INTRODUCTION

In this case study we explore the cooperation of Future Processing with Trapeze Group Europe, part of Trapeze Group, that for more than 40 years has been planning, developing, and implementing transportation systems around the world.

First, we look at the problem they faced and the solutions that Future Processing were able to provide. This is followed by a reflection on the outcomes of this collaboration and a look at the plans for the future. Finally, we ask Trapeze Group Europe themselves for their view of our collaboration.

ABOUT THE CLIENT

Trapeze Group Europe is part of Trapeze Group – an international transport software company with over 2,500 customers worldwide.

As subsidiary of Volaris Group, Trapeze Group has clients across Europe, North America and Asia Pacific, providing its solutions to public and private transport organisations and authorities.

Trapeze delivers technology, systems and services to automate a multitude of tasks in day-to-day transport services. Trapeze Group Europe, based in Denmark, is responsible for delivering software for planning and operations management for European public and demand-response transport organisations.

Their solutions consider the full spectrum of their client’s operations. The integrated approach provides a complete enterprise solution connecting the back office, operations and information centres with vehicles, as well as on-street and on-road equipment.
BUSINESS PROBLEM

Trapeze Group Europe were approached by one of their long-standing clients, a leading public bus and rail transport operator, with a task of building an app that would ease everyday work of their drivers.

The main challenge that Trapeze were facing was lack of internal resources to cope with the task, which is why they approached Future Processing.

FUTURE PROCESSING’S ROLE

Future Processing’s task was to develop an app extension to Trapeze’s Android project Crew App (launched in 2010, a product of our earlier cooperation with Trapeze Group Europe).

Having worked previously with Future Processing to develop the original app, resuming that relationship seemed an obvious choice in moving the project forward with a view of implementing new functionalities and tailoring these to the existing system of Trapeze’s end client. This was not the only aim, though, as Erik Futtrup, Director of Development at Trapeze Group Europe, explains:

“**The project has had two primary goals – first of all to be involved more with our end client – and second of all to have an ‘add on product’ to our main product line. Both have been a success.**

Erik Futtrup
Director of Development

The main focus of the recent development of Crew App Android Extensions, or Crew App+, as it is named, was to make day-to-day work easier and more efficient for bus drivers, who can use the app on their mobile devices during their shifts.

**New functionalities that Future Processing added to the existing Crew App Android application include:**

- easy access to shift schedule (any changes are instantaneously visible)
- receiving push messages
- requesting holidays and time-off
- reporting overtime
- reporting incidents or problems with the bus (any potential damages will be visible in the system until they’re fixed)
- reporting delays
- uploading pictures with an option to describe them, e.g. to show damages on the bus

Although Trapeze Group Europe came to us with an idea, we helped in specifying the requirements.
BENEFITS OF THE PARTNERSHIP

Future Processing is particularly proud of this project because of its range – we were responsible for implementing and adjusting the solution used by bus drivers across Denmark – thereby reducing the burden on Trapeze from an internal resource perspective.

The goal of the project was successfully accomplished. Bus drivers use the application written by us and Trapeze Group Europe and it has improved their work efficiency.

As Erik Futtrup, Directors of Development at Trapeze, explains:

Future Processing has provided the resources necessary to complete the work on time and on budget and made it possible for us to meet our obligations towards our end client. Moreover, the project was delivered at a considerably lower cost than estimated for in-house or on-shore development. The previous version of Crew App is a most sought add-on module to our existing duty suite and was a very good base for adding new Crew App functionalities. The new features are very much aligned with requirements from our other clients, so we tried to make design decisions together with Future Processing that both suited our end client and the general market.

The response we got from our client’s bus drivers has been great, and many say that it makes their day to day work much easier.

ERIK FUTTRUP
Director of Development

In response to our standard satisfaction survey in which we ask all our clients for opinions concerning our work, the team, and the project, Trapeze said:

We were very satisfied with quality of the product and speed of delivery from the Future Processing team. Future Processing provided us with an expert level of skills across the project and were proactive in working out the details and suggesting innovative solutions and enhancements.

Another positive feedback came from Trapeze Group Europe, this time based on responses from their end client after the application went live with bus drives.

Knowing that not only Trapeze Group Europe but also their stakeholders are very pleased with the effects of our cooperation makes us extremely happy and proud that we were able to help yet another client to successfully solve their IT problem.
We started the project having only an outline of the requirements, therefore we decided to follow the typical scrum approach. During planning we asked the Client all the necessary questions and at reviews we were showing the effects of our work.

To make our daily work easier, we decided to introduce an innovative solution, namely we decided to automate one of the most painstaking Android jobs – the implementation of SOAP requests based on WSDL. Before that everything had to be done manually.

The innovation was based on finding and adapting to the custom WSDL, which we got from the Client. To generate the classes that suited the contract described in WSDL we used the free Wsdl2Code tool. These tools, apart from Wsdl2Code, were developed by our Technical Advisor and helped us make the implementation process quick and painless.

Another innovative thing we did was introducing RXJAVA - the concept of responsive functional programming.

**PRIMARY TECHNOLOGIES USED & TOOLS USED:**

- Android
- SOAP
- RXJava
- WSDL
 WHY DID YOU CHOOSE FUTURE PROCESSING AND WHAT DISTINGUISHED US AGAINST THE COMPETITION?

We chose Future Processing because we have had a very good history with them, as they have already developed a stable product previously, with hardly any errors. Deciding on who will do the new development on this product, it was very relevant to us that it would be done by Future Processing.

The alternative for us was to do the app ourselves and build up the expertise within the company – we did not have time for this, therefore we decided to concentrate on the domain that we know very well and at the backend web services and outsource the development to Future Processing.

ARE YOU SATISFIED WITH THE COOPERATION WITH FUTURE PROCESSING?

Yes, we are satisfied. It has been great to cooperate with Future Processing. The agile approach together with FP has worked well, which fit well.

WHAT DO YOU LIKE MOST IN FUTURE PROCESSING?

What we like most is the quality of development and well-tested product. Apart from that we always get good advice on implementation and design of the product. The stable management of a team leader at Future Processing’s side - Julian Merchel - is very important to us as well. Our collaboration has been very good.

HOW DO YOU SEE THE FUTURE OF OUR COOPERATION?

As far as the future is concerned, for app development we’ll definitely come back to Future Processing, either for new apps required by our customers or for further development on the Crew App.

WHY DID YOU DECIDE TO OUTSOURCE?

We decided to look for an outsourcing partner mainly because, as I have already stated, we lacked resources in app development and we needed to complete the project on time.