

# WHY COMMUNICATION THROUGH SOCIAL MEDIA IS IMPORTANT FOR RAILWAY BUSINESS PUBLIC RELATIONS?

Prof. dr Dalibor Petrović, Prof. dr Dragana Macura  
University of Belgrade, Faculty of Transport and Traffic Engineering, Belgrade, Republic of Serbia

E-mail: <sup>1</sup>d.petrovic@sf.bg.ac.rs, <sup>2</sup>d.macura@sf.bg.ac.rs

**Abstract:** Railway transport has been seen as a backbone for sustainable transport system around the world. It is an essential contributor to the economies and the quality of life in many developed countries. In order to increase the volume of railway passenger transport, the railway managers have to influence customers' satisfaction and to improve the quality of rail services. One of the communication tools railway companies uses to reach their passengers is Facebook. In this paper, the comparative analysis among different railway companies in selected European countries is done, in order to track good and less good examples of the usage of sites for social networking, i.e. Facebook. There are defined relevant criteria for making this relative comparison. After the analysis is done, the measures for improving the relationships with railway passengers are proposed.

**Keywords:** RAILWAY PASSENGERS, MARKETING, COMMUNICATION TOOL, FACEBOOK

## 1. Introduction

Railway transport has been seen as a backbone for sustainable mobility. It is the most environmentally-friendly, but also economically-cost effective, mode of transport. However, in many countries around the world the train utilization is pretty low, due to low customers' satisfaction. There are many marketing activities that can be conducted, in order to manage a customer satisfaction.

One way, in this regard, is to communicate with customers through social media, especially through networking sites, such as Facebook or Instagram. The research shows that social media today are key tools for maintaining relationships with costumers [1,2]. Furthermore, benefits of social media for a company are various, but some of the most relevant are: brand awareness growing, brand reputation increasing, customer relationship building, customer loyalty management, measuring the effectiveness of marketing and other company's activities, and so on.

In this paper, we have analyzed several Facebook pages of railway companies in Europe. The aim was to investigate whether social networking sites are important for railway companies or not? Do railway companies use these sites to communicate with their customers or not, and how much are they effective?

The paper is organized as follows. After the introduction, second section is devoted to defining social media role in public relations. The third section is dedicated to the research description. This section presents and discusses the main results of the conducted research. Finally, the last section is devoted to main conclusions and future research directions.

## 2. Social media and creative consumers

Comparing to earlier periods when companies were clearly separated from the organisational environment and were able to control how and when they will communicate with their environment, today public relations (PR) works quite differently. Due to ICT development modern companies are interconnected with their environment in numerous ways and they are increasingly losing possibility to maintain control over communicational flows. Especially, development of the internet and WEB 2.0 and 3.0 had significantly changed the practice of PR [3]. Social media plays the key role in this change, especially sites for social networking such as Facebook, Instagram and Twitter. After the rapid development of social media, companies had become aware that traditional forms of PR in the new social and technological environment may look

anachronistic. Today even the use of websites seems as an old-fashioned way for companies to present themselves and to communicate with public. They are now looking for new ways to develop and maintain the long-term relationships with costumers rather than one-time coupon and sales transactions that take place through websites. [4] Unlike conventional media and websites whose use is controlled by companies, social networking sites have different logic. They could be a powerful tool for sharing knowledge about particular company among consumers. Through these sites consumer can exchange positive impressions and praises but also, very often, a criticism. As a result of this development, controlling the organizational environment in new technological settings is becoming real challenge for the companies. However, if and when a company manages to adapt to the new circumstances then it gets the opportunity to make consumer its` best promoters. [5]

In that regard, Berthon et al. propose five axioms to help international marketing strategists make effective use of social media and constructively engage creative consumers [6]:

1. Social media is a function of the technology, culture, and government of a particular country.
2. In the age of social media, local events seldom remain local.
3. In the age of social media, general issues seldom remain general, that is, macro issues tend to be (re)interpreted locally.
4. The actions and creations of creative consumers tend to be a function of the technology, culture, and government of a particular country.
5. Technology tends to be historically dependent; that is, technologies in different countries evolve along unique trajectories due to inertia rather than they are the optimal solution.

## 3. Research results and discussion

Aim of our research was to make comparative analysis among different railway companies in selected European countries in order to define good and less good examples of the usage of Facebook as a tool for communication with customers. Our previous research had shown that different strategies of social media usage bring different results to the company and that is possible with relatively low budget to have very successful PR strategy [7].

For the purpose of this research we had analyzed Facebook pages of selected railway companies: ÖBB (Austria), SNCB (Belgium), DSB (Denmark), SNCF (France), DB (Germany), ŽSR (Slovakia),

SBB (Switzerland), SV (Serbia). All named companies are rail passenger transport companies.

In Table 1 we have presented some general data regarding railway, internet and Facebook use characteristics in selected countries.

**Table 1** General data for the eight select countries

Country	Railway company	Population	Length of railway lines (km)	Number of passengers (million PKM)	Percent of residence using the internet	Percent of residence using the Facebook
Austria	OBB	8 401 940	5 491	12 077	88	53
Belgium	SNCB	11 000 638	3 578	10 498	90	73
Denmark	DSB	5 560 628	3 181	6 280	98	79
France	SNCF	64 933 400	28 364	96 690	89	42
Germany	DB	80 219 695	38 466	95 529	93	53
Slovakia	ŽSR	5 397 036	3 206	3 754	83	60
Switzerland	SBB	7 954 662	5 196	19 616	95	53
Serbia	Srbija voz	7 186 862	3 809	377	75	52

Data sources:

Population: <https://ec.europa.eu/eurostat/web/population-and-housing-census-census-data/2011-census>, <http://popis2011.stat.rs/>

Total length of railway lines: <https://ec.europa.eu/eurostat/data/database>

Rail transport of passengers: <http://www.stat.gov.rs/sr-latn/publikacije/publication/?p=11525>

Internet and Facebook penetration: <https://ec.europa.eu/eurostat/web/digital-economy-and-society/data/database>

As we can observe from Table 1 all EU countries have high internet penetration, i.e. above 83% of all citizens who regularly use the internet. Serbia is lagging behind but even there 3/4 of all citizens now use the internet. For all countries the Facebook penetration is ranging from 42 to 79 per cent. These differences in the Facebook usage probably depend on some cultural characteristics of specific country.

When it comes to data connected with railway we can see that biggest countries such as Germany and France have the biggest length of railway lines and higher numbers of transported passengers. However, based on other countries we can conclude that extent of

country and number of citizens is not the only indicators of railway infrastructure development and use. The other indicators are: GDP, investments in railway infrastructure, geographical position, history of industrialization of particular country, and so on.

The main results of our Facebook study can be observed in Table 2. As mentioned before, we conducted research on selected European railway companies` Facebook pages. The research was conducted with help of Netvizz v1.6 application. The observed data are related to the Facebook pages content that was produced during the October 2018.

**Table 2** Data related to the Facebook pages of selected railway companies

Railway company	Facebook page launched	Page followers	The number of posts	The percent of users' posts	Reactions Total/per day	Comments Total/per day	Shares Total/per day	Engagement Total/per day
OBB (AT)	2010	173 000	238	74	3 443	12 344	1 543	17 330
					51.87	14.47	6.48	72.82
SNCB (BE)	2013	46 000	50	88	514	1 090	607	2 211
					21.80	10.28	12.14	44.22
DSB (DK)	2010	105 000	166	92	2 463	10 886	571	13 920
					65.58	14.84	3.44	83.86
SNCF (FR)	2012	261 000	145	89	1 690	3 127	610	5 427
					21.57	11.66	4.21	37.43
DB (DE)	2010	580 000	30	30	6 340	6457	975	13 772
					215.23	211.33	32.50	459.07
ZSR (SK)	2017	4 700	33	64	205	757	252	1 214
					22.94	6.21	7.64	36.79
SBB (CH)	2012	17 100	120	100	339	240	8	587
					2.00	2.83	0.07	4.89
SV (RS)	2015	1 600	14	0	46	292	29	367
					20.86	3.29	2.07	26.21

As we can see from Table 2 first companies` Facebook pages had been launched in 2010 (OBB, DSB and DB) following by pages launched in 2012 (SNCF, SBB) and 2013 (SNCB). The last two pages are launched in 2015 (Srbija Voz) and 2017 (ZSR).

When it comes to the followers the Facebook page of the German railway company (DB) has the largest followers number comparing to other railway companies. France Company (SNCF) is on the second place, followed by Austrian Railway Company (OBB). On the other hand, Serbian and Slovakian railways` pages have a smallest number of followers.

When it comes to page posts it is interesting to note that majority of posts are generated by followers instead of companies itself (from 30 to 100 per cent, excluding non-EU country Serbia). This is the best example of communicational role of sites for social networking. As we can see, the companies' Facebook pages are not exclusively reserved for dissemination messages from companies to the costumers but the quite contrary. This is the space for two way communication between companies and consumers which is often held or dictated from the consumers` point of view.

The correlations between number of followers and independent variables (Pearson and Spearman correlation tests, Table 3) have shown that there is strong interdependence between number of followers on one hand and the population size, length of railway lines, number of passengers and the Facebook page lunch year, on the other hand. In another words, those railways companies who are from the biggest countries with the most developed railway transport can count on the largest number of follower, under the condition that they had launched their Facebook pages 8-10 years ago.

**Table 3** Main Correlations

<b>Pearson</b>				
	Facebook launch year	Page followers	Total posts	Users' posts
Engagement	-0.805**	0.604	0.611	0.499
Reactions	-0.730*	0.924**	0.197	0.093
Comments	-0.758*	0.394	0.724*	0.627*
Shares	-0.650*	0.566	0.567	0.416
<b>Spearman Sig. (1-tailed)</b>				
Engagement	0.822**	0.786*	0.690*	0.690*
Reactions	-0.908**	0.929**	0.476	0.476
Comments	0.761*	0.738*	0.595	0.595
Shares	-0.602	0.833**	0.381	0.381

\*\* Correlation is significant at the 0.01 level

\* Correlation is significant at the 0.05 level

The most interesting results of our study are ones which reviled the rate of posts engagement i.e. the number of reaction (predominantly likes), comments and shares to company's page posts. We have used two measures to present this figures, total numbers and average numbers (per post) of reactions, comments and shares, i.e. engagement rate. Total numbers reviled that posts from OBB page had generated the highest engagement rate (17 330), followed by DSB page posts engagement rate (13 920) and DB page posts engagement rate (13 772). The lowest total engagement rate was generated by SV (367) and SBB (587). On the other hand, in terms of average numbers, post from DB generated highest engagement rate per post (459.07), followed by DSB (83.86) and OBB (72.82). The posts from SBB, with average of only 4.89, had been the least successful in attracting reactions from page the Facebook users. The correlation from the table 3 (only for total engagement rate) shows that engagement rate is dependent on the Facebook lunching year, number of followers and posts number (total and average). That is reason why the Facebook

pages of OBB, DSB and DB are the most successful ones in the terms of engagement rate (total and average). Besides this correlation one can also note that posts from these companies, especially OBB and DSB, had generated the highest share of comments in the overall engagement rate. This is also important indicator because it shows that it is crucial to "provoke" the Facebook users to actively engage with post i.e. to comment instead of just clicking likes and shares.

#### 4. Conclusion

The aim of the conducted research was to analyze whether the railway passengers are active on social media, i.e. Facebook, or not, and to highlight the advantages of Facebook that can be a good communication tool between a railway company and passengers. The results of this research can be useful for the management of railway companies around the world.

Our main conclusion is that active and toward consumers open communication through the Facebook company page is the most effective way of interacting with organisation`s environment in the age of the internet. To be active means to publish as many posts as possible and to inspire the customers to do the same. The post should be of various sorts (statuses, photos, videos, links, etc...).

Our research has shown that for bigger countries are easier to generate the higher number of followers. This is important because the number of followers is one of the leading predictors of post high engagement rate. But OBB and DSB are good examples that even companies from smaller countries can be very effective and visible in cyber space if they use social media in proper way.

On the other hand, by "open" we have in mind regular and responsive communication which is led by desire to answer to costumers` questions and remarks, and not to present some imagined picture of company as in the old day of PR. To be open also means that company`s Facebook page is equally space for the company and consumer which means that consumer are allowed to make posts and comments however unpleased they can be. In this way, consumers have impression that company really care for their suggestions and complains. We believe that this is the best way to build mutual understanding and trust.

Future research is dedicated to the model development that can be a guideline for the railway company's management. Actually, the model will give the suggestions to railway company's marketers how they can improve the attractiveness and effectiveness of the company's Facebook page.

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#### References

- [1]Macnamara J. Public relations and the social: How practitioners are using, or abusing, social media. *Asia Pacific Public Relations Journal*. 2010.
- [2]Khang H, Ki EJ, Ye L. Social media research in advertising, communication, marketing, and public relations, 1997–2010. *Journalism & Mass Communication Quarterly*. 2012 Jun;89(2):279-98.

- [3] Phillips D, Young P, Online public relations: A practical guide to developing an online strategy in the world of social media, Kogan Page Publishers; 2009.
- [4] Pappasolomou I, Melanthiou Y, "Social media: Marketing public relations' new best friend", Journal of Promotion Management, Vol.1;18(3):319-28. 2012
- [5] Petrović, D i Kaplanović, S. „Mogućnosti i izazovi upotrebe online platformi za društveno umrežavanje u poslovnom okruženju“, Zbornik radova PosTel 2015, str 67-76, Beograd, 2015.
- [6] Berthon, P. R., Pitt, L. F., Plangger, K., and Shapiro, D. "Marketing meets Web 2.0, social media, and creative consumers: Implications for international marketing strategy", Business horizons, Vol. 55(3), 261-271, 2012.
- [7] Petrovic, D i Kaplanovic, S. "Zastupljenost regionalnih poštanskih kompanija na online društvenim mrežama u kontekstu savremenog poslovanja" Zbornik radova PosTel 2017, str 39-49, Beograd, 2017.

#### *The internet sources:*

- <https://www.facebook.com/unsereOEBB/>  
<https://www.facebook.com/SNCB/>  
<https://www.facebook.com/dsb/>  
<https://www.facebook.com/SNCFOFFICIEL/>  
<https://www.facebook.com/DBPersonenverkehr/>  
<https://www.facebook.com/zelezniceslovenskejrepubliky/>  
<https://www.facebook.com/sbb.cff.ffi.ch/>  
<https://www.facebook.com/srbijavoz/>  
<https://ec.europa.eu/eurostat/web/population-and-housing-census/census-data/2011-census>  
<http://popis2011.stat.rs/>  
<https://ec.europa.eu/eurostat/data/database>  
<http://www.stat.gov.rs/sr-latn/publikacije/publication/?p=11525>  
<https://ec.europa.eu/eurostat/web/digital-economy-and-society/data/database>