Managing Projects in Decentralised Organisations:

Tracking Humanitarian Fleets
Introduction

Fred Mendez was having a good day. As regional logistics coordinator for IHO, a medium-sized international humanitarian organisation, he had successfully overseen a three month pilot project to test the use of vehicle tracking technology (VTT) for the fleets of two countries in his region. Today, as a direct result of the pilot’s success, he had just received final authorisation from six of the seven national directors in the region to install VTT equipment in their fleets.¹ These amounted to approximately 200 4x4 vehicles, one third of the organisation’s total fleet.

The fact that the authorisation had been given suggested to Fred that the need for adequate fleet management might at last be gaining recognition within the organisation. The pilot VTT project had clearly demonstrated this need to national directors and programme directors throughout the region, and at headquarters. Now that the decision had been made to use the equipment across the region, Fred reflected with some satisfaction on the months of hard work, planning, developing and persuading it had taken to get to this point.

The Beginning: Getting Interested

Three years earlier, Fred had begun thinking about the potential value of VTT for IHO’s fleet. Through conversations with his counterparts across the humanitarian sector, as well as attendance at the annual Fleet Forum² conferences, he had come to understand how the equipment worked and had been curious to know more. His counterparts were very enthusiastic about the advantages it had brought them in their capacity as fleet managers, but he had hesitated. Those he had spoken to worked in large organisations with centralised fleet management. Fred doubted that it would be the same for IHO, a decentralised organisation where fleets were the responsibility of programme directors and often managed by receptionists with no fleet management training (appendix 1). Even in his role, the decentralised management structure of IHO meant that he could only advise rather than instruct on correct policies and procedures (appendix 2).

However, as a year passed, high levels of fuel consumption and incidents of dangerous driving were becoming an increasing worry for IHO. Fred seized on these two issues to promote the need for VTT in the vehicles in his region. From existing records such as driver log books, invoices, and monthly reports, he prepared a strong proposal, highlighting the problems and requesting financial assistance to test the innovative equipment in two of the seven countries in the region. As he sorted through files of paperwork, he tried to get a clear picture of what was happening with the different countries’ fleets. But their parallel reporting systems and lack of cross-referencing made it practically impossible. If the VTT project came together, he thought to himself, this problem could soon be sorted out.

¹ One country would not take part. For reasons of national security the government would not allow tracking equipment to be used by any organisation.
² www.FleetForum.org
Implementation: The Organisation

Fred’s proposal for the pilot VTT project defined two clear objectives:

1. Reduce fuel consumption
2. Decrease levels of speeding

He then set about winning buy-in from the different stakeholders within IHO. The global head of logistics was keen to support the project. Thanks to his experience he recognised the need for improved fleet management throughout the organisation and saw that VTT would help to promote it. With this support, Fred presented his proposal to the finance manager at headquarters. Seeing the potential financial benefits of the technology, the latter was willing to allocate funding required for the VTT equipment on a one-off basis. Fred was made responsible for implementing the pilot. He would have to do so in addition to his existing responsibilities as the funding available did not cover the cost of hiring new staff. Although he knew that it would be challenging, Fred agreed to take it on.

Now he had to convince those who would actually use the equipment and the programmes. Fred had already spoken to national directors and programme directors in his region. He had been careful to select two countries he knew had an interest in improving the way their fleets were managed, those who had a keen logistics manager or a devoted fleet manager. Although they were reluctant to take on any extra work, the fact that IHO’s donors were also expressing an interest in VTT helped Fred to build a stronger argument. Having obtained the programmes’ approval to equip their entire fleets with VTT and cleared the project with security, he set about finding the best supplier.

Implementation: The Technology

When Fred initially began to look for a supplier he was surprised at how many there were in the market. It was a world he knew little about and so it was difficult to know exactly what he required. There were suppliers for satellite and GPRS\(^3\) systems; suppliers for the hardware unit; suppliers for the computer software to manage the internet server, and finally suppliers who provided both the software and the units. He eventually decided to go with a GPRS software supplier based out of a country in his region. It was cheaper than satellite tracking and the countries for the pilot had strong networks. They would also source and supply the units. Although this meant an additional cost, he felt they gave him a good price.4

As the contract was being signed, Fred wondered whether the supplier would be able to cope with the specific demands of a humanitarian fleet: the remote locations and rough terrain of the journeys, the short lead times and the need to train field staff. Fitting the equipment was no problem, but as the pilot proceeded, some glitches needed to be ironed out. On the technical side, for example, IHO’s firewall blocked the organisation from accessing information from the server. This was resolved by setting up a separate server specifically for

\(^3\) General Packet Radio Service
\(^4\) Estimates range from: Hardware - $400 - $1000; Data Transmission - Under $10 for GSM based systems to $40 - $60 per month PLUS service provision; Interface (stand-alone installed software or internet based platform) - $20 - $30 per month per vehicle
IHO. In one country, some areas were just too remote for the system to maintain network coverage. There was little that anybody could do to resolve this but the problem was mitigated because the system updated itself as soon as the vehicle was back in range.

Fred worked closely with the supplier and the programme directors to overcome these problems. Within a month, the system was running relatively smoothly and Fred waited impatiently to start seeing results.

The Results

From the very beginning, the intention was that Fred would assist during the ramp-up stage but once it was running smoothly this was something that needed to be owned by the programmes. His infectious enthusiasm for the VTT project filtered into the programmes involved in it. When the managers first saw the equipment in use, the possibilities seemed endless. Not only could they locate the position of their drivers but they could also see when the vehicle had stopped and they could calculate the speed at which they were travelling. One manager had been convinced that there was an unacceptable amount of night driving taking place in his programme. With this equipment he would be able to identify and hopefully eradicate it.

The results were startling. At first Fred couldn’t understand what was happening. The number of accidents rose dramatically and drivers were driving erratically, either too fast or else way beyond authorised hours (appendix 3). However, he soon realised that it was not that these problems were increasing, but rather his visibility of the problems was increasing. It was time to act.

Fred was adamant that the training the field staff had received would be put to good use. He convinced the national directors to assign one person from each programme to download information from the system every day. This took about five minutes, and the results were compiled in a weekly report that was sent to the fleet/logistics managers, programme directors and national directors. They were also sent to Fred who was then able to have an overview of the fleet activity and to feed back to the supplier if there were any problems with the equipment. Having this information enabled the fleet/logistics managers to identify the key problems with their drivers and to provide solutions through additional training, reprimands and rewards.

Fuel consumption decreased by 12% on average, and although he couldn’t prove it, Fred was convinced that this was due to drivers no longer speeding. The number of accidents was greatly reduced and unauthorised night driving was no longer a problem (appendix 4). Indeed, one national director informally reprimanded a senior programme staff member for asking a driver to use a vehicle at night without the proper authorisation. As an added bonus, one of the programmes had even managed to retrieve a stolen vehicle, something that had never been possible before using the VTT.

---

5 IHO’s average yearly mileage was 25000Km/vehicle. Average fuel efficiency was 8Km/litre. Average fuel price was US$1/litre
The snowball effect was immediate. After showing these results to the programme directors in the other countries of the region, he no longer had to worry about persuading them about the merits of the equipment. They were keen to use it in their vehicles and excited about its potential. At headquarters too, they saw the real benefits and supported Fred and the national directors as they made plans to roll out this remarkable technology across the region’s fleet. One aspect of the rollout was to offer training in downloading information from the VTT to one staff member from each programme.

Fred also thought of the future possibilities. He could fit the equipment with a driver identity tag and develop security messages for drivers to communicate directly with their base. The programme directors he had spoken to were excited at the prospect of being able to monitor delivery of their programmes and share information on routing and scheduling between programmes or even countries across the region. The future for fleet management in IHO looked bright.

...Six Months Later

Fred Mendez was having a bad day. He had just received a call from yet another irate national director complaining that his fuel costs were rising dramatically again. To make things worse, two vehicles from a neighbouring country had been stolen the previous week and were irretrievable. The fact that their VTT units had stopped working three weeks prior to the theft had gone unnoticed.

Fred surveyed the mountains of paperwork that had once again accumulated in an effort to investigate what was happening with the region’s fleets. Recently, the fleet problems had been taking him from his other responsibilities. Every day there seemed to be another problem with a programme’s vehicles and working overtime was no longer enough to solve it. The VTT server was so overloaded that it would take hours, perhaps even a full day, just to download the information. Even then, it would be virtually impossible to obtain any valuable data from it. What had gone wrong? he wondered.

Fred sat back in his chair and tried to put the pieces together. Had VTT simply become another add-on? Since he had handed responsibility for the use of VTT to the programmes there had been some problems. During the first two months, many key staff had departed from the organisation. The two national directors involved in the VTT pilot had left. And nine field staff across the region that had been trained to use the equipment had either left or been replaced. As a result, much of the original enthusiasm for the innovation had been lost.

Although Fred thought they had recovered from that, the problems appeared to be getting bigger. Programme directors couldn’t identify the reasons behind the changes in fuel consumption. Neither could they measure the impact that this was having on programme delivery. They had begun to lose interest and no longer followed up on the information being sent to the servers. The logisticians and fleet managers complained that the VTT system was creating too much additional work for them, when they were already dealing with multiple types of reporting. They had been struggling to cope with their daily activities, such as trying to ensure that vehicles were properly maintained, and now they had complaints from programme staff who didn’t like the feeling of being watched. To them, the system was beginning to seem like more trouble than it was worth.
Fred sighed as he remembered how successful the pilot had been. What explained its success and why had it not been sustained during the rollout? What would be required to get the programme back on track? It was going to be a difficult journey, but he was determined to find the answers to his questions.
**Appendix 1**

*Fleet Management Models*

**Centralised Fleet Management**

- **Donor**
  - Fund
  - Approval
  - Lifecycle management / Training / Data analysis

- **HQ**
  - Procure
  - Supply
  - PDI / Maintenance / Fuel
  - Service providers

- **Vehicle supplier**
  - Store / Transp
  - Vehicle requisition / Rental fee / Data capture

- **Regional / National Office**
  - Store / Transp
  - Usage

- **In-country programme**
Decentralised Fleet Management

Donor

In-country programme

Vehicle supplier

Fund

Procure/Store/Usage

Maintenance/Fuel

Approval

Service providers

Supply

Lifecycle management/Training/Data capture and analysis/Disposal
Hybrid Fleet Management

Donor
Fleet Management Unit
Vehicle supplier
Fleet Management Unit or Regional/National
In-country programme

HQ

Fund
Procure
Lifecyle management/Training/Data analysis/

Approval

PDI/Maintenance/Fuel

Service providers

Supply

Store/Transport

Usage

Vehicle requisition/Rental fee/Data capture

Usage

Data capture/Lifecycle management/Training/Data analysis/
Appendix 2
IHO Global Management Structure

Appendix 3
Expected Evolution of Alarms per Vehicle Following VTT Installation
Appendix 4

Observed Evolution of Alarms per Vehicle Following VTT Installation

What We Observe: Country

Source: Data from an unnamed international humanitarian organisation (2011)
To order INSEAD case studies please contact one of the three distributors below:

**ecch, UK and USA**

ecch UK Registered Office:  
www.ecch.com  
Tel: +44 (0)1234 750903  
Fax: +44 (0)1234 751125  
E-mail: ecch@ecch.com

ecch USA Registered Office:  
www.ecch.com  
Tel: +1 781 239 5884  
Fax: +1 781 239 5885  
E-mail: ecchusa@ecch.com

**Centrale de Cas et de Médias Pédagogiques**

www.ccmp-publishing.com  
Tel: 33 (0) 1.49.23.57.25  
Fax: 33 (0) 1.49.23.57.41  
E-mail: ccmp@ccmp.fr

---

**INSEAD**  
The Business School for the World®

www.insead.edu

---

**Europe Campus**  
Boulevard de Constance  
77305 Fontainebleau Cedex, France  
Tel: 33 (0) 1 60 72 40 00  
Fax: 33 (0) 1 60 74 55 00

**Asia Campus**  
1 Ayer Rajah Avenue  
Singapore 138676  
Tel: 65 6799 5388  
Fax: 65 6799 5399

**Abu Dhabi Campus**  
4th Street – Muroor Road – P.O. Box 48049  
Abu Dhabi, United Arab Emirates  
Tel: 971 2 443 6200  
Fax: 971 2 443 9461

Printed by INSEAD