

LUGGAGE LOCKERS - NEEDS AND EXPECTATIONS OF PASSENGERS

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Summary: Locking luggage on a railway station is a basic service many passengers want to use. Especially when they try to use their time efficiently, like for shopping, for meetings or for sightseeing luggage often disturbs. Most of today's luggage lockers do not fulfil the needs of modern travellers. The paper gives an overview about all the needs and expectations of passengers regarding to luggage storing on the station and about the benefit for station operators when offering suitable and accepted storing systems.

1. Introduction

Long distance travellers by train have got much luggage. Depending on the travel purpose the configuration of luggage items looks differently but in an average each passenger has got one piece of luggage and additional every second one hand luggage item.

There are many reasons why offering the possibility of locking luggage at the station is meaningful and required. Business traveller, for example, may lock luggage while having meetings or tourists may use some left time for sightseeing. But one reason which is interesting for both, railway station operators and passengers similarly, is the waiting time at the station until the train is leaving.

Aircraft passengers are used to duty free and shopping areas in order to spend their time till departure. Modern railway stations also mutate more and more into shopping malls offering train passengers the possibility of “using” the time before departure by shopping, eating and drinking etc. The big difference between the offered services on airports and on train stations is that aircraft passengers already have checked in their luggage and are able to go on a shopping tour without being handicapped by their belongings. Train passengers always have to carry their whole luggage what leads to the fact that especially those passengers which are earlier at the station or which have to wait for a connecting train can hardly use all the attractions in the station

Luggage is a big handicap because it's hardly possible to dander with it through the narrow aisles of full shops. Passengers which have no arm left will wait outside of the shops and watch their belongings. Fig. 1 shows an example of countless

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passengers sitting around and waiting for departure. If passengers had no luggage they could spend their time for shopping this would lead to two advantages: (1) The felt waiting time is much shorter when dandering through shops instead of sitting on a bench in a cold departure hall. The shorter felt time makes the railway more attractive. (2) People dandering through shops will increase the turnover of the shops.



Fig. 1: Passengers killing their time when waiting for departure

These thoughts point up that a very customer-friendly possibility of storing luggage, also for a short term, is necessary and meaningful for the passenger comfort, for the railway undertakings and for the station operators. But today's offered luggage lockers absolutely do not fulfil the requirements of modern travellers. Therefore a study funded by the Austrian Research Promotion Agency (FFG) and the Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT) analyses the basic needs of passengers regarding to locking luggage and will design a concept for a new customer-friendly locker system. This paper focuses on the passengers needs and expectations.

2. Passenger needs and expectations

2.1. Use of waiting time

Depending on the age and the sex of passengers the use of the waiting time differs. For example younger men more often prefer to use the time for working than women or elderly. But in general every fourth passenger prefers going for shopping or dandering through the shops. About one third prefers to sit in a bistro or restaurant to eat something. An additional third prefers sitting in a waiting area or in a lounge (compare figure 2).

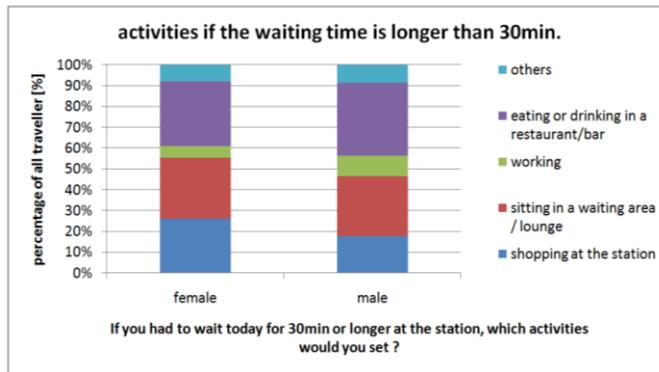
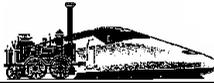


Fig.2: Activities if the waiting time is longer than 30min.

Especially passengers who want to dander or go to a bistro say they feel handicapped by their luggage. In general more than one third of them feel handicapped or very handicapped. But also every fourth passenger who wants to sit in a waiting area or who wants to work feels handicapped because of the luggage (see figure 3).

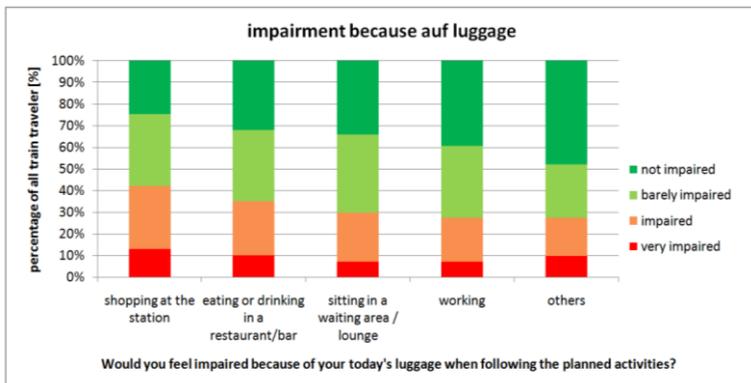


Fig.3: Felt impairments because of luggage while doing different activities

These numbers are an average over all passengers depending on the planned use of time. The felt difficulties grow by the number, size and weight of luggage items. About 60% of passengers with large and heavy luggage items feel handicapped by the luggage when they want to use the time for shopping or going to a bistro or restaurant. And even 30% of passengers with medium sized luggage do.

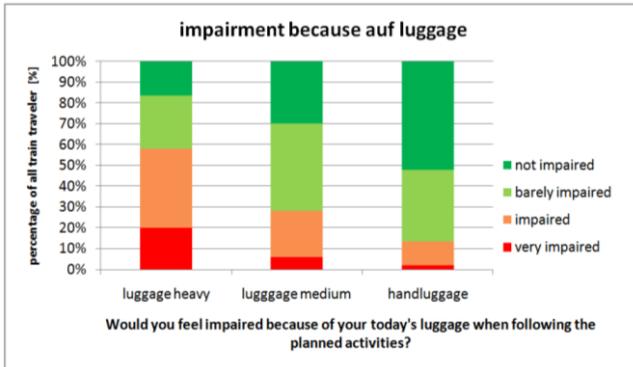


Fig.4: Felt impairments because of luggage

These figures illustrate the large number of potential consumers which want to go for shopping or eating and drinking but can't do that in most cases. This also points out the need and the meaningfulness of short term luggage lockers. But the offered service must be as close to the customer's needs and expectations as possible. What passengers expect under different circumstances will be pointed out below.

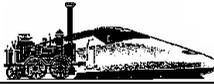
2.2. Main problems with usual lockers

Two main problems regarding today's lockers emerge. In general the handling of luggage is often very inconvenient and especially for short term locking the price are relevant parameters of acceptance. There is no system known at railway stations that offers short term locking for free or for a special low price.

2.3. Price

To make short term storing attractive for travellers the price is one of the most important criteria. About 70% of all passengers in general call the price as an essential reason why they don't use a locker. The willingness to pay depends on the duration of storing. About one third of passengers who would like to use a locker for short term storing for easier use of the time at the station does not want to pay for that service, more than one third is willing to pay one euro for one luggage item and hand luggage. Only one quarter is willing to pay more than one euro (see figure 5).

This research results show, if station operators want to have as many shopping passengers as possible short term locking up to two hours should be offered for free. The maximum acceptable amount is one euro. But it must not be forgotten that the inhibition of using the service or not is between paying nothing or pay anything. So even if two third of the asked passengers say they are willing to pay one euro many won't do so in reality.



It seems to be best to offer short term locking for free and calculate with indirect amount. Because many more passengers can go for shopping – and they want to do that – the turnover and the profit will rise.

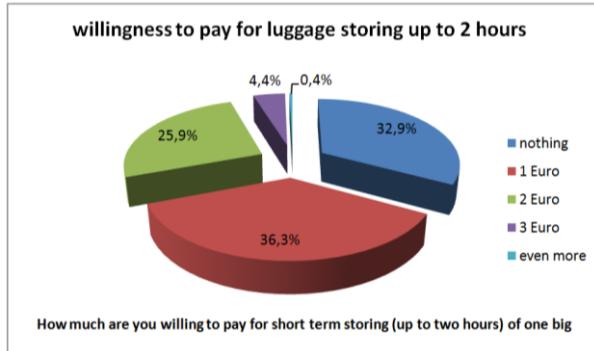


Fig.5: willingness to pay for short term storage

For a locking-duration of one day passengers are willing to pay more. Only 15% are willing to pay only one euro, one third is willing to pay two euro and an additional third is willing to pay three or four euro. Because the station operator has no immediate benefit like additional shopping passengers a price between two and four euro seems to be acceptably (see figure 6). But of course passengers who lock the luggage for some hours or a whole day will also come back before departure and maybe will leave the luggage in the locker for doing some shopping in the station until departure.

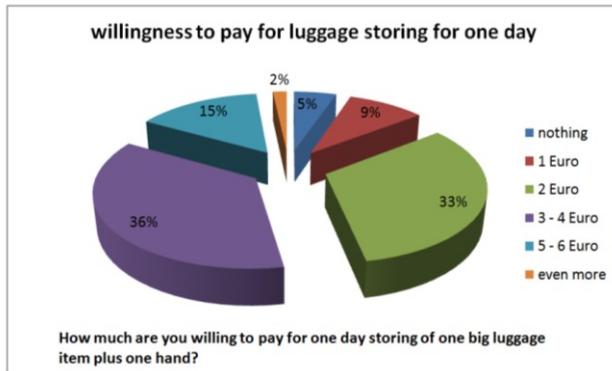


Fig.6: willingness to pay for one-day storage

2.4. Handling

Beside the price the handling of luggage lockers is an essential criteria for acceptance. The handling consists of easy locating, the potential must of lifting up the luggage, the size of lockers, the immediate handling (payment process, central touch screen etc.), the time duration of the locking process and the return of the luggage.

The most important factors are the size of the lockers and the fact whether the luggage must be lifted or not. For short term locking also the time need is essential, especially when passengers want to pick up their luggage in order to go to the train.

2.5. Required lifting of luggage

Depending on the age and the sex travellers have got different difficulties when they must lift luggage. For example about 50% of all female passengers with large luggage are not able or willing to lift it, about 20% are able or willing to lift it up to about one meter and only 30% are able to lift it higher.

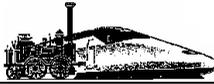
For about 70% of all female and 40% of all male traveller storing luggage at floor level is important or very important. Also for 70% of all passengers above the age of 60 this is a must.



Fig.8: Many passengers have troubles when they must lift their luggage

2.6. Time need

The time needed for storing and especially for getting back the luggage is another very important criteria for acceptance. More than 25% of the asked train passengers say the luggage returning must not need longer than one minute, more than 50% accept a time need between one and three minutes (see figure 9). The time need includes the whole process between coming to the locker until getting the luggage and leaving. Especially the subjectively felt time needed when passengers are in a hurry and they are nervous because of the approaching departure of their



train is very important. If passengers are in a hurry one minute can be felt as five minutes. For systems that may need a little bit longer – for example central locker terminals – a timer that tells the remaining time in seconds would be very meaningful.

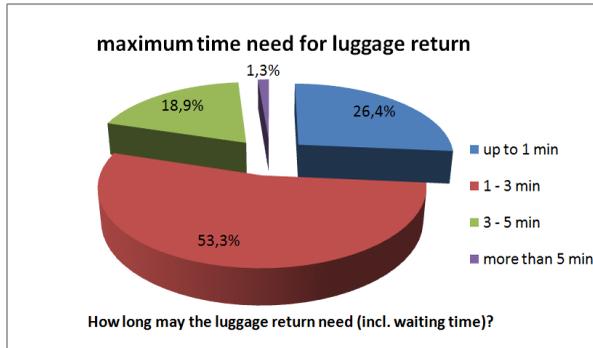


Fig.9: maximum allowed time need for luggage return

2.7. Luggage size

Many of today's lockers are too small for usual luggage items. The width of many lockers is 33cm but 40% of all luggage items are bigger than this size. That means 40% of luggage items do not fit into normal lockers. Passengers either cannot store it or must use a normally much more expensive locker for huge items.

3. Summary - Conclusions

About 80% of passengers staying more than 30min at the station think about using a short term locker for easier moving in order to use the station infrastructure like shops or bistros (see figure 10). For half of them the handling must be very quick. One third says they will use it only if no fee is charged. For station operators it may be a very good benefit if they offer short term locking for free. They will get indirect revenue from many more shopping passengers.

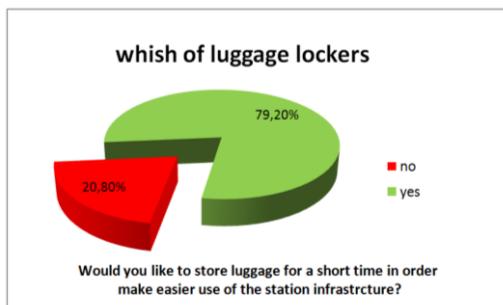


Fig.10: general wish of luggage lockers

Regarding to the acceptance of the system and to passengers comfort, needs and expectations a locker system is required that allows floor level locking or at most a short lifting. The system also must serve the different dimensions of today's luggage!

Therefore many travellers would prefer central locking terminals like in Köln main station (see figure 11). But in this case the handling time is very important.



Fig.11: central luggage terminal in Köln

In order to fulfil all the different customer's needs an Austrian project consortium consisting of the partners Upper Austria University of Applied Sciences, the St.Pölten University of Applied Sciences and the consulter netwiss GesmbH develop a completely new locking system that allows very customer friendly locking and which will be very efficient for the operators.

References

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