



White paper Smart Ticketing

Smart ticketing and tarification in (international) public transport

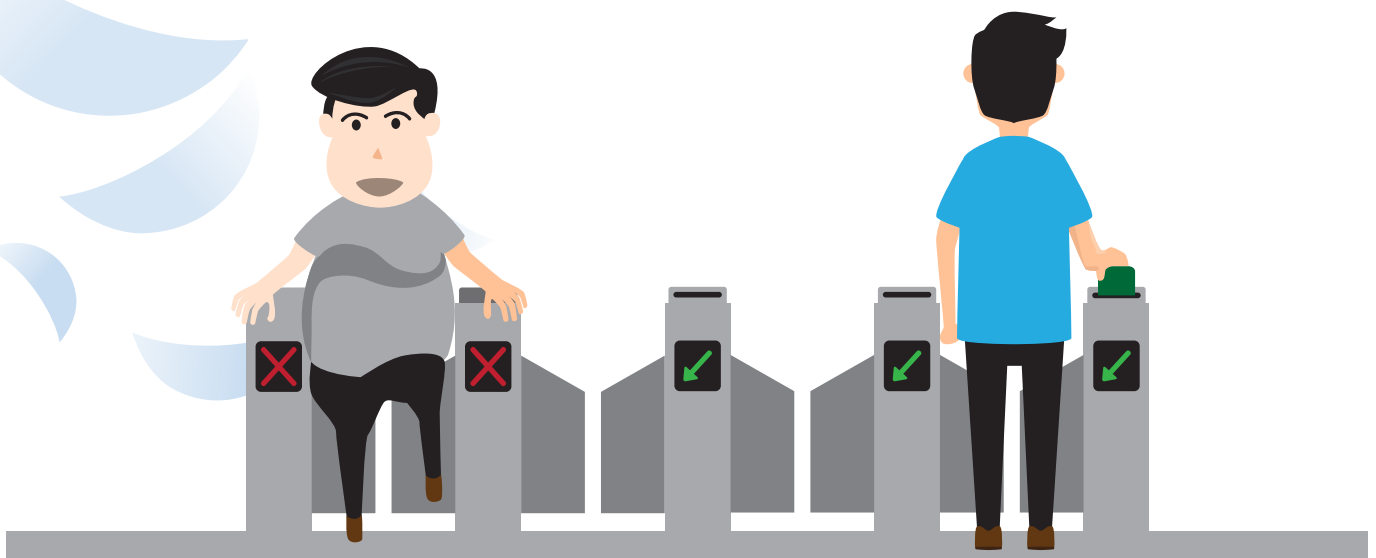
Frederik de Vries, Twynstra Gudde



Smart ticketing

As in public transport a transition towards smart-ticketing is taking place. Customers in the public transport domain are relying more on up to date travel information accessed via mobile devices. Also, public transport ticket systems are being digitalized in a number of countries in the European union. At this moment, the first steps are being set in order to incorporate these ticket systems in mobile devices (smart phone, credit card).

This transition faces a number of challenges. First of all, a technical challenge in order to integrate different tickets, rates and payment applications into one system that is transparent and easy to use for all customers. Second a challenge regarding governance and collaboration. An integrated system requires collaboration between a large amount of public and private parties. For this part of the transition Twynstra Gudde has developed a methodology that we use in a different transition projects, mostly in a public private partnership set up.



Smart ticketing for International Rail Agenda

Challenge: design an end user friendly system to make cross border travelling by public transport cost transparent and inviting for (new) travellers

Twynstra Gudde is managing a project on cross border ticketing and tarification in the south of the Netherlands, North Rhein West Phalia (Germany) and Belgium.

Customers in public-transport want seamless travel, using multiple modalities. In order to achieve this, they require easy ticketing and paying schemes based on digital techniques. Traditionally, there are boundaries between public transport concessions and nations. These borders generate inconvenience for travellers (difficult access to tickets, high prices for border crossings) resulting in relative low numbers of travellers and therefore low profit generation for public transport operators. Which in its turn leads to a higher pressure on tax money and a larger impact on sustainability and air quality goals.

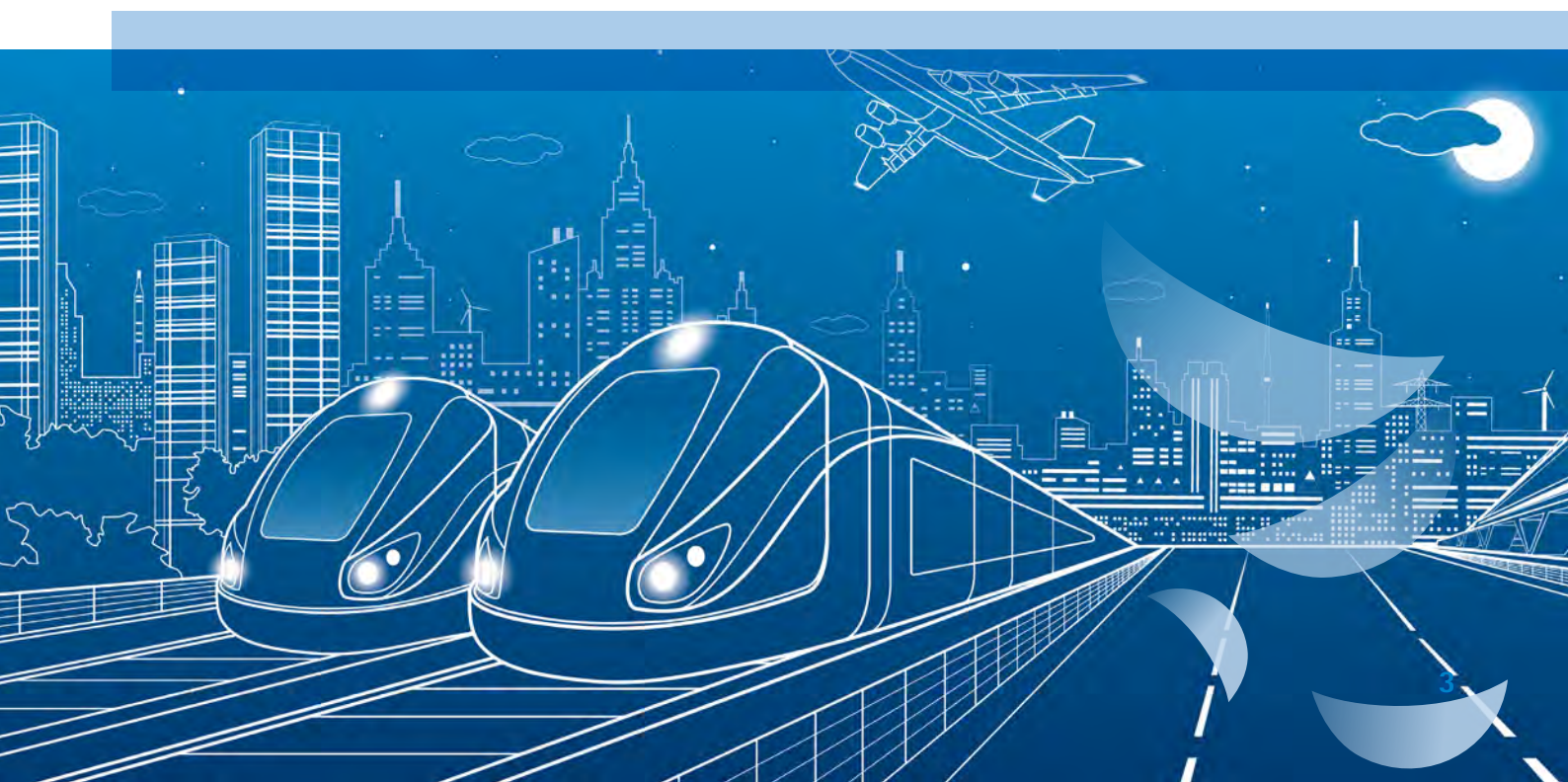
The realization of an end user friendly system requires collaboration between a large number of public and private parties (public transport operators, public transport authorities, providers of ICT services,

providers of paying services, etcetera) in a sector that is traditionally dominated by the public sector. In short, a multi-stakeholder collaboration in which competitors, public and private parties, different worlds, different principles and different languages have to work together in order to achieve the desired result.

The project focusses on:

- Smart phone technology
- NFC Technology
- Acceptance structure for all various tickets of all Public Transport Operators and Public Transport Authorities in all three countries.

We manage the project by creating a specially designed multi-stakeholder governance structure with all the significant partners, based on the Twynstra Gudde methodology for public-private governance. This methodology is suitable for all kinds of transition projects, among which the transition to smart ticketing.



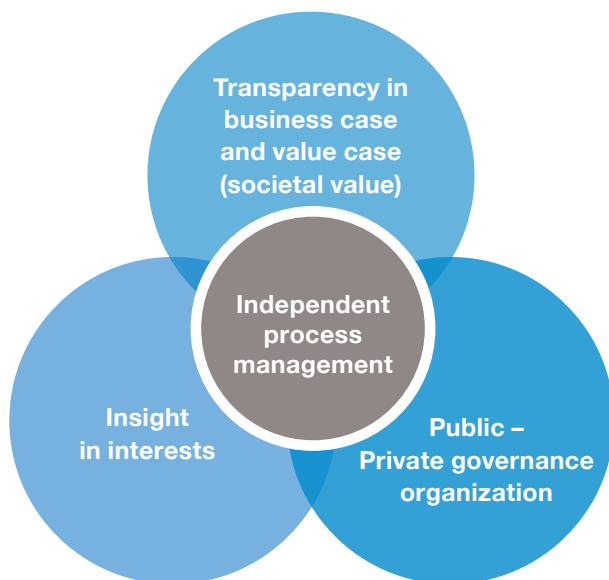
Twynstra Gudde methodology for public-private partnerships / multi-stakeholder governance

Based on our experience with public – private partnership projects, we developed a methodology for initiating and managing these types of partnerships. Backbone of this methodology are four critical success factors. When these factors are not, or not correctly used, chances of a successful collaboration will deteriorate quickly.

The four critical success factors are:

1. **Insight in interests**
2. **Public – Private governance organization**
3. **Transparency in business case and value case (societal value)**
4. **Independent process management**

These four critical success factors are visualized in the figure below, and explained in the following paragraphs.



1. Insights in interests

Public and private partners need to have a common interest in achieving the goal of the project. Next to this common interest, public and private partners will also have different interest in achieving the project result. This is a logical consequence of their reason of existence and the goals they try to achieve. For persons that work in the public – private partnership, these different interests of the other partners are generally not completely clear. As long as these interests are not made explicit, partners will have the tendency to think and act based on a (possible false) assumption of other parties' interests, resulting in discrepancies between these assumptions and the actual interests.

Therefore, it is important to explicate the interests of the different project partners at the start of the collaboration project. Of course, all parties need to have an interest in realizing the project. Next to this common interest, also other interests of partners need to be explicated. The better these interests can be described by the different partners, the easier it is to understand each other, resulting in a larger chance on a successful collaboration.

2. Public private governance structure

Within public private partnerships, as in all projects, it is necessary to be able to take decisions. In the Twynstra Gudde methodology for public – private partnerships, starting point is that decisions can only be made by the joint partners. All project partners need to be able to be a part of the decision making process in order to secure their own interests in the project. Therefore, all partners have a seat at the decision taking table and decisions will be taken based on a broad consensus. All parties have to agree with (or not object to) the decision that is proposed

The governance process describes the way decisions are prepared and taken by the project board. Next to an organizational structure, the governance consists of a set of collaboration rules.

3. Transparency in business case and value case (societal value)

All collaboration projects usually have a financial aspect. For the collaboration process it is important to explicate the financial impact of the project. It needs to be transparent for all partners which costs and benefits are related to the project and in which way these costs and benefits will be divided between the different partners. For the project a business case will be constructed concerning all financial elements of the project. Next to these financial effects, also societal effects (and other relevant non-financial parameters) will be quantified and used in the decision making process. Societal parameters can for instance be CO2 emission reduction, improving quality of life within cities, reduction in emission of air pollution, etcetera. These parameters are generally hard to monetize but are often an important incentive for these projects. By incorporating both financial and non-financial generated value within the decision making process, decisions will be based on the entire set of interests of all project partners.



4. Independent process management

Generally, parties that have an interest in the business case of a project will have the tendency to try and optimize the final outcome of the project on their behalf. This behaviour can lead to friction between project partners and ultimately to termination of a collaboration process. In order to prevent this behaviour (or to steer it in the right direction) it is important that the process is managed by an independent manager. This independent manager needs to keep the partners together and ensure that the interests of the different project partners remain balanced.

Project partners will have different levels of skills and knowledge. Due to these (potentially) large differences, a feeling of discontent can occur for those parties that are behind in knowledge. Therefore, the independent process manager needs to make sure that all partners are informed and are able to understand the ins and outs of important (technical, financial) aspects of the project.

The process manager fulfils an important role in the project. She normally chairs the project teams and is secretary of the executive board. In the latter role, she is responsible for the preparation of the decision making meetings and corresponding paper work.



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Alfa Consulting

Av. Diagonal, 567
08029 Barcelona
SPAIN
+ 34 93 3220202
alfaconsulting.com

Bonfiglioli Consulting

Via Isonzo, 61
Casalecchio di Reno (BO)
ITALY
+ 39 335 430582
www.bcsoa.it

Horváth & Partners

Phoenixbau
Königstr. 5
70173 Stuttgart
GERMANY
+ 49 711 669 190
www.horvath-partners.com

Litmus Group

Level 7, 8 Chifley,
8–12 Chifley Square,
Sydney NSW 2000
AUSTRALIA
+ 61 432 181 162
www.litmusgroup.com

Oresys

48, Rue de Londres
75008 Paris
FRANCE
+ 33 1 44 90 18 18
www.oresys.com

Twynstra Gudde

Stationsplein 1
P.O. Box 907
3800 AX Amersfoort
NETHERLANDS
+ 31 33 467 77 77
www.twynstragudde.nl

Avalon Consulting

101, Suraj Prakash,
1st floor, 86 Shankar
Ghanekar Marg, Prabhadevi,
Mumbai 400 025. INDIA
+91-22-4946 6600
www.consultavalon.com

Genex Partners

Shirokane Takanawa
Station Bldg 3F
1-27-6 Shirokane
Minato-ku, Tokyo 108-0072
JAPAN
+ 81 3 5795 3211
www.genexpartners.com

Key To Way

6,7F, 79, Banpo-daero
Seocho-gu, Seoul 06670
KOREA
+ 82 10 8931 0834
www.keytoway.kr

North Highland

3333 Piedmont Rd. NE
Suite 1000
Atlanta, GA 30305
USA
+ 1 404 233 1015
www.northhighland.com

S. Point

1000 Changping Road,
Building A, Jingan District,
Shanghai, CHINA 200042
+ 86 21 6272 8858
www.spointdesign.com