Key performance indicators (KPI)

The basic problem:

You will be told a lot of BS about indicators

BS stands for:
- Pretending this is science, not common sense
- Inventing unnecessary classifications, standards and 'rules'
- Engaging in unproductive formalistic discussions
- Pretending you can discuss indicators without ever seriously looking at the data
- Believing indicators are more important than they really are
KPI are a tool for monitoring.

**Monitoring of implementation**
- Were planned activities **implemented**, and were they implemented **on time** and within the **planned budget**?
- Use KPI related to implementation of activities
- Quarterly or semi-annual reports, addressed to decision makers, to improve implementation

**Monitoring of results**
- Did the strategy / program deliver **expected real-life improvements** for key target groups?
- Use KPI related to expected results of measures/pillars
- Annual reports addressed to all stakeholders, to adjust the measures

**Evaluation**
- **Comprehensive external assessment** of the quality of the strategy / programme, its implementation and **impact**
- **There is no such thing as „good impact indicators“**
- At least at the end of implementation period, to inform preparation of a new strategy / programme
Implementation monitoring and KPI

Key issues

➢ To allow monitoring, activities in Action Plans must
  ❑ be specified in terms of outputs to be delivered,
  ❑ include targets for performance indicators,
  ❑ include implementation timelines.

➢ To allow financial monitoring:
  ❑ planned activities must be costed and budgeted,
  ❑ financial reporting must be activity/output based.
Example: Monitoring implementation

<table>
<thead>
<tr>
<th>Action</th>
<th>Budget</th>
<th>Development partners</th>
<th>Uncovered</th>
<th>Time period</th>
<th>Responsible authority</th>
<th>Performance indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2.5</td>
<td></td>
<td></td>
<td>300 thousand lei</td>
<td>2015-2017</td>
<td>ODIMM / Chamber of Commerce &amp; Industry</td>
<td>Number of organized training courses; Number of trained people</td>
</tr>
</tbody>
</table>

- **Organize training for business incubator managers**

  - **2015-2017**
  - ODIMM, Chamber of Commerce and Industry

  - Within the 11 Business Incubators, over **2877 consultations** were provided to entrepreneurs in the Business Incubators operating area.
  - Business Incubators have organized **185 events** dedicated to entrepreneurship, organized and funded by the Business Incubators Management Team.
  - There were two sessions on the role of IA, in which over **100 people** participated.
  - During the year 2017, the **Cahul district councilors**, who were responsible for the establishment of the IA entity, were advised and guided in the procedure for registering the status of the institution [...]
  - On April 11, 2017, ODIMM organized an **informative session** on the opportunities offered by the Business Incubator. [...] More than **30 potential entrepreneurs** wishing to start their own business at the Business Incubator participated in the information session.
  - On 13.06.2017 ODIMM organized a **training course** on "Business Planning". [...] The training course was attended by **25 people** who are already entrepreneurs or want to open their own businesses and want to become residents of the Cahul Business Incubator.
  - On 24.10.2017 and 02.11.2017 at the Business Incubator in Calarasi and Cahul, ODIMM organized an **Information Session** entitled "Opportunities for the Development and Internationalization of SMEs". Over **60 residents** of the Business Incubator and economic agents from the region participated [...] 
  - On 08.12.2017 representatives of ODIMM and Business Incubators Soroca, Sangerei, Nisporeni and Stefan Voda participated in a **training session** on how to effectively apply the methodology and conduct a focus group with the exporting entrepreneurs or potential exporters in the Republic Moldova. [...]
Results monitoring and KPI

Key issues

➢ KPI range from those directly related to the measure to broader ones that are influenced by many other factors.

➢ Where to look for indicators?
  • Start with data used to describe the situation and underline the problem, then look further
  • Regularly published statistical data (statistical office, central bank) or readily available (published!) administrative data
  • Regular and comparative international reports

➢ Guiding principles for the choice of indicators:
  ▪ Relevant, quantitative, reliable, available
  ▪ Target values must be motivational, but achievable

BEWARE!

KPI never tell the whole story. Combine them with other information and analysis. For evaluation, engage external expertise and stakeholder consultations.
Example 2: SME Strategy 2016-2020

Checking the overall targets set in the strategy

Targets of effective implementation of SME Development Strategy are as follows (baseline – 2013):

1. Growth SMEs output by average 10% annually by 2020;
2. Growth of number of employees in SMEs by 15% by 2020;

Reformulation of indicators:

1. Average annual growth of production value of SMEs over the last three years;
2. Increase in the number of persons employed in SMEs since 2013;
3. Increase in productivity (value added per person employed) in SMEs since 2013.
Example 2 (Cntd‘)
Checking the realism / ambition of targets

Average annual growth of production value of SMEs over the last three years.
Target for 2020: 10%.

Estimate for 2017 (on quarterly data): 9%.

Is the target realistic / ambitious?

Production growth, annual
Production growth, 3-year average
Example 3: Choosing indicators
From objectives to ideas for indicators

<table>
<thead>
<tr>
<th>STRATEGIC DIRECTION: INCREASE OF SME COMPETITIVENESS AND INNOVATION SPIRIT</th>
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</thead>
<tbody>
<tr>
<td><strong>OBJECTIVES</strong></td>
</tr>
<tr>
<td>Improvement and development of technical and innovation potential of SMEs.</td>
</tr>
<tr>
<td>Assistance in the formation of SMEs clusters, development of business incubators, etc.</td>
</tr>
<tr>
<td>Support of intellectual property for SMEs.</td>
</tr>
<tr>
<td>Facilitation of access for SMEs to domestic and foreign markets.</td>
</tr>
<tr>
<td>Implementation of management systems based on the international and European standards.</td>
</tr>
</tbody>
</table>
Example 3 (Ctnd‘)

Suggestions made

- **Businesses financial statements** could be used to calculate total investment by SME.
- NBS now conducts an **innovation survey**. In 2015-15, 20.8% all companies were innovative. Out of these, 62.1% were small (10-49 empl), the rest were medium-sized.
- Number of **patent applications** (by SME): Intellectual Property Office.
- **Sectoral structure of GDP** produced by SME.
- **Share of SME in total exports**: add to business survey or into the balance sheets.

![Share of innovative enterprises by sectors](image1)

![Sectoral structure of GDP produced by SME](image2)
Example 4
Data issues: comparability

Definitions of SME

National definitions typically include different thresholds for turnover. Why?

Eurostat, by convention, produces SME data based on employment-only definition:
- 1-9 & individual entrepreneurs
- 10-49 (small)
- 50-249 (medium)

Example from one of the countries
[SME employment share in 2017]

Long enough time-series of data based on national definition. [72.7 %]

OECD, with national statistics, produced internationally comparable data, but published only for 2017 and partly 2016. [63.7 %]

National statistics published backward time series on employment only-definition, but did not include individual entrepreneurs in the 1-0 category. [49.3 %]
Example of a possible approach: Criteria for selection of KPI for ERP measures

Based on OECD’s ERP Monitoring Tool

SCREENING (CUT-OFF) QUESTIONS:

- Timely? *(for year X in year X+1, at least annually)*
- Transparent methodology?
- Additional efforts to produce the data?

SELECTION QUESTIONS:

- Relevant? *(for the measure’s objective / expected results)*
- Specific? *(depends on the measure or on many other influences)*
- Credible? *(official, international sources)*
- Comparable? *(internationally, with past years)*
- Breakdowns? *(sectors, size, regions, gender)*
# Evaluation

## Key questions to be addressed

<table>
<thead>
<tr>
<th>Appropriateness of the strategy</th>
<th>Was the strategy designed and implemented in such a way that it could have had a meaningful impact on growth / competitiveness / employment?</th>
<th>PROCESS EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness (impact) of the strategy</td>
<td>How much of the improvement may be attributed to measures / actions of the strategy?</td>
<td>IMPACT EVALUATION</td>
</tr>
<tr>
<td>Efficiency of the strategy</td>
<td>Could similar results be achieved with similar resources / Could better results be achieved by allocating resources to other policies?</td>
<td>ECONOMIC (FINANCIAL) EVALUATION</td>
</tr>
</tbody>
</table>

Dead-weight losses? Displacement effects?

How is this related to PPB?
## Process evaluation

<table>
<thead>
<tr>
<th>Technical quality</th>
<th>Was the strategy based on sound analysis of the situation? Did measures address key obstacles to SME development?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusiveness</td>
<td>How were stakeholders involved in the design of the strategy? How was their feedback reflected in the strategy / implementation?</td>
</tr>
<tr>
<td>Quality of implementation</td>
<td>To what extent were planned measures implemented? What difficulties were encountered during implementation? How effective were monitoring and reporting arrangements?</td>
</tr>
</tbody>
</table>

- Desk analysis of:
  - background studies
  - official reports

- Qualitative information from:
  - surveys
  - focus groups
  - Interviews

- Expert judgement

Funded by the European Union.
Impact evaluation

**Analysis of Situation**
- Update the pre-strategy analysis
- Upgrade the analysis: studies and data now available

**Evaluation Plan**
- Which measures are most important to be evaluated?
- What methods can be used for evaluation?

**Impact Estimation**
- Quantitative analytical methods
- May be combined with qualitative information

**Consultation**
- Discuss preliminary findings with stakeholders and beneficiaries

Comparison of groups
Regression analysis
Economic models
Trends, meta-analysis
Group exercise 3

Analyze KPIs for selected 3 measures from different ERPs

Fill in a simplified scoring table based on OECD‘s ERP Monitoring Tool and decide if an indicator is good, acceptable or not acceptable

<table>
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<tbody>
<tr>
<td>KPI 1</td>
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<td>KPI 2</td>
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<tr>
<td>KPI 3</td>
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</tr>
</tbody>
</table>

Compare and discuss your results with the other group that worked on the same measure (1=4; 2=5; 3=6).
Groups 1 and 4, example 1

**Agricultural cooperatives**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of agriculture cooperatives using new investments</td>
<td>33</td>
<td>43</td>
<td>53</td>
</tr>
<tr>
<td>Agriculture cooperatives capacity presented in ha arable land</td>
<td>1,225</td>
<td>1,600</td>
<td>2,000</td>
</tr>
<tr>
<td>% of young farmers (age below 40) members of agriculture cooperatives</td>
<td>23</td>
<td>25</td>
<td>27</td>
</tr>
<tr>
<td>% of women associated to agriculture cooperatives</td>
<td>19</td>
<td>20</td>
<td>21</td>
</tr>
</tbody>
</table>
Groups 1 and 4, example 2

Youth guarantee

- % of successful participants in the Youth Guarantee for a period of 4 months, in relation to the total number of participants in the measure,

- % of successful participants in the Youth Guarantee according to the grounds for exit from the measure (employment, measure),

- The situation of young people after leaving the Youth Guarantee (in the 6, 12 and 18 month intervals).
Groups 1 and 4, example 3

**Improving effectiveness of inspection oversight**

<table>
<thead>
<tr>
<th>Description</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual plans of all Inspections adopted</td>
<td>December</td>
<td>December</td>
<td>December</td>
<td>December</td>
</tr>
<tr>
<td>Action Plan for the Employment of Young Inspectors adopted</td>
<td>-</td>
<td>Q3</td>
<td>30% implemented</td>
<td>60%</td>
</tr>
<tr>
<td>Implementation of the e-Inspector software in central-level inspectorates</td>
<td>Four inspectorates</td>
<td>All central-level inspectorates</td>
<td>All central-level inspectorates</td>
<td>All central-level inspectorates</td>
</tr>
<tr>
<td>Media Plan for Promoting the Profession of Inspector prepared</td>
<td>-</td>
<td>100% prepared</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>New portal of the Coordination Committee for Inspection Oversight developed</td>
<td>Public procurement procedure implemented</td>
<td>50%</td>
<td>50%</td>
<td>-</td>
</tr>
</tbody>
</table>
## Groups 2 and 5, example 1

### Financial support to research and development

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of newly established project partnerships between the business and academic sector</td>
<td>22</td>
<td>36</td>
<td>36</td>
<td>46</td>
<td>56</td>
<td>66</td>
</tr>
<tr>
<td>Number of newly established innovative companies</td>
<td>156</td>
<td>233</td>
<td>279</td>
<td>320</td>
<td>360</td>
<td>400</td>
</tr>
<tr>
<td>Number of registered patents</td>
<td>58</td>
<td>65</td>
<td>71</td>
<td>76</td>
<td>81</td>
<td>86</td>
</tr>
<tr>
<td>Number of highly-skilled staff employed through the supported projects</td>
<td>459</td>
<td>641</td>
<td>700**</td>
<td>750</td>
<td>800</td>
<td>850</td>
</tr>
<tr>
<td>Number of published papers in the Web of Science (All documents) *</td>
<td>7221</td>
<td>7038*</td>
<td>7100 (5071)*</td>
<td>7200</td>
<td>7300</td>
<td>7400</td>
</tr>
<tr>
<td>Number of researchers per million inhabitants</td>
<td>1238</td>
<td>1570</td>
<td>1600</td>
<td>1650</td>
<td>1700</td>
<td>1750</td>
</tr>
</tbody>
</table>
Groups 2 and 5, example 2

Single and transparent investment legal regime

- Increase of FDI (in % and amount);
- % of investor enquires completed;
- Percentage of transition from enquiry to project e-Invest
Groups 2 and 5, example 3

Enhancement of financial benefits in social assistance

- Reduction of the poverty rate to 16% by 2021.

- Inclusion in the labour market of about 20% of existing social welfare beneficiaries
### Groups 3 and 6, example 1

#### Raising competitiveness of industry

<table>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of goods exports in GDP, in % - TV: 40.5% in 2021</td>
<td>33.7</td>
<td>36.6</td>
<td>38.4</td>
<td>35.7</td>
<td>37.1</td>
<td>38.9</td>
</tr>
<tr>
<td>Growth rate of industrial GVA, in % – TV: 5% (2021)</td>
<td>/</td>
<td>3.5</td>
<td>2.8</td>
<td>2.7</td>
<td>4.7</td>
<td>4.9</td>
</tr>
<tr>
<td>Number of participants in export promotion programmes who are involved in new export activities - TV: 1150 (2021)</td>
<td>85</td>
<td>90</td>
<td>95</td>
<td>100</td>
<td>105</td>
<td>110</td>
</tr>
<tr>
<td>Number of documented interest expressed by investors – TV: 108 (2021)</td>
<td>61</td>
<td>67</td>
<td>74</td>
<td>82</td>
<td>90</td>
<td>99</td>
</tr>
</tbody>
</table>
Groups 3 and 6, example 2

Reduce regulatory burden to business

- Number of business licences;
- % of businesses satisfied;
- % of businesses that file a complaint/number of complaints filed;
- Number of hours reduced for administrative procedures/cost of applications
Groups 3 and 6, example 3
Qualifications oriented to labour market requirements

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2018 (BV)</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of qualifications entered in the qualifications database/register</td>
<td>140</td>
<td>190</td>
<td>240</td>
<td>290</td>
</tr>
<tr>
<td>Number of students attending the dual education system</td>
<td>3500</td>
<td>3850</td>
<td>4235</td>
<td>4665</td>
</tr>
<tr>
<td>Number of companies in which learning through work is conducted</td>
<td>600</td>
<td>800</td>
<td>900</td>
<td>1000</td>
</tr>
<tr>
<td>Number of established education training centres and excellence centres for the purpose of supporting dual education</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>
Group exercise 3

Analyse KPIs for selected 3 measures from different ERPs

Fill in a simplified scoring table based on OECD’s ERP Monitoring Tool and decide if an indicator is good, acceptable or not acceptable

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</table>

Compare and discuss your results with the other group that worked on the same measure (1=4; 2=5; 3=6).

Discussion – how useful do you find such KPI for:

- Improving policies and implementation
- Strengthening accountability of policy implementing institution
- Allocation of budget

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