



Evaluating of Iran Railway Stations performance (Stations Ranking)



UIC next station
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RAI

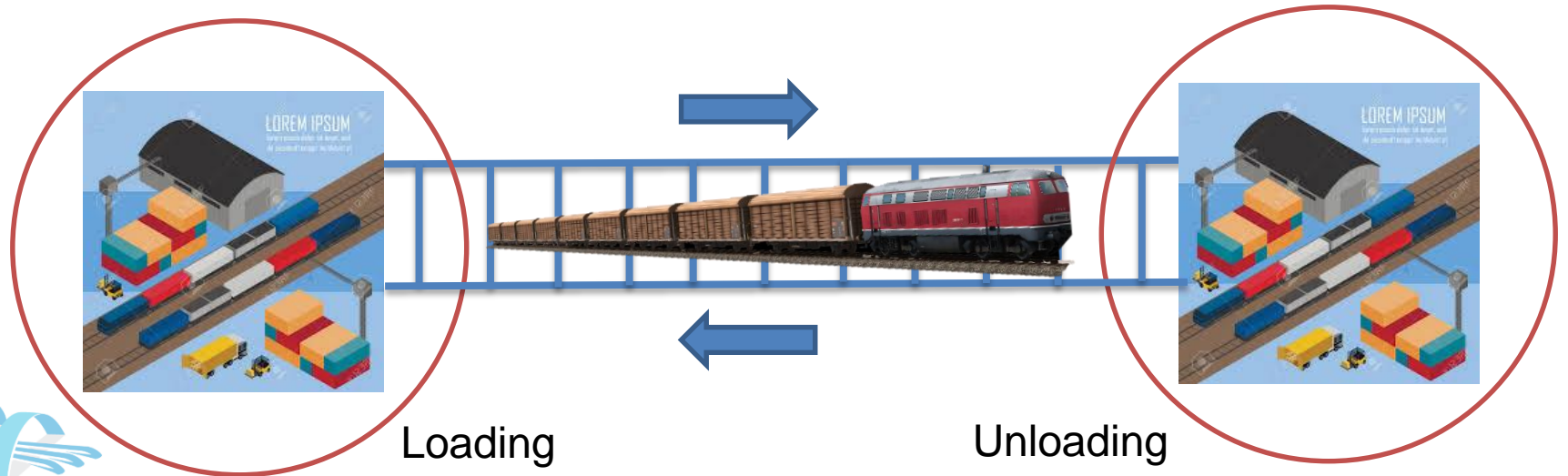
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Preamble

- Optimization of available resources and facilities has been always challenging to the managers in organizations. Given that the stations are one of the most important resources at the railway's disposal, there is a need for a model to evaluate stations' performance, rate and provide feedback. So in this article by defining relevant indicators and setting a model for evaluating stations' performance while rating and giving feedback annually to the stations, a solution is proposed by benchmarking the stations performing better against the other similar stations.
- Some of the recognized indices for evaluating the performance of stations include”
- accidents, average wagon and locomotive stops, number of formed trains, number of crossing trains, passenger trains delays, and passengers' satisfaction. Stations being examined in present article are depots in Iran including 18 open stations with gaar grades.
- Results show that regarding performance indices and quality of services, Mashhad and Tehran stations lead the ranking among the stations in the whole network.

Cycle time of a wagon

The importance of this study is that two-thirds of the cycle time of a wagon is spent at the stations, and a reduction in stopping and operation time at the stations can increase commercial speed



Daily Operations in the stations

- Loading- unloading
- Shunting
- Locomotive and wagon Visit
- Train forming
- Stop (Waiting for the assignment)
- Stop for Overtake & Convergence



Indicators

- Number of formed and passing train/ number of tracks
- Wagon stop time
- Locomotive stop time
- Accidents
- Passenger train Delay
- Passenger Satisfaction



Indices Weight

Research Method

& Software

- AHP
- Expert Choice

Indices	Weight
Accidents	0.25
Number of formed and passing train/ number of tracks	0.20
Passenger train Delay	0.15
Passenger Satisfaction	0.15
Average of Locomotive stop time	0.13
Average of Wagon stop time	0.12

1st rank: Mashhad Railway Station



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Indicators	Mashhad
number of tracks	18
Number of formed and passing train per day	44
Average of Wagon stop time (minute)	15013
Average of Locomotive stop time (minute)	9.4
Accidents (level)	0.1
Passenger train Delay (minute)	1.1
Passenger Satisfaction (percentage)	72.3



2nd rank: Tehran Railway Station



2nd rank: Tehran Railway Station

Indicators	Tehran
number of tracks	16
Number of formed and passing train per day	68
Average of Wagon stop time (minute)	3836
Average of Locomotive stop time (minute)	0.7
Accidents (level)	0.1
Passenger train Delay (minute)	1.3
Passenger Satisfaction (percentage)	69.2



Table of Gaar stations Ranking:

Rank	Station Name
1	Mashhad
2	Tehran
3	Enshe'ab Bandar Abbas
4	Qom
5	Sirjan
6	Andimeshk
7	Bafgh
8	Arak
9	Dorood
10	Manovri Bandar Abbas
11	Bandar Emam Khomeini
12	Tabriz
13	Sarakhs
14	Aprin
15	Ahvaz
16	Miyaneh
17	Tabas
18	Jolfa

Thank you
for your kind attention