Portfolio management and priority actions for stations. Case-study of Russian passenger and logistics terminals.

6A – Asset management strategy implementation

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1. Railway stations and terminals as multi-assets.

1. RAIL INFRASTRUCTURE
2. SOCIAL AND ECONOMIC INFRASTRUCTURE
3. REAL ESTATE ITEMS
4. OPERATORS’ FACILITIES
5. A SYSTEM OF SYSTEMS

Picture sources: RZD, metrans.eu
2. Major problems of setting up investment priorities.

Example of Russian passenger stations

- 2018 FIFA World Cup
- Programme on improvement of quality of rail services for passengers in 2017-2019
- Reconcept of commerce
- Investment programme
- Adaptation for PRM

What will a client get at station N?

- Toilets: stations A-B
- Luggage lockers: stations C, K-L
- New format of business lounges: stations D-E
- Toilets: stations A, C
- Unique commerce and service spaces: stations X-Y
- Individual heating devices: stations W, Z
- Refurbishment of station L
- Toilets for PRM: stations M, O, X

What will the asset performance be like?

What should local manager do?
3. Case-study of Russian stations and terminals.

**Example of Russian passenger stations**

<table>
<thead>
<tr>
<th>Real estate</th>
<th>Passengers</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>341 stations</td>
<td>324.8 mln per year (2017, departures only)</td>
<td>13.5 thou. employees</td>
</tr>
<tr>
<td>2,325 real estate items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3 mln m² – total floor area</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Out of categories: 43
1 category: 32
2 category: 127
3 category: 1
Non-classified: 5

The sizes of circles correspond to the categories of stations

Stations management system is a pool of diversified items, where separate arrangements cannot lead to augmentation of general asset performance effectiveness.
### 4. Algorithmizing management solutions (1 of 2).

<table>
<thead>
<tr>
<th>General criteria</th>
<th>PRIORITY DEVELOPMENT – STABLE</th>
<th>PRIORITY DEVELOPMENT – HI-PO / PROJECT-LINKED</th>
<th>PRIORITY MAINTENANCE</th>
<th>BALLAST</th>
<th>OTHER SPECIFIED / NON-SPECIFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in future events / intl. programmes</td>
<td>🟡</td>
<td>🟡</td>
<td>🟡</td>
<td>🟥</td>
<td>🟥</td>
</tr>
<tr>
<td>Economic efficiency</td>
<td>🟡</td>
<td>🟡</td>
<td>🟡</td>
<td>🟥</td>
<td>🟥</td>
</tr>
<tr>
<td>Technical conditions</td>
<td>🟡</td>
<td>🟡</td>
<td>🦐</td>
<td>🟥</td>
<td>🟥</td>
</tr>
<tr>
<td>Traffic dynamics</td>
<td>🟡</td>
<td>🟡</td>
<td>🦐</td>
<td>🟥</td>
<td>🟥</td>
</tr>
</tbody>
</table>

- **High efficiency with maximum use of existing options.**
- **High efficiency with opportunity to involve in new projects or events.**
- **Poor technical conditions with high efficiency or involvement in new projects.**
- **Candidate items for sale or frozen assets.**
- **Out of priority items or items with specific features.**
4. Algorithmizing management solutions (2 of 2).

Algorithmizing principles:

- best performing items
- high-potential items
- worst condition items than cannot be sold
- worst condition items
- stable negative efficiency dynamics
- other items

Priority investments

Sale / disposal

The most important is a right choice of criteria.
5. Typical criteria for passenger and freight terminals.

**PASSENGER**
- Passenger flows
- Revenues
- Commercial attractiveness
- Use of floor space
- Physical condition
- External commitments
- Involvement in programmes and events

**FREIGHT**
- Volumes of transshipment
- Revenues
- Location on freight routes
- Physical condition
- Linked infrastructure
- External commitments
- Involvement in programmes and events

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1A. Development</td>
<td>1B. Development</td>
<td>2A. Maintenance</td>
</tr>
<tr>
<td></td>
<td>- stable</td>
<td>- potential</td>
<td>- priority</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Improvement of quality and efficiency of services to passengers.</th>
<th>1A. Development</th>
<th>1B. Development</th>
<th>2A. Maintenance</th>
<th>2B. Maintenance</th>
<th>2C. Maintenance</th>
<th>3. Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renounce of old and unused services</td>
<td>P2</td>
<td>P2</td>
<td>P1</td>
<td>P1</td>
<td>P1</td>
<td></td>
</tr>
<tr>
<td>Transfer of services to professional management</td>
<td>P2</td>
<td>P1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change of metallic seats in waiting areas</td>
<td>P1</td>
<td>P1</td>
<td>P2</td>
<td>P3</td>
<td></td>
<td>P2</td>
</tr>
<tr>
<td>Installation of automatic luggage lockers</td>
<td>P1</td>
<td>P1</td>
<td>P2</td>
<td>P3</td>
<td></td>
<td>on demand</td>
</tr>
<tr>
<td>Change of technical equipment in business lounges</td>
<td>P1</td>
<td>P1</td>
<td>P2</td>
<td>P3</td>
<td></td>
<td>on demand</td>
</tr>
<tr>
<td>Modernization of toilets</td>
<td>P2</td>
<td>P1</td>
<td>P3</td>
<td>P4</td>
<td></td>
<td>on demand</td>
</tr>
<tr>
<td>Kids friendly projects</td>
<td>P1</td>
<td>P1</td>
<td>upon opportunity</td>
<td></td>
<td></td>
<td>upon opportunity</td>
</tr>
<tr>
<td>Comfort waiting project</td>
<td>P1</td>
<td>P1</td>
<td>upon opportunity</td>
<td></td>
<td></td>
<td>upon opportunity</td>
</tr>
<tr>
<td>Equipment of stations with tablets and other technical means to gather feedback</td>
<td>P1</td>
<td>P1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **P1**  | first priority |
| **P2**  | second priority |
| **P3**  | third priority  |
| **P4**  | fourth priority |
| **P**   | priority applicable without priority |
## 7. Case-study of logistics terminals.

<table>
<thead>
<tr>
<th>Major sources or revenues</th>
<th>Federal leaders</th>
<th>Project-linked terminals</th>
<th>Necessary</th>
<th>Foreign stars</th>
<th>Ballast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transit + export and import</td>
<td>The high-potential terminals supposed to become part of Federal network of logistics terminals</td>
<td>Terminals linked to large-scale production projects</td>
<td>Terminals assuring network integrity and bringing stable revenues</td>
<td>Terminals to attract additional transit freight flows</td>
<td>Possible sale or disposal due to permanent decrease in revenues and transshipment volumes.</td>
</tr>
<tr>
<td>New cargo base</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Scheduled services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Other</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Sources of Revenues:

- **High potential of freight volumes growth**
- **Low potential of freight volumes growth**
- **Medium potential of freight volumes growth**
- **Probability of freight volumes decrease**
8. Outcome.

1. Elaboration of a unified system of multi-asset investment prioritization in regard of limited financing.

2. Avoidance of duplicating of activities in different programs for one group of terminals and lack of activities for other ones.

3. Opportunity of fast changes for non-scheduled programs and activities.

4. Augmentation of transparency for partners, customers and connected stakeholders.

5. Opportunity to delegate asset management decisions to lower levels (regional divisions, terminals, etc.)
Thank you for your kind attention!

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