development Expert, Consultant for Asian Development Bank, International Center for Environmental Technology Transfer, and USAID
General Background

CURRENT FINANCIAL PARTNERS

A Government Owned and Controlled Corporation

Small Business Corporation

Provides 90% financing to all our Buyers (all unbankable) 12% per month up to 4 year term

Negosyon Finance Corporation

Micro-financing companies that provides working capital for GerWeiss

FSSI

growing community enterprises
General Background

Other financial institutions considering funding GerWeiss

- Peace & Equity Foundation, Manila
- Meso Impact Finance, Luxembourg
- LGT Impact, Liechtenstein
- LBP Leasing and Finance Corporation
Sustainable Transport Problem

3.5 million Tricycles contribute 67% of air pollution
Sustainable Transport Problem

9,100,000 tons
GHG annually from 3.5M tricycles
Our company exists because we totally believe in the Triple Bottom Line Principle. We will not be in this space if we cannot deliver and be consistent with these core values.

Our ultimate goal is to improve the lives of the people (Drivers) who belong to the bottom of the pyramid by providing a safer, effective, efficient, affordable, and giving them the capability to at least double their income and reduce poverty.

**PEOPLE**

We improved the lives of the people (Drivers) who belong to the bottom of the pyramid by providing a safer, effective, efficient, affordable, and giving these people the capability to at least double their income and reduce poverty.

**PLANET**

The e-trike ecosystem uses an eco-friendly electric vehicle technology to eliminate, which we believe is the best solution, the main source of air pollution from the transportation sector. It has zero emission and no noise vehicle.

**PROFIT**

Equally important, the two business models are profitable: 1. the e-trike production has a capital recovery of 120% every 120-day cycle, 2. the Battery leasing program has less than 2.5 year payback period.

**DIVERSIFIED SOLUTION**

One product (e-trike ecosystem) solving several problems. Eliminating the root of the problem by replacing the major source of air pollution (tricycles) from the transportation sector so that the problem will not keep coming back. It will also eliminate the major source of noise pollution and reducing poverty by providing the drivers with a better livelihood.
Solution

Tricycle replacement
Solution
etrike ecosystem

The center of the ecosystem is the SWAPPING of lithium batteries from the U.S. to ensure high performance of the etrike and have a long-term revenue from battery leasing.

Advanced lithium batteries provide a 100% financing from Small Business Corp and with the, everyone can afford to buy the etrike.

The market is huge, estimated value is about $16.0B, but the buyers do not have financial capability. Thus, we can provide a more contextual package and simplify the transactions.

Renewable energy sources have a more diverse operation and charge management.

2-minute swap system to complement the charging and generation.

Fast 45-min charger to support a high operational rate.

Advanced BMS that actively monitors and prevents the batteries from being abused.

Real-time tracking.

Real-time tracking system to provide critical data about the battery.

GPS tracking.

2nd life program for carbon credits.

To be set up.

Efficient clean source.

Solar charging.

Carbon credits.

Recycle.

Reuse.

Fast charging.

Reusing batteries for additional revenue.

Reuse.

EAM.

The body of the etrike for additional revenue.

Solution.

EAM.

Solution.

EAM.
Other Problems being addressed

**Poverty**
An Asian Development Bank study discovered that a majority (70%) of the drivers earned a daily net income of P100-P150 ($1.80-$2.70).

**Lack of Education**
About 70% did not finish secondary degree of education. The same with their children.

Tricycle is also the main source of noise pollution
Other Problems being addressed

Picture of Poverty
Other Problems being addressed

Picture of hardship in the operation
Other Problems being addressed

Tricycle Drivers Boracay and Manila

Coming from different cities but both has been driving tricycles for more than 20 years. Usually, their children follow their footsteps.
Other Problems being addressed

Providing computer access exclusively used for educational purposes for the Driver’s children
Saling has now quadrupled his income and now has a good savings account at the bank!!! He is very happy…

I am a happy owner.

And thank you again for your kind help today!! Keep going you are doing a good thing!!
Achievements

First locally designed and manufactured e-trike
Achievements
Achievements

Basis for mandatory replacement program in Boracay Island

3rd Generation
Achievements

First to secure 100% bank financing for the Drivers

BPI Globe BanKO grants first-ever e-tricycle loan in Boracay

January 24, 2014

Certificates of credit line approval are awarded to the first batch of tricycle drivers and operators participating in Boracay's e-trike program. Awarding the certificates are the following (third row L–R) BanKO Manager for Aklan Ruffy Leyson, Sangguniang Bayan ng Malay E-trike Committee Chairman Dante Pagsugurion, BanKO VP for Emerging Markets Gigi Catti, Mayor of Malay, Aklan, John Yap, Toyota Tsusho Asia Pacific VP Yasuhiro Kakiyama, Gerweiss President and CEO Gerard Villoria with wife Edelweiss, and BanKO VP for Institutional Banking Group Josaias de la Cruz.
Achievements

The first and only company allowed to collect amortization payments for a bank

Achievements

Our biggest source of pride

UN DESA 2016 - FINALIST
Achievements

**Singularity University - FINALIST (2017)**

**Global Solutions Program**
Developing moonshot innovations to create an abundant future

**VERGE HAWAII (2017) - SEMI-FINALIST**

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**Edelweiss Villoria**
Selected as one of the Finalists at Singularity University GSP and Semi-finalist at VERGE HAWAII
Obstacles and Barriers

**TECHNICAL**

**BATTERY**

**BATTERY**

**BATTERY**

**COST AND DURABILITY**

Drive System, under chassis, 100% from China

Lithium Battery System 100% from USA

Body and assembly 100% local
Obstacles and Barriers

Managerial

LACK OF KNOWLEDGE AND EXPERIENCE

BUT MANAGERS ARE QUICK LEARNERS AND HIGHLY TRAINABLE
Obstacles and Barriers

Financial

ACCESS TO SUBSTANTIAL FUNDS ARE VERY LIMITED CONSIDERING THAT THE PHILIPPINE MARKET IS VALUED AT $20B

WE CONTINUE TO DEMONSTRATE HOW OUR ECOSYSTEM IS SUSTAINABLE.
Obstacles and Barriers

Governmental

BUREAUCRACY IN THE IMPLEMENTATION OF OUR LAWS

THIS BUSINESS MODEL IS COMMERCIALLY VIABLE ALREADY. WE PREFER LIMITED GOVERNMENT PARTICIPATION.
Obstacles and Barriers

Cultural

OLD HABITS AND FEAR OF CHANGE

ADDRESS THEIR FEARS

DEMONSTRATE SUSTAINABILITY
SCALE UP PLANS

12,000 etrikes in 5 cities

Market Size: 3.5M Tricycles
Market Value: $18.9B
Est. # of Drivers: 5-10 Million

TARGET MARKET

<table>
<thead>
<tr>
<th>City</th>
<th>Market Size per City</th>
<th>Target Market (25%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Coron</td>
<td>1,000</td>
<td>250</td>
</tr>
<tr>
<td>2. Puerto Princesa</td>
<td>7,500</td>
<td>1,875</td>
</tr>
<tr>
<td>3. Cebu</td>
<td>15,000</td>
<td>3,750</td>
</tr>
<tr>
<td>4. Quezon City</td>
<td>25,000</td>
<td>6,250</td>
</tr>
<tr>
<td>Total Target Market*</td>
<td>25,000</td>
<td>6,250</td>
</tr>
</tbody>
</table>

*Equivalent to 1/3 of 1% of total market

Estimated Gross Annual Revenue: $27M
1/3 of 1% of the total market
SCALE UP PLANS

Cost of Battery Pack: US$3,500 (4.3 KWh)

Daily Battery Lease: US$6

Payback Period: 1.6 years
FUTURE PLANS
FUTURE PLANS

SUSTAINABLE TRANSPORT SYSTEMS

ETRIKE

EBUS / E-VEHICLES

ELEVATED GREEN URBAN TRANSPORT

ELECTRIC CARGO TRANSPORT SYSTEM

URBAN TO SUBURB LINKAGE
Metro Manila traffic ranked among 10 worst in world
(The Philippine Star) | Updated October 20, 2016 - 12:00am

A study conducted by JICA warned that by 2030, the Philippines would lose P6 billion daily due to traffic. File photo
Usual Pollution
over crowding

breakdowns

accidents

usual traffic

over crowding
FUTURE PLANS

PROPOSED INTEGRATED SOLUTION
ELEVATED GREEN URBAN TRANSPORT SYSTEM

- **Solar Panel Roof**
- **Pocket Gardens**
- **Bike Lanes**
- **Pedestrians PWD Friendly**
- **Food Carts**
- **ETRAM for Mass Transport (For Development)**
- **All Weather Resistant**
- **Low Maintenance**
FUTURE PLANS

POTENTIAL OPPORTUNITIES

ELEVATED GREEN URBAN TRANSPORT SYSTEM

Metro Manila as of July 2015

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**Estimated Total Length:** 51 km
**Estimated Total Area:** 1,224 Hectares

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**Solar Energy:**
- 160 GWh / year = $25M / year

**Commercial Area:**
- 306,000 sqm = $18M / year
  - $5/sqm/month

**e-Tram Revenue:**
- 1,000,000 pax / day = $313M / year
  - AVE. FARE $1/PAX/DAY

**Estimated Annual Gross Revenue**
- = $356M
FUTURE PLANS

ELEVATED GREEN URBAN TRANSPORT SYSTEM

POWERING THE FUTURE WE WANT

ELECTRIC CARGO TRANSPORT SYSTEM

SUSTAINABLE TRANSPORT SYSTEM FOR ALL

SAFE AFFORDABLE ACCESSIBLE

URBAN TO SUBURB LINKAGE
THANK YOU

TO GOD BE THE GLORY