HOW CAN WE JUSTIFY THE RESULTING GAP BETWEEN PLANNING AND IMPLEMENTATION OF A PROJECT DEVELOPED IN A MULTICULTURAL CONTEXT? A RETROSPECTIVE ANALYSIS

LUDWIG MERZ

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Ludwig Merz

……
Mr. Ludwig Merz
Candidate

……	……
Assoc. Prof. Nathasit Gerdsri, Ph.D. Advisor	Assoc. Prof. Astrid Kainzbauer, Ph.D. Chairperson
……	……
Duangporn Arbhasil, Ph.D. Dean College of Management Mahidol University	Asst. Prof. Kannika Leelapanyalert, Ph.D. Committee member

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LUDWIG MERZ 5749260

M.M. (GENERAL MANAGEMENT)

THEMATIC PAPER ADVISORY COMMITTEE: ASSOC. PROF. NATHASIT GERDSRI, Ph.D., ASSOC. PROF. ASTRID KAINZBAUER, Ph.D., ASST. PROF. KANNIKA LEELAPANYALERT, Ph.D.

ABSTRACT

The Pilgreens are a group of three students who have united their interests and practical management knowledge to thoroughly plan a four-month ecological travel within an electric-powered vehicle. The success of this venture partly relied on the collection of about a EUR 60,000 budget and the promotion of electric mobility. In this regard, they have set up an official French-based NPO_ to better account for their activities. The organization is built on the foundation of an environmentally-friendly vision: To be a global driver of electric mobility through the promotion of sustainable projects in developing countries. This document will provide you with information regarding the Pilgreens' business development, and an analysis that will help you understand how the team has been dealing with the difficulties encountered. Indeed, while most of the project plan requirements were fulfilled and allowed the three students to depart from Bangkok at the beginning of August 2015, the two-month delay that occurred in implementing the project was due to some specific factors, sometimes unforeseen. In this paper these factors will be analyzed in detail.

KEY WORDS: Project Management / Ecological Initiative / Planning / Implementation / Comparison

60 pages

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CHAPTER I
INTRODUCTION

1.1 Preface

Part of the elements of this paper is the result of common research and work by Karen Koulakian and myself, students in International Management from both IAE Toulouse Graduate School of Management and College of Management Mahidol University. After we completed the Master in International Management at IAE Toulouse, we decided to spend the second year of our Management programme at the College of Management of Mahidol University in Bangkok, Thailand for the year 2014-2015. The International Management in Asian Context degree between IAE Toulouse and CMMU is meant to be terminated with a six month internship placement resulting in a thematic paper based on a subject that is treated during the internship. Some parts of this thematic paper can be found in Karen Koulakian's paper since those parts relate to the common efforts made in project management by the two of us and to an analytical approach to the work made.

The idea of "The Pilgreens" was born out of our personal interest while we were living in the capital of Thailand. Luckily our professional intentions matched the expectations of our supervisors from both IAE Toulouse and CMMU Bangkok, so we both decided together to conduct a travel from Bangkok, Thailand to Toulouse, France in an electric tuk-tuk to promote electric mobility. Considering that such a travel adventure was never experienced before and that the whole management of the trip (including preparation, funding, promotion, etc.) required a time-consuming and elaborated project plan, we agreed with our supervisors on using this practical experience to write an analysis about the project planning and implementation of such a project.

The whole work was done in equal parts by Karen Koulakian and myself, while some individual achievements are marked in the text.

1.2 A lifetime project

"Your life should be filled with purpose-driven experiences and projects that bring excitement, passion, energy, and authentic meaning and joy into your life", wrote Richie Norton once. This is seemingly what we felt like while we were sketching our first project definition and planning in October 2014. We were convinced that this electric tuk-tuk was the starting point of something rewarding, something we could benefit from; and we eventually have.

The Pilgreens is a (French) non-profit organization that was founded by Rémy Fernandes-Dandré (FR, Co-Founder and President), Ludwig Merz (DE, Co-Founder and Financial Director), and Karen Koulakian (FR, Co-Founder and Vice-President) officially on the 9th of February 2015 in Paris, France.
We decided to set up this organization to provide a legal framework for our activities that are related to the promotion of electric mobility.

There are some questions that we have been asked many times during the preparation phase and during our travel.

"How did you meet and why did you come up with that idea?" Living in the capital of Thailand is certainly different from living in Europe and also from what people would expect it to be. One of the main reasons is certainly the climate conditions and the resulting culture. And a small vehicle called 'tuk-tuk' is part of that culture. It might seem 'simple', but it is something that foreigners and Europeans all notice when travelling in Thailand. So did we. Out of curiosity Karen tried to drive a tuk-tuk (with mixed results and feelings going from fear to luck) and he subsequently suggested his fellow student and friend Ludwig to drive back to France with this quirky vehicle. The fact that the idea seems to be completely crazy encouraged us even further to develop and realize this exciting project. Together we started to talk to friends about our plan and Rémy Fernandes-Dandré, who had also taken the first year of the Master programme, absolutely loved the idea and joined the team. He helped and worked at a distance on the project as a full time member, and flew to Bangkok in June 2015. Thinking further about giving the project a valuable purpose and of what a tuk-tuk is famous for (or better why it is so remarkable) we refined our final idea and came up with a plan to carry out the travel in an electric-powered tuk-tuk.

"Why a tuk-tuk?" The answer is simple: "because you asked the question". By the time you asked the question we have already attained our first objective: generating (your) attention. The answer also suggests the fact that the tuk-tuk is an open and friendly vehicle, which is therefore a good way to communicate about the impact of pollution caused by traffic.

"Why Bangkok - Toulouse?" We both had the opportunity to complete the IMAC double degree at CMMU Bangkok. And the first idea was to connect our two prestigious universities with this travel. When thinking about the timing of the project we have always kept two things in mind. First of all 2015 is a very important year regarding the future development of electric mobility. Over the last ten and especially five years, electric cars have evolved from a niche product to a viable solution for mobility and transportation. As a matter of fact, we have all noticed the station-powered electric cars in the major French cities. But still the image of electric cars is not yet that of a mass-market product that can be used for all kinds of daily situations.

Then, such a travel - you might call it a once-in-a-lifetime project - needs a few things to be considered: the availability of all participants, the financial means, and the conditions to execute it, such as favourable weather and stable political situation in the selected countries. These are the reasons why we decided to integrate the project into our "extended" studies (instead of an internship). This was a unique opportunity for us to seize and we knew that if we were not able to undertake this project this year, we would never be able to accomplish it.

The objective of this paper is to present an overview about the Pilgreens' work that has been undertaken from the first sketch of the idea in October 2014 all the way until the delivery date of this paper. The general issue we will be considering and answering is the following: How can we justify the resulting gap between planning and implementation of a project developed in a multicultural context? A retrospective analysis. The first part of this paper is dedicated to the strategic planning of the project based on project management concepts, which includes information and analysis about the implementation of the project. In a later section different analyses, including cross-cultural concepts and discussions, will be detailed. Lastly my personal opinion will be presented as well as a few suggestions for improvement.

Overall, the project represented about ten months of work and preparations so that the final outcome could live up to the initial expectations. And the outcome is an ecological and challenging journey of 20,000 kilometres across 15 countries over 120 days.

In the meantime they foresaw the laying of the foundations of a future non-governmental organization and managed to meet with local community leaders to study about the needs in electric mobility. Today, they are on a double-edged mission: prove that electric mobility is the way to go and explore the potential of electric mobility in developing countries by collecting testimonials and opinions in the field.

Furthermore, The Pilgreens attended the COP21 United Nations occurrences on climate change in early December 2015 in Paris. nhey have beem granted symbolic support from the French Ministry of Ecology, Sustainable Development and Energy, who they signed a “convention” with.

CHAPTER II
STRATEGIC PLANNING

2.1 Project objective statement (POS)

In the following part I will present our project planning (version from April 2015) and the link to the execution *(highlighted in brief comments in italic when it is necessary to explain potential reasons that will be analyzed later in detail).* The following components are inherent to a successful project planning: project objective statement, milestones, deliverables, technical requirements, limits and exclusions.

The initial statement we came up with is the following: To travel from Bangkok to Toulouse using our own transportation (tuk-tuk) from 10 June to 10 October 2015 relying on external funding. Here is the updated statement: To promote electric mobility based on renewable energy sources by travelling from Bangkok to Toulouse with an electric vehicle (in the form of a tuk-tuk, a 3-wheeler) from 15 July to 1 December 2015 relying on external funding and personal contribution of the participants.

During the planning phase we had to postpone the departure date twice. In the analysis I will provide reasons and include my academic research. The real departure date finally occurred on the 9th of August 2015.

2.2 Global timing

The travel is embedded in the creation of an organization (The Pilgreens). Its main goal is to promote electric mobility in developing countries. The role within the organization will be a catalyzing project with the aim to create public awareness for the need of this organization as well as first contacts and potential supporters.

We developed a business plan for The Pilgreens as a non-profit organization. As far as we can say after the travel this objective is achieved.

Global timing:

- October 2014 - January 2015: Initiation (feasibility study)
- December 2014 - June 2015: Planning & Development
- July 2015 - December 2015: Implementation & Execution
- December 2015: Close up & Evaluation (finalization of budget, reports, etc.)
- … The Pilgreens continues.

The last draft of the global timing was based on a too short preparation phase and unrealistic assumptions.

2.3 Milestones

The milestones are assigned to one or several of the main project participants, Ludwig (L), Karen (K), Rémy (R).

There are several milestones that were significantly delayed toward the end. In the analysis part we will try to find a reason for such important delays. As the milestones are indicating, collecting funds was a significant challenge. Due to significant changes in the itinerary (arrival in Toulouse after the COP21) we were able to achieve the main objective and ensured our participation at the COP21 in Paris.

Table 2.1 Milestones

DATE	TASK	RESPONSIBLE	STATUS	NOTES
06/12/2014	Definition of the draft route	R: BKK-Georgia, K: Georgia-EU-TLS	ok	Journey mapping
10/12/2014	Two Estimations (Electric VS fossil) + one Budget estimation	L: Technical parts K: Check + Trip	ok	

Table 2.1 Milestones (cont.)

DATE	TASK	RESPONSIBLE	STATUS	NOTES
11/12/2014	Overall planning	L	ok	
12/12/2014	First Communication release	R	ok	
31/12/2014	Internship definition	IAE	ok	Validated by Nicola Mirc
15/01/2015	Final strategy definition	ALL	+2	Electric-powered
31/01/2015	Definition of the final route (visa requirements)	ALL	ok	Visa needed for China, Kazakhstan, Russia
01/02/2015	Decision on final transportation	ALL	+16d	Electric tuk-tuk
10/02/2015	Second Budget estimation (detailed)	L	ok	
12/02/2015	Second Communication release	R	ok	
01/03/2015	Collect 30% of the budget	ALL	+37d	28/02/2015: 15%
01/04/2015	Start Visa application	ALL(!), Individual	+75d	Tuk-tuk papers needed. Not a critical activity.

Table 2.1 Milestones (cont.)

DATE	TASK	RESPONSIBLE	STATUS	NOTES
01/05/2015	Collect 90% of the budget	ALL	+72d	01/05/2015: 60%
01/06/2015	Check of holding all documentation	ALL	+60d	Not a critical activity. Before departure.
01/06/2015	Transportation ready	ALL	+65d	Tuk-tuk ready 10/06/2015 (+10), Batteries 03/08/2015 (!)
10/06/2015	Departure from Bangkok, Thailand	ALL	+60d	09/08/2015
10/10/2015	Arrival in Toulouse, France	ALL	ongoing	Planned: 14/12/2015
05/12/2015 - 09/12/2015	Attendance at the COP21 in Paris	ALL	ongoing	At Musée de l'Air et de l'Espace
Legend:	+60d Critial delay	+60d Non-critical delay	ongoing activity	

2.4 Deliverables

In the early stages of the project planning I identified the following deliverables:

- Route definition
- Means of transportation (3-wheeler tuk-tuk)

- Budget
- Overall planning
- Legal structure
- Press release to media and other stakeholders
- Communication plan
- Communication tools and channels
- Technical preparation and documentation
- Event organization in every country (capital and large cities)
- Sponsorships, partnerships & funding
- Film, photo, and documentary
- Logistic and equipment
- Insurance and tuk-tuk registration
- Medication & life support

These are detailed in the 'Technical specifications' part of the project plan, where we listed the requirements for each part.

2.5 Technical specifications

The technical specifications contain the detailed requirements for the identified deliverables.

2.5.1 Route definition

The route must be feasible with the chosen vehicle and allow the participants to travel safely from Bangkok (Thailand) to Toulouse (France) within a four-month time frame during summer (June until November 2015).

The route has to go from Bangkok (BKK), Thailand, to Toulouse (TLS), France with the following requirements:

- Feasible in 4 months
- Feasible with the chosen means of transportation (constraints see tuk-tuk)
- Length (distance): 15,000 km - 20,000 km

- Visas (for French and German passport holders)

3 propositions / alternatives to choose from (can be partly the same route):

- Fastest
- Shortest
- Least expected “problems”

General requirements for the route selection are:

- Respect legal requirements (licence, visa, etc.)
- No “blocking point” (visa, level of danger, etc.)
- “Safe” (no major risk)
- Provide maps and detailed mapping
- Administrative requirements (Guide in China, etc.)
- Charging point at least every 150 km (electricity requirements)

As required by the update of the initial project statement the route must be feasible by electric tuk-tuk and there must be a charging point at least every 150 km. The final itinerary is presented in the form of a table.

The route definition has been revised together and with the help and advice of different partners such as local embassies, agencies (mainly in China), experts, and travel blogs, as well as people that have travelled from Thailand to Europe in a classic tuk-tuk (British ladies Antonia Bolingbroke-Kent and Jo Huxster), or that have done such a kind of travel with an electric car. In the appendix you can find the actual itinerary that includes the forecast for the arrival dates. The final route definition fulfills all the requirements and includes: the dates, the length of stay in a city, the departure and arrival cities, the distances between cities, and the number of daily hours of travelling.

2.5.2 Means of transportation (an electric tuk-tuk)

The initial idea and concept is based on a travel in an electric tuk-tuk, a three-wheeler produced originally in Thailand (but also in different forms in India and other countries in Asia).

The main requirements for the vehicle are:

- Pure electric
- > 150 km autonomy

- Solar panel to help charging the batteries
- Minimum 2 batteries and a charging system that works in all countries
- Ready in June
- Safe
- Reliable
- Affordable (within the budget)
- Potential sponsorship with the producer should be taken into consideration

The tuk-tuk was finally purchased from Tuk Tuk Factory, a Dutch company that has been producing pure electric tuk-tuks for about 5 years now in Bangkok, Thailand. Their vehicles comply with European and international standards and type approval is made for Europe and the United States of America. The delivery date was agreed on the 20th of May, but due to problems with the green coloured pieces from their suppliers they could only maintain a delivery of the final tuk-tuk as of the 10th of June.

We then made small changes, such as removing the middle seat bank and replacing it with a box that can be locked to guarantee the transportation and safety of our personal belongings as well as the spare parts. These amendments were finished and ready the 10th of July, with a delay of about one month due to the fact that they were not foreseen to take that much time. The solar panels were installed by a local Thai company (CFEE) within five days.

The lithium batteries were purchased from Shenzhen Auto-Energy Technology in China. We purchased them the 15th of May. The expected delivery time was 25 working days (15th of June). Due to problems with the international money transfer the payment arrived in China the 10th of June. Therefore the expected delivery date was the 10th of July. Due to the delay of the delivery (partly caused by the customs) the batteries arrived in Bangkok the 3rd of August, with a delay of about two months. I will try to explain the reasons for it later in other chapters, as the late delivery of the batteries represents the main cause for the overall delay and the late departure. It even put the whole project at risk.

2.5.3 Budget

The budget has to be flexible and based on the assumptions made in the other parts to provide an overview about the spending and the financial sources.

- Depending on the route (distance, time)
- Two options (Gas vs Electric) to evaluate the differences and to choose from
- A first draft has to include all the costs of the trip (prior, during and afterwards)
- All major expenses
- Communication expenses
- Security costs (insurance, etc.)
- Personal budget
- Guide
- Transportation (tuk-tuk + maintenance)
- Preparation
- Communication (e.g. website, printing material, etc.)
- The budget also needs to specify the expected due date for the major expenses and provide a cash flow forecast.

The draft will be constantly updated to respect the changes in the other parts and will be finalized after the trip.

During the implementation of the project some spending had to be delayed due to the lack of sponsors and financial sources but at the departure date the budget and the cash flow forecast were within the plan. Including our personal input the total project was financed at 90% and the cash flow guaranteed the coverage of the expenses until at least beginning of November 2015. The total budget could at some point slightly decrease from EUR 60,000 to EUR 50,000 by removing unnecessary spending, but at the end we had to include other unforeseen costs, therefore the total budget remained the same as initially planned.

2.5.4 Overall planning

An overall planning in the form of a GANTT chart was provided and constantly updated to keep track of the main project activities, the interdependencies of

the tasks and the critical path (possible delay). The first draft had to include an estimation of all the necessary main activities and responsible persons for each task and provide a global timeline. The final planning included a resource allocation scheme.

In the appendix you can find the GANTT chart and the resource allocation scheme. During the execution we encountered many problems, such as a short notice of delays that could not be resolved using a GANTT chart.

The project plan chart was useful to show the final consequences of delays in each task but it does not tell you any solutions. We got biased by the planning that showed that the final objective was still on track, while we did not realize that delays in the tasks made us use all the spare time to compensate them on the paper. Therefore at the end in theory the project was still on track, but in reality we had lost all flexibility and had no time left to compensate further delays in the execution.

Another main problem we experienced was caused by our plan: the relationships between the tasks were not modelled correctly and we used too much resource levelling and therefore we added too much tasks on the critical path. Resource levelling is normally used to schedule tasks in parallel in order to save time and reduce costs by applying a better resource utilization, but the disadvantages are that you reduce slack time and therefore flexibility, and you increase the risk of delay as more activities become (near) critical.

That is exactly what happened to our project: for example we did not take into account the fact that Tuk Tuk Factory could not provide us with the vehicle papers (that were required to apply for the number plate which was needed to start the two-month long registration process in China) before they had received the chassis number.

Initially we had scheduled the task of vehicle production and vehicle registration as separate tasks. As we were running late for the order and the production we just rearranged them as parallel tasks. But finally the registration could only be started after the production of the main body, which means that the delay in the production also caused a delay in the registration.

There were other additional delays that we had not expected including late reactivity from Tuk Tuk Factory and the need of sending the original papers by post to Paris. In a normal project such unforeseen activities would have been considered as

normal and would not have a significant impact. But in our case every delay had a direct influence on the overall success.

2.5.5 Legal structure

A legal structure needed to be set up to provide a legal framework for the trip. The structure and the legal framework allows the participants to:

- Receive money from sponsors
- Keep track of the financial resources
- Be compliant to a standard that is widely recognized and internationally accepted
- The participants can act in the name of the organization and the vehicle and other investments can be made for the organization
- The founders of the association are liable within the limits guaranteed by the state and the French and international law
- Accounting has to follow the legal requirements and the money can only be used in accordance with the mission of the organization

After reviewing different forms of legal structures, the final project structure was established in the form of a French 'association' (non-profit organization) in Paris and under the French law. A public and non-profit organization was set up in France on the 9th of February 2015 under the name of 'The Pilgreens'. The objective of the organization was defined set as follows: to promote the use of cleaner sources of energy and support the mission, the organization foresees, among other things, a trip aboard an electric vehicle, before continuing to develop the organization under the pro-environmental philosophy of the founding members. This establishment binds the project with the legal requirements of a non-profit organization in the European Union.

2.5.6 Press release to media and other stakeholders

All stakeholders must be constantly updated by being given the access to the relevant information and the relevant stages of the development of the project (preparation, forecast, travel, finalization). This is assured by the emission of official press releases for every major event in the project development.

This was an optional task and at the end we reduced the press releases to the main updates and core events. Overall we only published three official press releases, while the invitation to most of the events on our way was finally handed over to the local event organizers. Here they are:

- *The press conference on 28th May 2015 (EN, FR, TH, 2015-05-21)*
- *The farewell-party @Ocean Bangkok on 27th June 2015 (EN, TH, 2015-06-04)*
- *The Kickstarter campaign (EN, 2015-06-10)*

The reason for this 'failure' is analyzed in the chapter about motivation.

2.5.7 Communication plan

The goals of the communication plan are as follows:

- Attract public and inform them about the trip
- Create a network of interested people (community of followers)
- Allow to send updated news to that network
- Communicate the vision, goal, motivations
- Interact with stakeholders and communicate to them via the media

The final communication plan provides companies with the details of partnership and sponsoring opportunities.

Besides the communication plan we also created a Marketing presentation (in the form of a PDF document), an advertising video as well as a PowerPoint presentation that we usually used.

These documents were not foreseen in the project plan but were finally the most important utilities in our communication strategy.

A detailed analysis of our communication could be done at the end and after termination of the project. By today we do not have enough data to examine whether the way of communicating was the most efficient or not. We did change the plan a few times by taking into account suggestions from our partners.

2.5.8 Communication tools and channels

The following communication tools have been set up, monitored and updated on a regular basis:

- Online
    - Website
    - Social media
        - Youtube-channel
        - Facebook (page and group)
        - Twitter
        - Instagram
        - Blog
        - Newsletter (own + partners')
- Offline
    - Press
    - Radio
    - TV
    - Magazines

The launch of an entirely new website including a blog was planned in June prior to the departure, but finally realized in September during the travel. With the help of Google Thailand inc. a communication plan for social media was elaborated. It included five daily updates and posts on Facebook and Twitter. Videos were regularly posted on Youtube.

Due to unforeseen problems with the censorship of social media in China we had to reduce the frequency and adapt to the local Internet connection.

We underestimated the difficulties to find a working Internet connection and the time it would take to maintain a network of followers. A possible solution could have been to have a team in France or in Thailand that takes care of all the aspects around communication but we had decided to organize the communication by ourselves. Retrospectively we would now consider making a different decision and delegate some work to a team in an office – for example we could have hired a Community manager. We also got inspired by "Pole to Paris", another project of the same kind as The Pilgreens' travel.

2.5.9 Technical preparation and documentation

The goal of the preparation was to make the trip as safe as possible and exclude any technical failure or foresee measures in case of technical problems.

- A maintenance training at Tuk Tuk Factory was set up before the travel.
- The following documents were prepared prior to the trip:
    - Documentation of the technical requirements
    - List of spare parts
    - Maintenance manual
    - Security manual

The technical documentation had to allow the participants to communicate and prove the technical feasibility. On the other hand it had to allow the execution of the trip, meaning that it had to provide some maintenance aid and ensure safety.

Together with Tuk Tuk Factory a list of necessary spare parts was set up and a maintenance training was held at their factory showing the necessary maintenance steps and possible repairs.

2.5.10 Event organization in every major city

During the journey events have been organized in order to meet persons of public interest. The idea was to discuss the possibilities of electric transportation, create awareness and promote cleaner sources of energy.

The events have been used to conduct a study on 'the perception of electric mobility in developing countries and how an international organization (NGO) could intervene to promote the use of cleaner sources of energy in selected countries'.

The events were developed and organized around the following keywords (linked to the travel): sensitize, educate, set up projects, promote solutions, and encourage people to take action.

In all the big cities we have organized meetings with key people of the electric mobility (mostly in the capital cities). Educational events (in schools, universities, and companies) are also planned and have been organized at universities, for example in Bangkok (Thailand), Kunming (China), Almaty (Kazakhstan), in Baikonur (Kazakhstan), in Tbilisi (Georgia), and in Belgrade (Serbia). There were many events planned to the attention of teachers, students, parents and public. During

the presentations we provided young people with information about environmental issues, solutions for cleaner transportation, evolution of our societies, and environmental care by presenting our purpose.

2.5.11 Sponsorships, partnerships, and funding

Sponsorings were granted from different financial sources to cover all the expenses related to the trip and to provide a funding for the organization. The collected money was used to finance the trip but could also be used within the goal of the organization. Any extra money that would not be used at the end were expected to be donated to another organization that is in line with the values of the founders, or retained to be deployed for further activities within the organization.

Sponsors/partners have to be aligned with the overall goal of the organization and the core values of the project. The idea is not to 'sell' a product but provide a win-win situation. Partners could have a certain level of visibility towards the media and other advantages that are stated and detailed in the communication plan.

Financial sources could include:

- Governments and public fundings
- Charity and other organizations
- Public organizations such as universities or cities
- Companies (B2B support)
- Private persons (B2C donations)
- Crowdfunding
- Contribution of the founders (limited!)

A complete list of all sponsors and partners is provided in the stakeholder analysis. Identifying then convincing the different partners and especially sponsors was the most difficult and challenging part of the preparations. Especially as the time between the announcement (official launch in February) and the departure (initially planned in June) was limited (constrained to five months). This is also the main reason why the payment of the sponsors (cash flow) arrived quite late and caused a delay of some tasks (such as the order of the batteries and the tuk-tuk).

2.5.12 Film, photo, and documentary

A professional film and photo documentation were planned to be released during and after the trip. The planning for it included the equipment and a story board. The documentary was about the preparation, the trip itself and the events prior, during and after the travel.

The filming was ongoing and we finished some small clips. But an overall plan for the documentary is still missing and has not been realized yet.

2.5.13 Logistic and equipment

A packing list including all the important parts needed for the travel is made available together with the source and the timing to make sure to be ready at the departure date. This includes:

- Insurance and tuk-tuk registration
- People + vehicle + tax compliance
- Driving licence requirements
- Visa
- Accommodation (tent, sleeping bags, etc.)
- Personal care
- Medication & life support (health insurance)
- Vaccinations
- Medication (regular + emergency)
- Personal insurance
- Emergency contacts in each country and place
- Training and preparation for unexpected situations

A packing list was provided and set up. Every item was assigned to a responsible person in the team to make sure that everything was ready and set up on departure date. This list was created and verified with the help of other experienced travellers, medical supporters (doctors), and other key individuals.

The logistics were overall all right, at least the documents (visas and tuk-tuk) were accepted in all the countries, and there has not been any problem that could not been resolved by ourselves, although passing through the Russian-Georgian border was a hassle due to administrative constraints.

2.5.14 Insurance and tuk-tuk registration

The tuk-tuk needed to have an insurance to fulfill the international travel requirements but also in order to avoid any expenses for the participants in case of a severe accident or any unlucky situations, such as a theft or any forms of violence.

The registration of the tuk-tuk was complete (licence plate: DS-205-FP) and the papers were brought to Bangkok by Rémy on the 17th of June. The insurance was provided by Allianz. The tuk-tuk was insured against all possible damages in most of the countries we travelled through up to the value of EUR 100,000,000 (civil responsibility) and EUR 18,900 for the tuk-tuk. The driver was insured to the amount of EUR 250,000.

2.5.15 Medication and life support

We needed to be equipped with our own medical kit and be able to treat the most common diseases and problems by ourselves (first aid kit), however an insurance which we were offered could cover any possible medical fees and expenses related to any potential health issues regardless of the country.

MSH International provided a fully health insurance for all participants during the whole travel. A medical kit was acquired with the help of doctors and pharmacists as well as our insurance. The medical kit had proved to be efficient for the small problems we encountered.

2.6 Project priority matrix

Project management often relates to the management of schedule, budget, and performance. Indeed, the most important consideration in project management is the trade-off between time, cost and requirements. The project priority matrix is used to identify which criterion is constrained, which should be enhanced and which can be accepted.

Constrain: The project must meet the completion date (time), specifications and scope (requirements) or budget. A constraint is considered when a fixed deadline,

an absolute limit of the budget or some critical requirements which need to be fulfilled are planned.

Enhance: Which criterion can be enhanced? Given the scope of the project, which criterion should be optimized? Enhancing time or cost means making time shorter or cost cheaper whereas enhancing requirements means improving quality.

Accept: For which criterion is it acceptable not to meet the original perimeter? When trade-off has to be made, is it permissible for the schedule to slip, to reduce the scope and performance of the project or to go over budget? Accepting time or cost means postponing the deadline or increasing costs whereas accepting requirements means decreasing quality.

Table 2.2 Project Priority Matrix

	TIME	REQUIREMENTS	COST
Constrain	X		
Enhance		X	
Accept			X*

* depending on external funding

Time was constrained in the case of our project since there was a fixed arrival date (initially the graduation day at IAE Toulouse on the 7th of November, and later the COP21 event in Paris at the beginning of December – arrival in Paris expected on 4 December 2015).

In the project the requirements could be enhanced, meaning that the ways of communication, the number of presentations and the interaction with the followers can always be improved.

The budget was determined by us at the very beginning, and based on this budget we have set up a fund collection objective. An increase in the budget and the costs could be accepted as it would have simply implied increasing the sponsoring and finding more supporters. This is only possible within some limits and by investing more time, and it should be used with care and only in the case that an increase in the budget cannot be avoided.

2.7 Limits and exclusions

The following limits and exclusions must be kept in mind while planning the project and the outcome:

- The amount of money spent by the participants must not exceed 5k Euros per person.
- The currency exchange risk will not be excluded (no hedging or buying forward).
- All preparation work is done by the participants or done on voluntary basis (try to avoid hiring some people for communication or other activities).
- Defining a risk free route to avoid major difficulties is possible.

The budget was initially based on estimations and could therefore vary.

2.8 Assumptions

The assumptions must be kept in mind while planning the project and the outcome:

- In case sponsors will not cover all the fees the missing fees should be covered by the participants.
- Political situation is and will be stable enough to travel in the selected areas.
- Visa requirements will not change (planning to execution).
- All participants do not have any personal constraints during the travel period (June - December 2015).
- Gas/electricity prices are calculated on prices dated January 2015 with a 10% risk adding and will not change significantly.
- Currency conversion is based on the rate of the 01/05/2015 and will not change significantly.
- All calculations are based on Euros and km (kilometres).
- The electric tuk-tuk that will meet all the requirements can be found on the (Thai) market or partly developed on the basis of an existing electric tuk-tuk by modifying it.

In case that any of these assumptions would not apply anymore the trip could be postponed, replaced by a similar trip (shorter, other route) or completely cancelled. All the money collected at that point will be either returned or used within the aim of the organization.

2.9 Stakeholder analysis

As part of the project plan a stakeholder analysis has been conducted in order to develop the project accordingly with the stakeholders' needs. All stakeholders were identified and classified and then categorized as supporters, neutral and opponents.

Table 2.3 Stakeholder Analysis

High power (high influence on the project)		**Governments** **Administrations** Accommodation (hotels) **Media** (press, TV…)	**Participants** **Tuk Tuk manufacturer** **Suppliers**
Moderate power (little influence on the project)		**Institutions** Agency (China)	**Sponsors** **Partners**
Low power (no influence on the project)	Supporters of fossil driving Traditional car manufacturers	**Public** Electricity provider	**Followers** **Community** Participants at events
	Opponents (no interest)	**Neutral (moderate interest)**	**Supporters (high interest)**

This analysis includes:

- Commissioners: those that pay the organisation to do things
- Customers: those that acquire and use the organisation's products
- Collaborators: those with whom the organisation works to develop and deliver products
- Contributors: those from whom the organisation acquires content for products
- Channels: those who provide the organisation with a route to a market or customer

- Commentators: those whose opinions of the organisation are heard by customers and others
- Consumers: those who are served by our customers: i.e. patients, families, users
- Champions: those who believe in and will actively promote the project
- Competitors: those working in the same area who offer similar or alternative services

2.9.1 Participants

The participants have a high interest in the success of the project and are therefore considered as main supporters, developers, and driving force (organizators) of the project. Their interest stems from their intrinsic motivation that is related to the desired outcome of the travel. Therefore they are highly important for the success and their degree of motivation should be kept high. Identified participants are:

Ludwig Merz, student at IAE Toulouse and CMMU Bangkok (Master International Management). Due to his undergraduate studies in industrial engineering at the University of Applied Sciences in Munich he is the technical responsible of the project and he takes care of the tuk-tuk, the spare parts, the tools and maintenance of the tuk-tuk. Besides that he is the financial director. He has no health problems and is highly motivated.

Karen Koulakian, student at IAE Toulouse and CMMU Bangkok (Master International Management). Due to his background in cross-cultural management he takes care of the planning of the itinerary, the visa processes and administrative requirements, as well as the meetings on the way. Besides he is the communication director. He is also coordinating the sponsors; he is the main contact. He has no health problems and is highly motivated.

Rémy Fernandes-Dandré, student at IAE Toulouse (Master International Management), previously working at Young & Rubicam in Paris, is responsible for the communication and the legal structure in France. Due to his media work he will also take care of the final documentary. He is the president of the organization. He has no health problems and is highly motivated.

2.9.2 Sponsors and partners

Partners and sponsors are selected individuals, institutions, companies or other organizations (such as universities or governments) that have chosen to take part in the project. So they are also considered as supporters. The difficulty is to identify them and convince them to partner up with the Pilgreens. And once they are partners and/or sponsors they have to be actively managed accordingly with their individual needs (meetings, information, fulfill the contract obligations). This is an important group of stakeholders that must be integrated in the planning. Identified partners and sponsors are:

IAE Toulouse: University where the participants are enrolled in. All the members of the Pilgreens' team are students at IAE Toulouse and this project is considered as an internship project. The project was granted a financial aid from this institution.

Mahidol University & CMMU: University of departure and financial sponsor. They have a high interest in environmental care and wish to promote themselves as a "sustainable university". They are also highly interested in the safety of the journey, and they accept to provide medical care.

AccorHotels: Main financial sponsor providing free accommodation during the trip (20% of the cities). They have a high degree of interest in environmental care and they promote environmental initiatives through 21 commitments (Planet 21 program–) for the well-being of the world.

Franco-Thai Chamber of Commerce (FTCC): Professional partner in Thailand that provides connection to French and Thai companies around Bangkok and in France. They also arranged the participation of the Pilgreens at "La Galerie COP21" event (Musée de l'Air et de l'Espace) in Paris, with the support of the French Embassy in Thailand.

Conseil Départemental des Hautes-Pyrénées: Institutional sponsor based in south France. They have a high interest in environmental care and wish to promote the initiatives taken within their region.

Cyber-Concepts IT consulting: German IT consulting that is interested in the project and the outcome. The CEO has a personal interest in environmental care.

Fondation Crédit Agricole Toulouse: Foundation sponsoring the project with a financial aid and having a high degree of interest in environmental care.

Hair & Chic: French-based company that is interested in the project and the outcome. The CEO has a personal interest in environmental concern.

MSH International: Health sponsor that provides a free health insurance for the participants covering the whole trip. They have a high degree of interest in the safety of the project due to their responsibility as an insurer.

Rotary International: Supportive organization of the project. Provides connections and support along the way, mainly in the form of contacts and assistance. The Rotary and Rotaract clubs are mostly spread in Europe and Turkey, they are a network of entrepreneurs that may join the Pilgreens' network in the future. Meetings have been arranged.

Kiwi & Kom-Kom Products Co. Ltd: Thai company that is interested in the project and the outcome. The CEO has a personal interest in environmental care.

Young & Rubicam: Communication agency based in Paris. Support through Rémy (employee until June 2015). Low degree of further interest in the project. No financial support.

ART++: International company specialised in the production of smart and waterproof bags. They provided waterproof bags that have a geolocation technology (if connected to a global positioning system). That partner is interested in the project outcome.

Comité de labellisation COP21: The committee for the COP21 labellisation has granted the "labellisation" to The Pilgreens' project early beginning of October 2015. In other words, the French Ministry for Ecology, Energy, Sustainable Development and Sea supports the project and acknowledges the organization's goals and values. This committee will symbolically communicate on the green initiative of The Pilgreens, among with other initiatives, as part of the COP21 labellisation to non-profit organizations.

2.9.3 Tuk-tuk manufacturer and other suppliers

The suppliers of the tuk-tuk and other parts (batteries, solar panels, etc.) are also considered as supporters, as it is in the nature of their business to support their

clients. When their role should turn into a partner (sponsor) they might be more reluctant but still do their business to support the project (neutral). The difficulty is to choose the right partners (the supporters among them), as the latter are more likely to do their best to help for the success of the project. So the selection process is highly important. Also the advantage of being a supporter (instead of a supplier) for them needs to be explained and communicated in a clear way (communication plan) to convince them to support the travel. The difficulty is to identify them and convince them to partner up with the Pilgreens. And once they are partners they have to be actively managed accordingly with their individual needs (meetings, information, meet the obligations, etc.). This is also an important group of stakeholders that must be integrated in the planning.

Tuk Tuk Factory (TTF): Supplier of the electric tuk-tuk. They have a high interest in achieving the project without any technical problems. Will be held liable for technical failure. A contract is signed that guarantees the support during the travel (e.g. sending out spare parts or technical assistance) and the Pilgreens have to include TTF in their communication.

Shenzhen Auto-Energy Technology Limited: Supplier of the lithium batteries (NMC). The project got delayed due to a problem with the international money transfer. They have no interest in sponsoring the project, and have no particular interest in speeding up the production process. However research showed that they provide high product quality.

Clean Fuel Engineering Enterprise Co., Ltd (CFEE): A Thai company based in Bangkok that produces tuk-tuks and golf cars. Their product range includes electric vehicles as well. In 2010 the CEO, Aj. Morakot Charnsomruad, has built a solar roof for one of their electric tuk-tuks. CFEE supplied the solar roof for the Pilgreens' tuk-tuk. The deal with that company is simply based on a contract. The company has a great deal of experience in that field and is therefore the ideal partner.

SafariOffRoad4x4: A Thai automotive tuning company based in Bangkok. They helped us customize the vehicle; they changed the seats, suspensions, and other small details to prepare it for such a long road trip. The owner got acquainted with the project and agreed on a small sponsorship (in the form of a discount). In return we posted their logo on the tuk-tuk. The company had the right expertise and has an interest in the project.

2.9.4 Community and followers

The influence of the community and the followers is quite low and they are considered as supporters. So the objective is to keep them satisfied by providing updated information about the project and answering all kinds of questions, in order to grow the community using the network of existing followers. It is not necessary to allocate too much time to these groups.

Facebook community: About 4,000 followers with a regular interaction of about 10% with the project (shares, etc.). Facebook advertising has brought about 500 additional followers. A continuous growth is expected.

Newsletter: 50 persons have subscribed to the newsletter. More promotion is needed.

Facebook group: About 250 persons have shown a deeper interest in the Pilgreens' commitments by joining the discussion group. More interaction is needed.

Twitter: About 300 followers. Regular retweets. A continuous growth is expected.

Instagram: About 350 followers. Photos are published regularly and also automatically integrated on the Pilgreens' website.

2.9.5 Media

Media outlets have been generating a lot of visibility for the project, in over 50 countries. They should be provided with good stories; they may turn into supporters. Some media in the area of environmental protection might already be, others must be actively contacted. Media outlets are approached either using public relations services from an agency (that was the case for the first press conference held at the CMMU) or by personal contacts. Media intervention in the form of interviews (TV, press, and radio) is also occurring during the trip in different cities.

Thanks to the press conference at CMMU Bangkok the 28th of May and some additional interviews in Bangkok, the Pilgreens have been represented in several Thai and international media. Most media like the idea of the project and the articles are in favour of the project.

2.9.6 Governments & administrations

Governments and administrations are quite important as their position is not always supportive but they can have quite a high degree of influence. So their requirements should be studied very carefully and the project should be adapted to meet their requirements. We were in contact with embassies in: Thailand, Laos, China, Kazakhstan, Russia, Georgia, Armenia, Turkey, Bulgaria, Serbia, Croatia, Slovenia, Austria, Germany, France.

The reactions are without exception entirely positive and supportive, and the project is mostly supported by the French embassies in all the countries we travel in. We have had a chance to meet with French ambassadors and consuls.

2.9.7 Public institutions

Institutions are important as their position is not always supportive but they can have quite a high degree of influence. So their requirements should be studied very carefully and if necessary the project should be adapted to meet their requirements. Their level of interest might be increased. The identified public institutions are IAE Toulouse and Mahidol University (CMMU).

During the travel various schools, universities and other institutions have been contacted so conferences could be organized. They do not have an impact on the direct success of the project and usually their interest in having us holding a conference at their institution is high.

2.9.8 Public

This wider group is not very influential over the project but the interesting part is that they might be turned from a neutral position to a supporting position (e.g. join the community or become supporters). Public must be integrated in the project as far as possible.

The goal is to raise awareness for cleaner sources of energy in the public. People are the main target of the campaign and the whole project. Usually the audience does like the idea and is in favour of the project. There is still a lack of action and interaction. The emotional connection is missing. To change the behaviour people have to get more actively involved in the project.

2.9.9 Non-supporters of the project

In general this travel does not harm anybody. So there is no direct opponent. Some individuals, companies and organizations might oppose the objective of promoting electric driving and cleaner sources of energy but they do not have a significant influence. The strategy is to monitor this group of people and provide them with information to convert them into a neutral or positive position.

At some point we expected resistance towards the project in countries whose income and resources are mainly based on fossil fuels such as Kazakhstan but till today this is not the case, and public as well as institutions are highly supportive.

CHAPTER III
RISK ANALYSIS

3.1 Risk analysis

Risk is part of our daily life, it is part of many decisions we make. The word risk is usually used to express a certain probability that an undesired event will happen. How big is that probability? What are the consequences and what degree of influence do they have on their environment? These matters are very subjective to each individual, for example I might consider something as risky while Karen does take it for normal and guaranteed. Difference in perception on this issue can lead to different identifications of risks and therefore different outcomes of a risk assessment.

Risk can be defined as:

- Literal definition of Risk and Safety Risk [dictionary]
    - The chance of injury, damage or loss; dangerous chance; hazard
    - Insurance: the chance of loss; the degree of probability of loss; the amount of possible loss to the company
- Risk – Any occurrence likely to adversely affect the attainment of project objectives[1]
- Risk is a probability, a mathematical quantity that can be measured, calculated or estimated
- Risk – The probability of an undesired outcome
- Risk – Probability of failure times the severity of the consequences
- Risk is either a condition of, or a multidimensional measure of, exposure to unpredictable loss or losses
- Risk is an undesirable situation or circumstance that has both a likelihood of occurring and a potential negative consequence on the project

[1] What is "Risk", Hall, D.C., Risk Management Working group INCOSE, 2002

In general, you can have risks from different categories such as political, environmental, financial, technical, or managerial. For the travel we have conducted a risk analysis as follows:

Table 3.1 Risk Analysis

High impact	Legal issues	Technical problems	
	Complete breakdown	Problems with the electricity supply	
	Accident		
Moderate impact	No telecommunication	Health issues	
Low impact			
	Low probability	Medium probability	High probability

3.2 Contingency plan

After we identified potential risks we set up a contingency plan. Depending on the risk we decided either to reduce the probability, reduce the possible impact (or even both), develop a contingency plan or ignore the risk.

We could acknowledge the advantage and quality of the planning we made beforehand. Other travellers that we met ended up losing weeks because of visa issues on the way, and they sometimes had other issues due to a lack of planning.

In addition, the planning of the events and meetings proved to be helpful; most of the planned events took place as planned, and new opportunities came up on the way.

Of course at some point this travel is including assumptions and unknown factors that could not be planned in detail, such as a breakdown or other problems with the Tuk Tuk. To account for them and be prepared to face any challenges, we had conducted a risk analysis and derived measures and consequences to account for the unknown.

At the end of the project we are now able to check whether the risk already occurred and if the measures taken in advance proved to be efficient (or exorbitant) or if there were any other unexpected problems that should have been included in the risk analysis. This retrospective analysis allows a comparison between the plan and the reality during project execution and we can justify any deviations.

3.3 The Analysis

The analysis is divided in some main parts.

The practical implications during the travel will be marked in italic.

3.3.1 Emergency measures

In general, we always carry enough money with us to pay for urgent expenses. On the bank account enough money for emergency flights will be stored and accessible via Visa and MasterCard.

In case of an absolute emergency one or more participants can take a flight or a train back to their home city or another place.

We had no major problems that required such drastic measures and at the end the financial reserves turned out to be sufficient.

3.3.2 Technical problems and breakdown

Reduce impact (minimize downtime and prevent an overall delay): together with the manufacturer of the electric Tuk Tuk and other experienced travellers we have set up a list of spare parts and tools that we have on the trip in order to be able to deal ourselves with most technical problems. A support contract with Tuk Tuk Factory will ensure that they are also able to supply parts that are either too heavy or not worth taking with us (due to low probability of failure). The factory can send off any parts from Bangkok to any location (city or town) during the trip using international express delivery. Additional days (maintenance breaks) are included in the schedule and they can be used in case that repairs are needed.

Reduce probability: A maintenance training and a spare-parts instruction related to the Tuk Tuk will assure 90% of the possible breakdowns and regular maintenance breaks are included in the schedule to check the vehicle and prevent a failure on the way.

Contingency plan: Local garages can always fix the mechanical parts and if we run out of electricity the Tuk Tuk can be pushed over a few kilometres. We also have a rope-system that allows any other car to pull the Tuk Tuk or we can call a truck to transport it to the next charging point.

We had two main breakdowns. The first breakdown, in Thailand, was caused by heavy rain that flooded the Battery Management System (BMS), which subsequently led to a complete automatic stop of the system. Due to the maintenance training we were actually able to handle this problem by ourselves and deal with it. We used a local truck to lift up the Tuk Tuk we repaired the BMS within two hours and improved the protection against water to prevent the same problem from happening again. The spare parts do also contain a second BMS, which was not needed this time.

The second problem occurred twice, in China: the breakdowns were due to a mechanical problem caused by a broken bearing. The first time we called a tow truck to transport the Tuk Tuk to the next local garage where the problem could be fixed within a few hours. As we had anticipated the fix to possibly break again we ordered the original bearings from a Chinese supplier with the help of Tuk Tuk Factory. The same issue occurred once again, but we already knew what to do and we could use the original part which we had ordered and received to fix it (anticipation). For the reparations the taken spare parts turned out to be useful. We did not use all of them but we had no major disadvantages (except some weight) in taking the other parts with us and we can even use them in the future.

3.3.3 Problems with the electric supply

Our travel relies on electric charging points every night, meaning that we expect to have some accommodation solution every single night along with a charging point and also some charging points during the day, for example in restaurants during lunch break.

Reduce probability: We planned our route carefully to have a charging point at least every 150 km. The batteries provide at least 200 km of autonomy (when fully charged) and are therefore sufficient to reach the next charging point.

Contingency plan: In case of a problem we could always call for help and use another car or a truck to pull the Tuk Tuk to the next power source.

Twice we had problems with the electricity supply at our accommodation and we could not charge the Tuk Tuk fully. Consequently, we had to leave with a low battery level, which led to unforeseen stops of the engine due to low voltage and energy, but we could use the "spare days" to compensate that delay. When that problem

occurred, we had no choice but to push the Tuk Tuk a few kilometres in order to reach the next power supply. Once in China on a steep road in the mountains we had to rely on another car that pulled us a few kilometres up to the next village. The rope we had foreseen in this case was not as strong as certified but we could luckily tie it again. An improvement would be to really test all components (including the cable for tying the car instead of relying on the given specifications).

3.3.4 Health

Reduce impact (costs): MSH International is an insurance that covers all health-related costs and has a 24/7h emergency hotline service.

Reduce probability: A health check-up of all participants prior to the trip ensured that the latter are in good health condition. A water cleaning system will be purchased to make sure that the water that is used on the way is free from bacteria.

Reduce probability: All advices for traveling in rural areas (such as hygiene and caution) will be studied and applied.

Reduce impact and probability: All participants will have all the necessary and advised vaccinations.

Contingency plan: A medical kit has been set up including a first-aid kit, and medication will be taken according to the advice from doctors specialized in travel and repurchased in big cities if necessary.

The health check up proved the good health condition of all participants. In general, we were lucky not having had any serious health problems during the travel, but the medication has proved to be useful for smaller diseases (or discomforts) such as diarrhoea.

3.3.5 Legal issues

Reduce probability: All legal requirements have been checked with the responsible persons (e.g. embassies) prior to travelling and all important documents are carried in several copies stored at several places.

Reduce impact: Embassies and authorities will be informed about the travel beforehand so they can help in case of a problem.

Due to the preparation beforehand we did not have any legal issues in any of the countries. We met other travellers who had visa issues due to bad preparation.

3.3.6 Telecommunication

A satellite communication system (e.g. from Satphonestore [2]or Spot [3]or another similar provider) can be purchased and tested two weeks prior to the trip.
The actual impact of a loss of communication is not so high, as there are always cities or towns within about a range of 150 km at every point of the travel.

After being advised by other travellers and due to the difficulties of importing a satellite phone into Thailand (legal issues) we finally did not purchase an expensive satellite phone. Instead we are getting several local SIM cards for our GSM-phones in each country. This has proved to be safe enough.

In Kazakhstan it happened that we had no phone and no Internet connections for more than 24 hours. Finally, this had no negative impact on the overall project and the safety was always guaranteed by other cars that passed on the same route as well as the local police in the small towns. Nevertheless, communication was delayed but that had been considered as an accepted problem and during the whole travel we were able to reach our contact persons and our relatives back home to give them an update.

3.3.7 Safety

Reduce probability: The route selection has been done according to local advice and (travel) experts (such as embassies or travel agencies) in every country. In addition to that we never drive further than 150 km from a city, take care of and respect the given security advice.

Research (about other travellers) has actually shown that the chosen route is generally safe to travel.

During the travel we have modified the route in Kazakhstan to avoid the northern cold. The initial route was supposed to include the capital city, Astana, but due to the late departure from Bangkok and two-month delay we then expected colder

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[2] http://www.satphonestore.com/
[3] http://international.findmespot.com/

weather over the period so a new route was drawn across southern Kazakhstan. That change allowed us to save about five days.

The second modification was made upon the advice of the French embassy in Georgia who advised to avoid the Abkhazia area in the northern-western part of Georgia. A new route free of danger has then been planned in accordance with the local authorities. In general, we experienced the problem of bad and outdated maps and we had to reroute locally by asking the inhabitants for the way. This happened especially in China but also Kazakhstan and the other countries on the way.

3.3.8 Accident

Reduce impact: The Tuk Tuk is insured by Allianz against all possible damages in most of the countries we are travelling through up to the value of EUR 100,000,000 (civil responsibility) and EUR 18,900 for the vehicle. The driver is insured to the amount of EUR 250,000.

Reduce probability: We comply with all legal requirements and traffic rules. Also the Tuk Tuk can not be driven faster than 60 km/h, this therefore reduces the risk of an accident.

We had two small accidents in China and Georgia where the police confirmed that it was not our fault, as other drivers crashed into our Tuk Tuk. Fortunately, there was no damage to health involved; we ended up with small scratches on the Tuk Tuk.

3.3.9 Unexpected problems

At some point we also expected problems that were not anticipated in the risk analysis:

At times, especially in Kazakhstan, no hotel or guest house could be found in (very) small towns. Luckily this issue had a low impact on the project since we were kindly offered private hospitality from local people. Outside camping was also planned, but only when we could recharge the batteries at the same time. So far that did not occur and did not prove to be necessary.

Once in Kazakhstan we got informed that the route we were going to take over a few days was not in a good condition and nearly unusable, so we had to make a

detour of about 700 kilometres. The resulting delay of three days could be compensated by removing break days which were planned later. But we did not expect one of the main roads in the country to be not accessible. This shows the importance of always having spare days to account for unforeseen problems.

We had not taken into account the internet censorship in China. This was including Facebook and Google (our email provider). Finally, this led to a delay in our communication but we found other providers to replace the censored services.

In general, we had accounted for the major difficulties in the preparation phase and we were positively surprised how efficient our risk analysis and our planning turned out to be. Compared to other travellers whom we met on the way we had less issues and problems during the travel and a really smooth execution in terms of any problems. Of course there were daily difficulties such as weather, minor problems, timing, and so on but we anticipated the main issues beforehand and solved them in advance.

CHAPTER IV
PROJECT MANAGEMENT

4.1 The planning

In this part we will have a closer look at the planning from a project management point of view. The analysis and the gap between the project planning and the actual execution can be interesting as it should help learn from one's mistakes. As Akio Morita, the founder of Sony, said: "Don't be afraid to make a mistake. But make sure you don't make the same mistake twice."

In the following and next parts we will then try to find the reasons for the differences and explain how we could have improved in the project and what lessons can be learned to improve the management of such kind of projects in general.

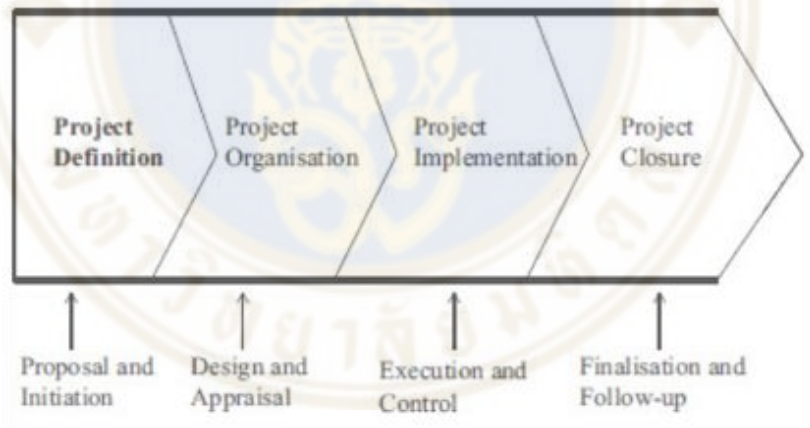

Figure 4.1 The Four Phases of a Project
(Source: Prof. Nathasit Gerdsri, Course on Project Management, CMMU 20414)

During this analysis we have to keep in mind that today the preparation phase (also called project organisation, which was the most important part of the planning) is finished, while the actual travel phase (project implementation) and therefore the overall project is not finished yet. So the second part of the results and the analysis are based on the experience of the first half of the travel. The closure of the project is expected after the finish of the trip beginning of 2016.

4.2 Why project management?

If you look at the definition of a project you find two main descriptions[1]:

- "A unique set of activities that are meant to produce a defined outcome, with a specific start and finish date, and a specific allocation of resources.
- A complex, non-routine, one time effort limited by time, budget, resources, and performance specifications designed to meet customer needs.

According to both, The Pilgreens' travel - especially including the founding of the organization - is a project and not part of daily operations, as it is a unique activity that will be only executed once (such as the foundation, even if the travel might be repeated or extended in the future). So now I will have a look at the project management from an outsider's point of view to find the points that could be improved.

4.3 Overall result

The criteria for a successful project are usually not easy to define and they do highly depend on the project definition and the project's objective. Normally it is the client (the end-user or the person/organization that initiated a project by usually paying for its costs) who does either accept the result or not, even if there is not always an "either-or" decision (for example in some cases a delay or a lack of quality might cause a price reduction but not a total failure of the whole project). In our case we have to measure the success by comparing the results with our own objectives (POS):

Promote electric mobility based on renewable energy sources by travelling from Bangkok to Toulouse with an electric vehicle (in the form of a Tuk Tuk, 3-wheeler) from 15 July to 1 December 2015 relying on external funding and personal contribution of the participants.

As a matter of fact the travel began the 9th of August 2015 with a delay of two months if compared to the initial objective and one month if compared to the final statement. However, the departure occurred as planned from Bangkok with an electric Tuk Tuk, that is based on renewable energy sources (solar panel and depending on the

[1] A guide to the project management body of knowledge (PMBOK® guide)

electricity supply in each country, see study in the appendix) and we arrived at our stand at the COP21 in Paris two days ahead of the deadline exactly within schedule (revised based on the delayed departure). The objective of the external funding has been achieved by 90%[2] and we managed to travel with that financial sources. So we finished the project within time and budget but we had to reduce the "quality" a bit. For example, we did not have very long breaks at some placed and therefore less time on the way for meeting local companies and we also had to remove some of the previously planned safety measures such as a satellite phone in order to not exceed the budget. We decided to save money on expenses that were not directly linked to the overall success of the project such as expensive and comfortable hotels.

Another way to measure the success of a project is to look at the following criteria of successful project management that were identified by Pinto and Slevin (1997)[3]:

- Commercial success (Project mission)
- Meets user requirements (Top management support)
- Meets budget (Schedule and plan)
- Happy users (Client consultation)
- Achieves purpose (Personnel)
- Meets timescale (Technical tasks)
- Meets quality (Monitoring and feedback)
- Happy team (Communication)

These points are related to a large scale project within a company and can hardly be applied for our case. So let us use a simplified version of success factors:

1. Schedule (delay)
2. Budget
3. Scope (requirements)
4. (Team satisfaction)
5. (Customer satisfaction)
6. (Quality of work)

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[2] See budget in the appendix

[3] Pinto, Jeffrey K., and Dennis P. Slevin. "Critical Success Factors In Effective Project Implementation

In general a project is always in the triangle between time(1), cost(2) and scope(3). That can also be applied for our planning. By increasing the budget we could have simply hired external support to increase the quality and the speed of the work or the other way around, we could have minimized the budget further and/or reduced the time needed for preparation by reducing the quality of the preparation and therefore the security of the whole operation.

A tool that can be used to check this triangle is the project priority matrix, which we created during the project planning.

If we have a look at it, we see that a slight deviation (increase) of the cost would have been accepted, but the initial budget of EUR 60,000 was respected. An increase of some expenses could be compensated by decreasing or even cancelling out other parts of the budget.

The requirements could have been enhanced further. As by today they are not fulfilled at a 100 percent, the actual progress shows that the main objectives were achieved at the end, as the promotion of electric mobility was proved with a successful eco-travel and the foundation of an organization in the field of electric mobility with first business contacts.

Delays in the timing could initially not be accepted. Regarding the planned ending of the project, the first internal objective of being in Toulouse for the graduation day (7 November 2015) will not be attained. Due to a modification of the itinerary the final arrival in Paris for the COP21 the 5th December 2015 will still take place while the arrival in Toulouse will be delayed by more than month by inverting the two arrival points and going to Paris first. This will further delay the arrival in Toulouse but it is a necessary step to arrive in time for the COP21 event which was the main goal.

The team satisfaction was measured at the end of the whole project, while in this case we are our own customers and the ones that actually judge the quality and performance of the work. Overall we were satisfied with our own planning, even though the tight involves some stress and does not give us a lot of time outside of the project work. If our travel had really some impact on the spread of electric mobility is hard to analyse and to say and will take some time to say, but we think that we had some local impacts by presenting our project to students and interested people. And the fact that we ended up with almost 4.000 interested people following our facebook page and listening

to what we shared by newsletters and posts and the fact that they still remember us shows that this extraordinary project could have some impact.

And the end we can say that we were able to bring the schedule back to track (at least for the COP21), the budget was respected and the overall performance and results will not be enhanced but attained.

However this was at the cost of flexibility during the travel, route-cutbacks, a slight reduction of events and the abstinence of personal breaks for the participants, and especially the renouncement of the objective of being in Toulouse at the beginning of November. Regarding this goal we failed, especially as time was marked as a constraint in the priority matrix and we had to postpone the departure twice.

4.4 Reasons for the failure

Bellis (2003)[4] identified five key reasons of project failures:

1. Ineffective decision making in managing changes (Organisation quality)
2. Project schedules with unachievable delivery dates (Process quality)
3. Excessive 'scope creep' (Product quality)
4. Ineffective coordination with subcontractors and suppliers (Organisation quality)
5. Ineffective control and communication over progress, and concealment of project status until it is too late (Process quality)

(1) The first point is not really applicable to our project because we were only three persons involved in the final decision-making, therefore we had short decision-making channels and a quick reaction time.

(2)As already discussed earlier the main reason for a failure is in our case that delivery dates were unrealistic and hard to achieve.

(3) The scope was not a reason for failure. On the contrary, the fact that for example the batteries are technically over performing (they do deliver more energy than specified) allowed us to travel actually faster and further than planned, to catch up with

[4] Bellis, P. (2003). Project Methodologies: An Introduction to PRINCE2 Methodology

the initial plan and to reduce the delay. And our own objectives were not excessive and were actually achievable. This is proven by the fact that we are able to achieve the performance and the overall project goal as there is promotion of electric mobility.

(4) The fact that we tried to force the Chinese supplier to unrealistic dates simply led to a confirmation of his part but finally he could not respect the agreed date. This issue has to be analysed under the aspect of cross-cultural management. The ineffective coordination with subcontractors and suppliers actually did not actually lead to a delay but led to a delayed communication of our "failure", meaning that we had to postpone the departure date and the event that was planned on that day in the last minute. As this happened twice our supporters lost confidence in the successful carry-out of the project.

(5) The last point mentioned is actually something that we experienced ourselves and we will detail this further having a look at monitoring and control.

4.5 Lack of monitoring

Monitoring is defined as "Compare reality (actual) against plan to identify variances (differences)".

Monitoring control is done throughout the project life cycle

- Must be frequent enough to alert management to potential problems before it is too late to correct them
- Frequency depends on project size, degree of innovation and risks, level of project responsibility
- Frequency is normally specified by the organisation

We actually had not defined a control process and details of the frequency, neither the responsible person for the control. Even for such a small project this could have been useful. As already mentioned in the chapter about the overall planning we unconsciously had the problem of "concealment". The monitoring showed a problem and a delay and instead of reacting we just adapted the plan until everything seemed to be feasible within the time again by removing even the last spare day and squeezing the activities at the maximum possible. By doing this we did not fail to plan but we actually

planned to fail. In practice the minor problem in any of the activities did then lead to an overall delay.

The general problem of monitoring is that there needs to be a plan of how to deal with the results. Normally monitoring causes non-planned activities or opportunities, which need to be resolved and this is a different action in the planning and execution of projects ("control").

4.6 Lack of control

Control in a project is defined as "Determine the causes of differences and take action to realign actual and plan".

This part had been completely ignored in the project plan and so the measures that we took to realign the delayed project were uncoordinated and not very well planned and often only involved a theoretical correction of the plan. There were no clear deadlines and responsibilities and therefore none of us wanted to be the one saying "this is unrealistic", as he would then be held responsible for the problem. The main reason why this did not lead to a failure of the whole mission was some luck and external help by companies due to their quick work we could actually save some time and avoid a complete abortion.

Other possible factors for project failures include the following points:

1. Lack of stakeholder/user input
2. Incomplete and/or vaguely defined requirements or specifications
3. Changing requirements or specifications
4. Lack of executive support
5. Insufficient planning
6. Underestimated time and/or resources allocated for design, development, quality assurance, and/or quality control
7. Technological incompetence
8. Insufficient resources
9. Unrealistic expectations
10. Unclear objectives
11. Unrealistic timeframes

12. New or untested technology

(1) Due to our intrinsic motivation we did not experience a lack of input. In other projects this can be a problem, as the people working on the project do not always have enough interest in the successful completion.

(2) The requirements were quite specific and the delay was not caused by an incomplete project plan. But this is certainly an important point in the project planning and it is indeed important to specify the objectives as detailed as possible to avoid errors, misunderstanding and resulting changes.

(3) We did not change the requirements, but experience showed that this mistake is quite common and often caused by an incomplete planning at the beginning.

(4) We had the necessary executive support by all stakeholders.

(5) Research showed that insufficient planning is one of the main failures of projects. In our case the planning was partly insufficient and deficient.

(6) This point does not apply for our project.

(7) Technical and technological competence is also needed to estimate the durations of the tasks. That is where we partly failed.

(8) From a retrospective point of view we did definitely suffer a lack of (competent) resources in terms of human capital (skilled people for audio-visual content for example to reach more people on the social media).

(9) The expectations proved to be realistic as we could fulfil them.

(10) In the MBO (Management by Objectives) theory, a goal or objective should be defined using the SMART criteria [5] (Specific, Measurable, Ambitious/Achievable, Relevant, Time-bound). We tried to apply this approach wherever possible.

(11) For us the unrealistic timeframe was one of the main problems. From the beginning the timing for planning and execution was tight and therefore the risk of a delay quite high.

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[5] Use S.M.A.R.T. goals to launch management by objectives plan, TechRepublic
Broom, Harris, Jackson, and Marshall (1998)
Poister, Theodore H. Measuring Performance in Public and Nonprofit Organizations

(12) The last point can also be applied to our project, as we did actually order lithium batteries without having ever tested them before and without really knowing the technology ourselves. Luckily the technology worked but this was more to luck and technological preparations rather then intensive testing.

These 12 points cover the main reasons for a project failure and in our case they are in line with the problems we found in the analysis. In general, it is useful to keep such a list in mind when planning a project and to actively avoid these points and pay special attention to not do the common mistakes. For example, we could have analysed the timeframe more carefully and paid more attention to the fact that the technology we used was actually untested and should therefore require more time to implement.

Other sources do state other causes for project failure.

Figure 4.2 Causes of Project Failure
(Source: Prof. Nathasit Gerdsri, Course on Project Management, CMMU 2014)

We tried to avoid these main causes of project failure as there are a lack of planning and poorly defined objectives/scope, by creating this project plan.

4.7 Reasons for the success

At first there is a general process that needs to be respected for a project:

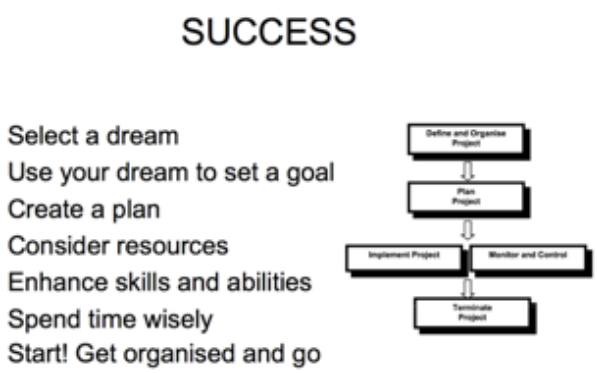

Figure 4.3 Causes of Project Success

(Source: Prof. Nathasit Gerdsri, Course on Project Management, CMMU 2014)

During the preparation we did respect these criteria. Besides there are other conditions that can be held accountable for the success of a project.

Jugdev and Muller (2012)[6] identified four conditions. There is no automatic transition and fulfilling these criteria does not automatically lead to a successful completion of a project, neither does every successful project fulfil all of them.

1. Success criteria should be agreed with stakeholders before the start of the project.
2. A collaborative working relationship should be maintained between the project owner (or sponsor) and the project manager.
3. The project manager should be empowered with flexibility to deal with unforeseen circumstances as they see best, with the owner giving guidance as to how they think the project should be best achieved.
4. The owner should take an interest in the performance of the project.

Criteria 1 to 3 do apply automatically to our project, as project owner and manager (client and project manager) are the same person. But as stated this does not automatically imply a success. At least we experienced less difficulties in the sense that we did not have to justify every decision and every change in the project plan and the results.

[6] Müller & Kam, Critical Success Factors in Projects

Factors that are crucial to the success of any project can also include the following points[7]:

1. Clear and clearly articulated goals
2. Comprehensive, long term, and detailed planning
3. Early definition of deliverable quality criteria
4. Active executive support with a shared vision throughout the project's life
5. Carefully planned implementation
6. Concise, consistent, complete, and unambiguous business and technical requirements Goals should be "SMART" (Specific, Measurable, Ambitious/Achievable, Relevant, Time-bound)
7. Realistic estimates and schedules
8. Early risk analysis and ongoing risk management
9. Planning for business process change management
10. Proactive issue resolution
11. Stakeholder involvement throughout the life cycle
12. Defined and consistently executed change management to minimize scope increases
13. A skilled Project Manager experienced in the execution of project management best practices
14. Standard software infrastructure
15. Execution of a formal system development methodology
16. A competent team
17. Commitment to success

Depending on the project and on the source there are different success factors that can be applied. This list represents some general points that can be helpful if you want to increase the probability of a successful project completion.
In our case we actually did respect most of the points (the ones that apply for this kind of project) and the overall success of the main objective can be attributed to and

[7] Department of Information Technology (DoIT) of Mayrland, What makes a successful project

explained by the planning and the commitment of all the participants. The project failed regarding the timing due to unrealistic estimates and schedules (7). In general this list can be used as an indication but it does not claim to be complete or applicable for all kinds of projects. Even projects that do fulfil all criteria might fail but the probability of a successful termination is higher if these points are respected, as they include the most common mistakes and how to avoid them. On the other hand even if these points are not respected a project might still be successful.

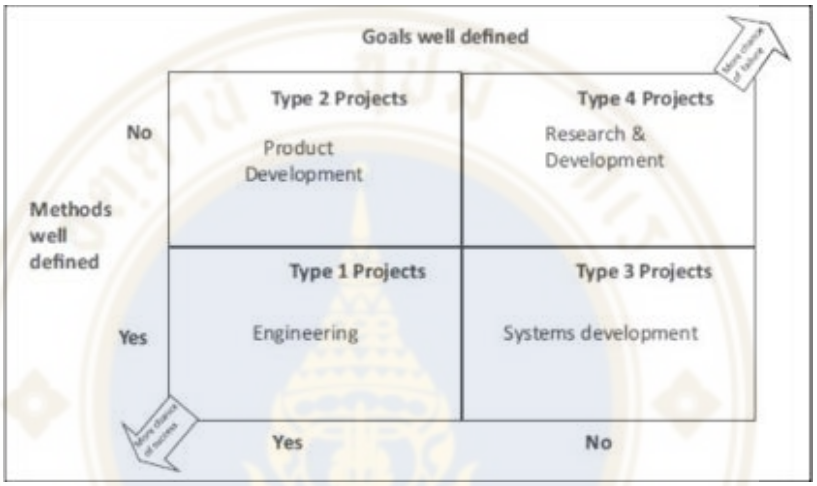

Figure 4.4 Goals Method Matrix
(Source: Turner and Cochrane (1993) model of project types and success requirements)

Regarding the goals method matrix this project can be classified as an engineering project, as the methods can be and are quite well defined and the goals are clear. According to Turner and Cochrane (1993)[8] the chances of a general failure are therefore quite small and reduced compared to other projects.

[8] Turner & Cochrane, Goals-And-Methods Matrix, 1993

CHAPTER V
LEARNINGS

5.1 Intrinsic motivation & self-actualization

One could claim that building and running this kind of project is easy, that we simply grabbed a pen and drew a line back home, and finally hit the road with our electric-powered Tuk Tuk. Well, one would forget all the challenges and obstacles that were to be overcome to reach final completion of this project. It was not easy whatsoever, partly because it implied collecting EUR 60,000 over a short period of time. However one would sound quite right if one suggested that intrinsic motivation contributed a great deal to our daily progresses made on the project and to the achievement of most of our objectives. Indeed intrinsic motivation, which occurs when one simply enjoys an activity or sees it as an opportunity to explore, learn, and actualize one's potentials (Coon & Mitterer, 2010)[1], has been driving the members of this project since the start of this little enterprise. Somehow this project has been creating positive emotions for the participants who have felt connected with the objectives of the organization, since they have clearly set those objectives while being self-empowered. This has positively affected the management of the project. Also the participants have made significant efforts only for the sake of their personal interest in environmental care and of the commitments they set out to achieve. Indeed, from a reward and recognition point of view, what they got out of this experience is seemingly intrinsically rewarding since it relates to positive emotions and self-actualization. For instance, the several press conferences and interesting events that the members attended generated a lot of attention and interest towards the project; that subsequently generated personal satisfaction and fulfilment. On the other hand, the members of the team have at equal level developed and managed the project without anyone telling them what to do. In other words, they were their own bosses and were self-motivated as well as self-empowered.

[1] Coon & Mitterer, Introduction To Psychology: Gateways to Mind and Behavior, 2010

You can also find evidence for the contrary. For example the fact that we had not sent out press releases as planned can be also attributed to the fact that nobody in the team really saw the necessity for it and got motivated to send out more. If for some tasks there was no external pressure, nobody in the team felt responsible to execute them.

5.2 Suggestions and improvements

As already mentioned in the analysis the main issue for the development of our travel was time. Normally such kind of project (involving also sponsoring and communication management) would be organized at least one year in advance. We simply did not have this time, as for us the decision was to start the travel phase in summer 2015 or never, because the external conditions (mainly the availability of the participants) would not be the same in 2016.

The second issue was the limited availability of resources, especially manpower. All three participants were working during the preparation (Karen and Ludwig at their studies at CMMU Bangkok and Remy at Young & Rubicam in Paris). That also affected the results. As you might imagine, we are not experts in creating a website or designing and installing lithium-batteries in an electric Tuk Tuk at the same time. So everything involved a longer and harder learning process, for that we sometimes had to pay for. For instance we published the new website a month later than planned.

If we were able to redo the whole planning based on the experience we went through, we would definitely add a few additional days without any activity (spare days) and we would also change a few other things:

- The itinerary (after having heard learned from travelers about the best routes to be explored) should be evaluated more carefully.
- Timing and changes according to the timing: At the beginning we planned the travel around a departure mid-June. If we knew from the beginning that our project would have on a two-month delay, we would have made some changes earlier (visa and visa dates, different itinerary

to avoid northern and colder areas, etc.). We therefore had to change our planning and adapt the travel considering a planning that was initially based on another date (e.g. by reducing break times to respect the visa dates or spontaneous changes of the route to avoid cold weather or bad roads and to save time).

- Add more time for unforeseen problems: It is better to have a realistic planning based on a viable schedule to avoid the need of rearranging events and disappointing stakeholders. At some point this has become quite common, as people do expect a fast and smooth project termination, and if there are gaps in the plan (to account for unforeseen problems) they might consider them as not necessary and question them. In fact, these gaps do make a project terminate within the scope and the timeframe.

5.3 Lessons learned

Overall we do not simply assess whether this project was a success or not. We rather look at what we gained out of this experience. And what comes out of it is very positive. At any rate the three of us have been facing tough decisions to be made, significant risks to be taken, while taking into consideration all the stakeholders involved in the project.

Here is an insight into what was happening some time before the travel: the day before the first press conference of The Pilgreens at CMMU Bangkok, we, three young managers, were sharing pros and cons about the project and thinking whether it is worth it to take so much risk and go forward with it, or simply cancel and express apologies to the stakeholders. Indeed, at that time, the bank account of the organization was almost empty whereas many orders were to come (mainly the Tuk Tuk and the solar panels). As you can imagine, we were a small organization with little resources… We were totally fearing to not getting enough funding to purchase what was primarily needed for this project. Even though we thought we could always borrow money, we also believed that the situation was critical since we could simply fail after all of the efforts we had made.

Eventually we did acquire the funding, in small pieces, although we were about to get behind schedule. We understand today how complex it can be to develop relationships with sponsors and organizations, and how stressful it can get to not achieve short-run expected goals while promises are made, and while a bunch of cameras are suddenly putting you in the spotlight.

The composition of our team, made of multicultural individuals with very different personalities and human-related approaches, was in favor of the success of this project, since significant decisions had to be made prior to the trip although the outcome was completely blurred.

Unconditional teamwork, meaning working together through joy and difficulties, is exactly what allowed us to overcome the problems. We have been mutually influencing each other and have getting the most out of each other's competencies, whether it was for the good or the bad. Because surely we have made mistakes, and we still do. But that day, when we doubted the achievement of the project, we were lucky enough that one of us stood up and inspired the others with his optimism.

Broadly speaking, when thinking of one's lessons learned, here is what could be considered in a project[2]:

- Manage the psychological impact of change. Whenever we go through difficulties and tough changes in the project, we still keep optimism up and always look at the objectives that are inherent to our personal satisfaction. We were lucky to have self-motivation since we had a very high personal interest in the outcome of the project, that came from within ourselves.
- Communicate in a way that engages team members and stakeholders. Respect and positive communication towards the stakeholders always allowed us to receive enthusiastic support from different people, whether it was organizations or simply friends willing to help.
- Manage conflict positively. Even in hard times we ended up realizing that tensions were not helpful but yet made us learn about the others'

[2] Sharon De Mascia: "The project success blueprint."

personalities. Therefore we could adjust our own behavior and communication style considering others' expectations.

- Have a flexible approach to project leadership. Although we did not have one single leader, it could have been useful to define clearer responsibilities. However surprisingly we did inspire each other at different times over the project.
- Use signature strengths and positive psychology to create an engaged project team. We acknowledged and relied on each other's capabilities and strengths, and have always tried and kept a positive attitude towards each other and the project, even in hard times.

From a project management point of view, we have practically applied our learned knowledge into the project. Creating a project plan and a GANTT chart to get an overview about a project duration is quite simple (especially if you schedule all the tasks in sequence), however designing all necessary tasks with the correct duration is difficult. And identifying and designing all the necessary requirements that need to be fulfilled before starting a certain task is even more difficult; it is the most difficult task which requires an insight in the actual task and the needs of the activities.

5.4 Personal remarks

Personally I was and I am still really surprised about the personal development that I went through while preparing and also while executing this travel. For me this was mainly due to the fact that we organized the whole project by ourselves. Not only organized, but also executed. That means, we had to go through (and we are still going and will go through) a lot of different kinds of problems and difficulties during the planning but also during the travel.

Just to mention a few, we had to deal with technical problems (choice and design of the Tuk Tuk as well as the batteries and their installation), communication challenges (how to convince sponsors to invest in an idea and an adventure that has quite a high degree of uncertainty, especially at the beginning), financial problems while organizing the cash flow and organizational issues while organizing the itinerary but also while just crossing a border and dealing with authorities that have never seen an

electric Tuk Tuk before and that haven't had any idea of how to deal with this kind of vehicle.

Also presenting the project to different audiences, at first the idea to managers, the directors of universities and potential investors and at the end the project itself and the issue of electric mobility in front of a university lecture room with about 100 students or another time 100 young pupils was very beneficial and each time we could realize the improvements we made by this "exercise" and practical experience among ourselves.

Besides these challenges, that made us all grow, I appreciated the fact that in this project we have been able to unite three totally different personalities with a different view on the project, different objectives and a different leadership style. As we have written in our self-presentation and the project presentation, Karen is the open-minded and easy going guy that loves to communicate with other people but who does not take into account the sad fact that not everybody is always willing to help us. Rémy is the creative guy who does not want to limit and restrict himself and his creativity with a planning that he has to follow, but who creates amazing results if you just let him work on his own using his own style and on an idea that comes from within his own will. And I would characterize myself as the planner who does not like uncertainty and who prefers to follow the rules even if there are none and even if in some countries and at some point this is not the best way to deal with authorities and problems. Giving the fact that uncertainty in this kind of project is normal and that it can never be avoided completely (or at least not at reasonable costs) I could actually benefit from the spontaneity of the others and learn from them on how to deal with unplanned situations. Each of us has his area of expertise that we actually needed in the project and so part of the work consisted of dealing with an interdisciplinary team and bringing the whole travel to a good result while respecting the others, their individual goal and their personal objective within the main goal. A simple example might be the question, if the money and our time should be invested in a better website to be able to communicate better to potential sponsors, an advertisement on Facebook to attract young followers, a solar panel, batteries or other technical improvements of the Tuk Tuk, a satellite phone to improve the safety or maybe another camera to film and document the trip.

Actually you might now say that this is something where a project plan is actually made for and maybe we should have even spent more time on a more detailed planning. But due to the short timing we often had to deal with exceptions. In the planning we imagined everything. A website, a powerful Tuk Tuk, a satellite phone and a few cameras. The real problems started when the things didn't work out as planned. I guess with our first planning we have been too ambitious, regarding all three pillars of the project management: time (schedule), scope (requirements) and money (budget) and somehow also a bit naive. But if we had been more realistic we would not actually have started the project. We have taken a big risk and thanks to our different personalities, a bit of luck and the help of a lot of other people at the right moment we have actually achieved something that I would call extraordinary. The single parts on their own might not seem so, but this travel is something that hasn't been done before and that involved a lot of insecurity. And given the circumstances, the short time and that it has been financed completely externally within less than 9 months, the project is something that I am actually proud of.

I don't know yet what the final outcome and the impact of The Pilgreens will be, but yet I know, there is one important one: smiles and happiness. We actually accomplished the mission to show numberless people on the way that electric mobility is nothing unsophisticated but something fun. And the Tuk Tuk is the best way of delivering this message. I have stopped counting the times we stopped on the side of the road and in villages because people wanted to take a photo with us (even the police used their sirens to stop us for a picture). And whenever we looked at their eyes we actually saw that they were happy. We experienced the same while being received at their homes for dinner and for accommodation. For me this is something very important, that made me also understand the importance of not only having a good message but of communicating this message in an appropriate way to the people and that an indirect announcement is sometimes the better solution. I am thankful that this project was supported by so many people that helped us go through this experience and learn from this practical project implementation.

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