USING THE LOGICAL FRAMEWORK TO ANALYZE TRANSANTIAGO

A First Approach
Introduction

In the year 2007, Chile’s capital of Santiago tried to improve its extremely decentralized and non-integrated bus system by making an ambitious redesign. The implementation of Transantiago, the new Chilean Bus Rapid Transit model, became known as the worst public policy ever implemented in the country (Batarce, Hidalgo & Muñoz, 2014). Unsufficient supply and unfinished infrastructure lead to long waiting lines, overcrowding and major public discontent. Even though the whole project was designed specially to be a low-risk business (Beltrán, 2012), increasing monthly subsidies are required until the present day to keep the system working.

What went wrong? Different theories trying to understand and mitigate the disaster have been written. The following paper will use the Logical Framework to analyze Santiago’s old system and the decisions made in the design process of the new one. By adapting the transportation example provided in Saldanha’s ADB Logframe Booklet (1998), specific goals, purposes and outcomes of Transantiago will be analyzed. The exercise does not aim to provide exhaustive details about the bus system implementation as a whole. Its purpose is to use a specific tool for Strategic Development Planning to try and understand what area or step of the way could have lead to such a difficult implementation process. Furthermore, doing an “inverse analysis” of a project that was already executed and of which we know its results will help us note precautions need to be made when applying Logframe to develop future policies, programs and projects.
Transportation systems and the way cities are planned around them can be a double-edged sword in development. Historically, with the rise of manufacturing business, cities have been built to accommodate automobiles. This has encouraged sprawl, many times prejudicing the urban poor that do not own private transportation (Irázabal, 2009). Investments to improve public transportation are essential towards urban prosperity. They have major economic benefits, bring people closer to jobs, contribute to poverty alleviation and improve the quality of life (UN Habitat, 2013).

Many Latin American countries have turned to public-private partnership to alleviate the cost of this major investments. Where this occurs, government supervision is essential so that private firms deliver fair and ethical services to the. According to Clara Irázabal in 2009, “Following a ‘privatize now, regulate later’ approach has, however, proven problematic as underdeveloped an unspecific contract ultimately force contract renegotiations” (p. 132). Unfortunately, many Latin American governments, when faced with pressure are known to follow this trend.
The case of Santiago, Chile

Santiago is a highly urbanized and segregated city, which makes public transportation especially important for development. With a total population of around 17 million, over 6 million Chilean live in their capital. This accounts to almost half of it's urban population.

Following with the historical urban trend, the first big investment in transportation was to create Costanera Norte, a massive highway that run along the Mapocho river and crosses the city from one end to the other. Public transportation didn’t have such luck. An extreme liberalization of fares during the military regime led to excessive supply of service and chaos. In an attempt to remediate these effects, a model based on private concessions was implemented in 1990. While the initiative helped to alleviate the problem, it was not enough. There where approximately 8000 buses owned by more than 4000 small concessionaires (Beltrán, 2012). According to M. Font, “The decentralized system resulted in an unnecessarily high number of buses ... The policy of low entry costs and unrestricted competition applied in the 1990s allocated resources inefficiently – competition among the buses, metro, and taxis generated a disorganized, nonintegrated system that forced users to assume a major monetary expense and use multiple forms of transportation” (2015). Since there was no rule that forced operators to organize themselves, duplicated routes and congestion, air and noise pollution characterized the system at the time.
These problems are not specific to Santiago. Market failures that affect urban mass transit provision are marked by unclear property rights on the curbside and on the road, transporters collusion, principal-agent problems between drivers and owners (incentives misaligned), congestion and pollution. Successful stories cases of BRT implementation in cities like Curitiba, Bogotá and Mexico City have helped by reserving specific bus lanes and restricting access, setting fares at a level that finance long-term provision, setting a fixed salary for drivers and charging private bus owners by kilometer (not per passenger), amongst others.

“So, why not?”, probably thought the thin country at the more southern part of the world. Transantiago’s inaugural date was set for 2005 but didn’t open until 2007. Even then, it’s start was marked by insufficient supply causing long delays in commute. Essential infrastructure – bus stations, exclusive lanes for bus networks, charging points for the new electronic payment systems – where not ready to be used. This lead to public disappointment and turned into a major political debate. While the system was supposed to be financially self-sustaining, subsidies that keep increasing until this date are required to keep the project running¹. What went wrong?

¹ http://lyd.org/centro-de-prensa/noticias/2015/11/vuelve-a-crecer-el-subsidio-a-transantiago/
Logframe and Transantiago

Looking for a clearer image of the logic behind Transantiago, the following section will analyze the system’s design and implementation using the Logical Framework. Logframe is a tool for Strategic Development Planning that defines goals, purpose, outputs and inputs to analyze and design policies, programs and projects.

FIGURE 1. INFLUENCE OF CAPACITIES IN CHILE’S OLD PUBLIC BUS SYSTEM – CAUSE EFFECT ANALYSIS
FIGURE 2. OBJECTIVE’S TREE IN CHILE’S OLD PUBLIC BUS SYSTEM

NATIONAL IMPACTS
- Better quality of life
- Higher productivity
- Higher national income
- Political stability
- Higher profits

CONSEQUENT IMPACTS
- Healthy environment
- Less tiredness
- Decreased expenses
- Safety
- Low fare evasion

KEY SECTOR PROBLEM
- Smooth traffic flows & public safety

DEFICIENT SECTOR OUTPUTS
- Sufficient bus supply
- Organized routes
- Modern buses
- Disciplined drivers
- Secure payments
- Reduced concessionaires

POLICIES & INSTITUTIONS
- Efficient entry costs
- Restricted competition
- Supervising policies
- Fixed contracts

SECTOR INPUTS
- Integrated public bus system
The figure shows a first approach in understanding the cause-effect analysis and reasoning behind the design of Transantiago. The purpose is to visualize its structure and main areas, not to provide exhaustive details of the complicated transportation system.
So, why not?

In the case of Chile, the government was trying to go from a deeply decentralized and disorganized system, to a more coordinated approach. Public-private partnerships in public services are sometimes in developing countries the only way to make new investments. Maybe the right question instead of why not, is how not. What are the things to avoid and what do governments need to have in mind when redesigning public transportation systems?

Almost ten years after it's initial implementation, there are various logical theories on what went wrong in the initial phase of the system. What calls the attention is that none of these reflections seem to have been made beforehand, or they weren't given the necessary importance.

The conclusions drawn from analyzing the design and implementation of Transantiago under the Logical Framework agree with many of the latter explanations. Many of the issues are related to monitoring mechanisms. The system was meant to be supervised by a new metropolitan authority that starting its trajectory at the same time of the project. An item like this could have been foreseen beforehand. Other major problems have to do with the overly ambitious project, that exceeded the capacities and coordination of the actors in place.
However, it is necessary to notice that some of the main problems that appeared during the implementation phase of Transantiago did not appear during the Logical Framework Process. Batarce, Hidalgo and Muñoz argue in 2014 that one of the major failures of the system is that quality was not a central issue in the reform. Focusing on a low-cost system that attracted investors, the whole redesigned was thought to be efficient and effective, leaving aside the experience design. “This particular case proves the difficulties inherent to inducing changes in urban residents’ habits, whereby many transit users in Santiago allegedly prefer long and windy commutes in a single bus than faster commutes in a system that requires transboarding”, concludes Irázabal in 2009.

Another discrepancy that can be observed has to do directly with implementation. While the analysis determines specific tasks and monitoring mechanisms meant to smooth the path between design and implementation, none of the actual problems can be detected. “It is essential to redress the striking imbalance between design and implementation. Where strategies for the latter exist, they are often mechanical, not executed as planned, or fragmented across central agencies”, argues Paul Smoke in 2015.

The Logical Framework is a mechanical cause-effect analysis. It is useful for creating plans that makes sense and follow a narrative. However, it has one big deficiency: it gives the possibility of leaving out too many things. The steps that are in there are thoroughly
analyzed, but it is difficult to see what is missing. The assumptions and risks are based on the designer’s assumptions of what those will be, creating a huge – and contradictory – risk.

Maybe something similar happened to the Transantiago’s designers. Maybe that is why it is so difficult to understand what went wrong; because it isn’t on the organized checklist that was created for the plan. It was actually outside the paper and inside user’s behavior, hopes, and expectations of what transportation should be.
References


