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Role of railways in empowering travelers: A case study from the Czech Republic

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ABSTRACT

The Czech Republic opened up its monopolistically dominated railway market to private operators in 2003. Even after 10 years, open-access competition in the passenger railway sector is in evidence only in the Prague–Ostrava route, where the three major operators include the national incumbent, České dráhy and two private players, RegioJet & LEO Express. In this paper, we study the effect of this emerging competition in Prague–Ostrava corridor by recording perceptions of 586 travelers about the services of the operators. We do an in-depth literature review and analyse our survey findings using five major 'railway constructs', viz. railway company image, service quality factor, travel convenience, relevant travel information, and traveler involvement, and their conceptual relationships in explaining the latent construct, traveler empowerment. Finally, the proposed theoretical construct relationships are statistically tested using structural equation modeling method based on Partial Least Squares (PLS). Also, by individually establishing traveler empowerment models for the three operators, a varying degree of empowerment is calculated with a variance of 91%, 90% and 94% for ČD, RJ and LE, respectively. Based on the findings, we conclude that 'traveler empowerment' is an enduring and distinct marketing strategy for all the three passenger railway operators in Czech Republic.

1. Introduction

The railways are an important cog in the wheel of human civilization, but in the context of modern history, the railways, above all else, are an industry. Like any other industry, the railway industry has also had to grapple with increasing competition, changing consumer demands and the challenges of competitive sameness (Betancourt and Gautschi, 1986). The railway industry in the Czech Republic, which happens to be our area of study for this paper, stands at a crossroads today. After monopolistically ruling the Czech transport market for close to a century, it is confronted with stiff competition for the first time. It was in 1994 that the first Railway Act (266/1994) formally opened the Czech passenger railway infrastructure to other operators. But the real opening of the market happened nine years later, when the European liberalization policy (Directive 91/440) influenced the Czech railway industry to take its first step of unbundling the infrastructure (Správa železniční dopravní cesty – SŽDC) and services (České dráhy – ČD) under the Railway Transformation Act (77/2002) in 2003 (Otáhal and Pospíšil, 2009). In accordance with the directives of the European liberalization policy, on January 01, 2003, ČD was rolled out as a joint stock company owned by the Czech state that would have to compete with the other private players. However, it was not until 2011 that the real competition began in the Czech passenger railway market, with the entry of the first private operator, RegioJet (RJ), and soon afterwards, LEO Express (LE) in 2013, in the Prague–Ostrava line.

The private operators came armed with strong market entry strategies, focusing on quality, service and value. They were reasonably successful in gaining quick market attention and wallet share of the passengers from the incumbent ČD. A major indication of this was their growing seat occupancy figures, which were in the range of 80–86% from the very first day of their operations (Urbánek, 2012). The dominant market leader, ČD, on the other hand, tried to keep the growing competition at bay by using its power to control the time of operations, service limitations (Contiguglia, 2011) and suspected predatory pricing (Tomeš et al., 2014). During the price war, fares in the Prague–Ostrava line fell to 25% of the existing fares, making travelers enjoy the best prices and services ever. This has resulted a huge loss to the tune of about 80 million CZK (Annual reports of RJ and LE, 2011) for

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the new comers. In all probability, ČD had a role in bringing about the loss, although it never admitted to doing so.

Considering, (a) the adverse impact of these price wars on revenue and long-term prospects (Brandenburger and Barry, 1996; Henderson, 1997), prices (Schunk, 1999) and the increasing focus of the railway operators on competition at the cost of the convenience of their customers (Heil and Kristiaan, 2001) etc., (b) the problems of 'competitive sameness' (Betancourt and Gautschi, 1986) challenging the growing markets, and (c) the changing needs of travelers (Vredin et al., 2006), we felt a need and an urge to carry out a research based on the perspective of Czech railway travelers.

The main objectives of this paper are:

(1) to identify major 'railway constructs' that result in the subjective experience of empowerment among the travelers, and
(2) to test the 'traveler empowerment model' quantitatively and
(3) to provide unique and enduring marketing strategies to Czech railway operators, based on their unique selling propositions (USPs).

We hope our study will facilitate a better understanding of the development of competition in Czech railways and help all the three railway operators to serve travelers better.

The organization of this paper is as follows. Section 2, that follows immediately after this section, discusses the present market share of the private railway operators and gives a brief idea about the three key railway operators discussed in the study. Section 3 explains the concept of power and empowerment based on interdisciplinary literature and at the end of it, proposes a conceptual model of traveler empowerment. Section 4 illustrates the theoretical relationships and assumptions made in explaining five key railway constructs and the latent construct (traveler empowerment). Section 5 details the methodology adopted. Section 6 elaborates on the PLS estimation and results. Section 7 focuses on discussions and suggestions based on the combined resultant model of traveler empowerment. Section 8 summarizes the study and draws the conclusion, while the final section, Section 9, lays out the scope for further research based on the results derived from the individual models developed for ČD, RJ and LE.

2. Passenger railways in the Czech Republic

The Czech Republic is a landlocked country with a population of 10.51 million, spanning across 78,865.4 sq. km (Czech Statistical Office, 2013) of area in the heart of Europe. It has well established road and railway infrastructure for transportation. It has one of the highest railway network densities in the world, with 122 m of railway lines per square kilometer, making the railways one of the most important modes of transportation in the country (Tnczos and Bessenyei, 2009).

The Czech Republic has four major agglomerations viz. Prague, Ostrava, Brno and Plzeň. The routes connecting Prague–Plzeň, Prague–Brno, Brno–Ostrava are well knit with both highways and railways. This has given rise to keen intermodal competition between rail and road transportation in these corridors. On the other hand, Prague–Ostrava is the only route where, exceptionally, the railway enjoys a monopoly, with negligible intermodal competition. Even though the competition in the Czech passenger railway market looks growing, breakthroughs have not happened at the expected pace, mainly owing to the stodgy, bureaucratic style of functioning of the national institutes (Nash, 2008). Even after 10 years of liberalizing efforts, the market share of the private players in the passenger railway segment (as of 2011) was found to be negligible, at 1.4% of the incumbent ČD (Annual report ČD, 2012), which is the only recipient of state subsidy to intercity transport. Nevertheless, the Prague–Ostrava railway route has been reasonably successful in attracting open-access competition between the state and private railway operators (Tomeš et al., 2014). Before trying to understand the power dynamics between the railway operators (service providers) and travelers (service receivers), it is essential to understand the background of the three Czech railway operators operating under the open-access competition in the route.

2.1. *České dráhy (ČD)*

ČD is among the top 10 railway companies in Europe. It is the largest national rail operator in the country, with 7654 trains (including trains in the express, fast, limited-stops and local categories) covering a passenger network of more than 9500 km, carrying more than 460,000 passengers every day (Info service ČD, 2013). Czech travelers make an average of 17 train journeys per capita per year (Info service ČD, 2013). The revenue from passenger transport stood at CZK 18.7 billion, nearly half of the total consolidated Czech railway industry revenue of CZK 41.0 billion (€1.6bn, $2.1bn) (Annual report ČD, 2010). ČD operates two kinds of intercity trains on the Prague–Ostrava line: the high-quality, high-speed, modern Pendolino trains, and the standard, older (as well as modernized) cars.

2.2. *RegioJet (RJ)*

RJ is a joint stock company that is a wholly-owned subsidiary of Student Agency. Although the company was registered on March 20, 2009, it started operating as a rail transport company on October 06, 2009, using modernized cars bought in the second-hand market in Austria. The pilot ride took place on April 24, 2010 and the train made its debut on September 26, 2011 on the long-haul Prague–Ostrava route (Contiguglia, 2011). It carried approximately 900,000 passengers (an average of 3,932 passengers per day), with an average occupancy of 84–86% on the Prague–Ostrava (-Žilina) route on the sanctioned 18 connections per day by the end of its first financial year (Urbánek, 2013a). The intensified competition following the entry of the second private operator, LEO Express, led to a deepening of price wars in the market, ultimately resulting in a loss of 76 million CZK for RJ in 2012 (Vosman, 2013).

2.3. *LEO Express (LE)*

LE, originally named RAPID Express, belonged to the real estate leasing company, Aretusa, which diversified into rail transport in September, 2010. LE started its operations in the intercity routes of Prague–Ostrava in 2012, with its modern, low-deck units bought from the Swiss company, Stadler. LE's various technical bottlenecks delayed its launch by nearly eight months and operations started only in June 2013. Since its launch, it has registered an occupancy of nearly 82% and has transported 72,000 passengers (which accounts to 28% of its route) using its 16 train connections per day (Table B2). LE earned revenues of CZK 85.5 million in 2012, registering a shocking loss of around CZK 86.8 million (Annual Report LE, 2012). However, the company and its shareholders were optimistic and invested nearly CZK 132 million to enhance the company's capital stability (Sůra, 2013).

All three operators discussed above are faced with fierce competition from one another, so none of them can afford to lose the focus of earning the satisfaction of travelers. The varying degrees of financial muscle power and market dominance of these railway operators add further complexity to the scenario. Hence, we will now attempt to explore the power dynamics between the service provider and receiver in the Czech railways sector.