Module 2
Developing Metrics and Indicators

End of Module Objective

- **Define metrics and indicators**

- **Identify requirements for developing metrics and indicators**

Definition of Metrics

- **Metrics are parameters used for measuring, comparing or tracking performance or output.**

- **They are values of variables.**
  - **Percentage of**
  - **Count / number of**
  - **Sum of**
  - **Average of**
  - **Maximum of**
  - **Rank of**

Definition of Metrics

- **Examples:**

  - **Metrics for traffic volumes include total departures, domestic and international flights.**

  - **Metrics for accidents include total accidents, fatal accidents and fatalities.**

Building Metrics
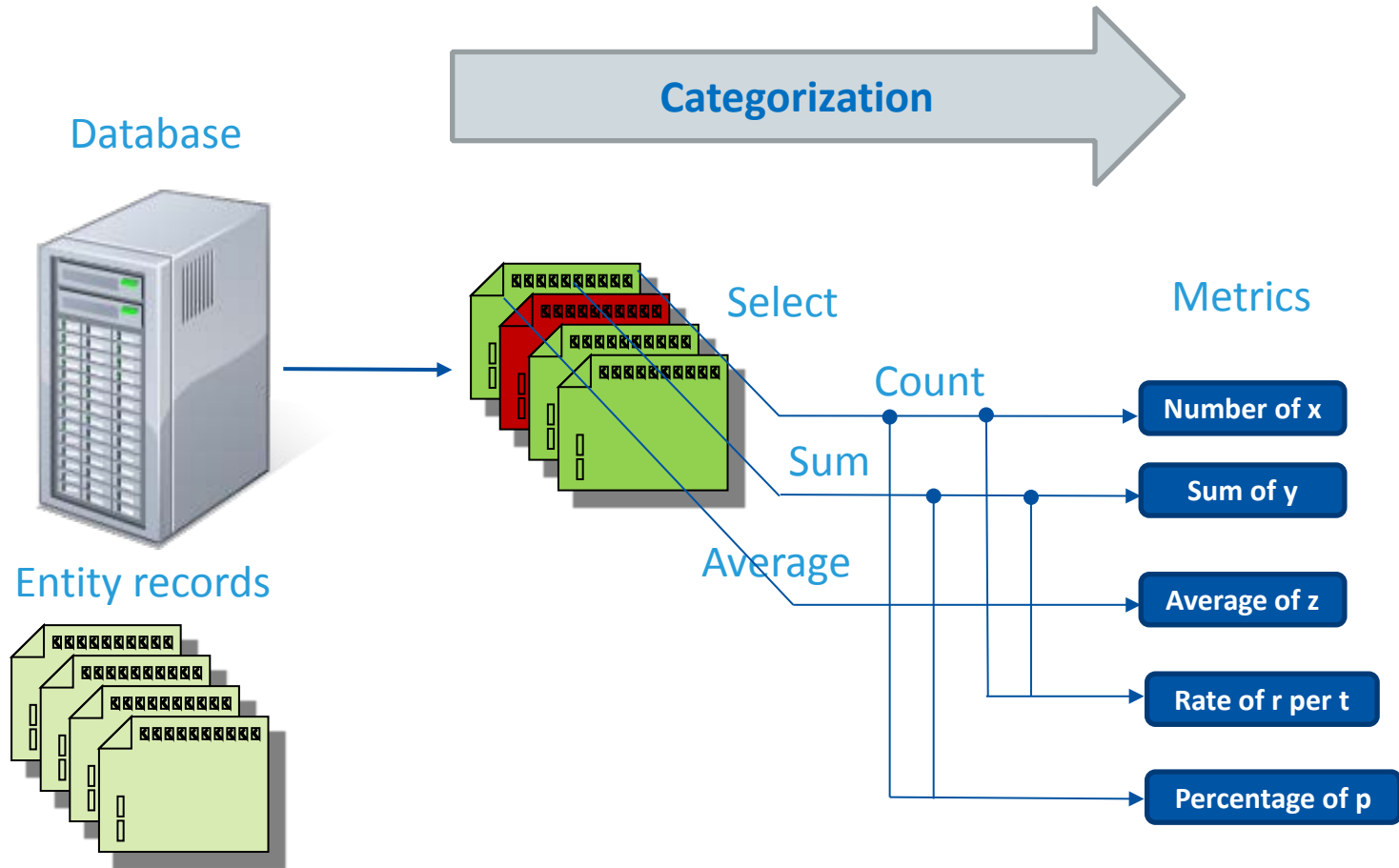
Definition of Indicator

- **An indicator is a measure that indicates/provides specific information on the status, level or condition of something.**

- **An indicator is a variable that expresses achievement, the attainment of a goal or the results of a specific change.**

Definition of Indicator

- **An indicator should be put in the context of the scope of the goal being assessed and measured.**

- **Example: A higher level of effective implementation (EI) of ICAO standards and recommended practices (SARPs) in a State indicates that the State has higher safety oversight capability.**
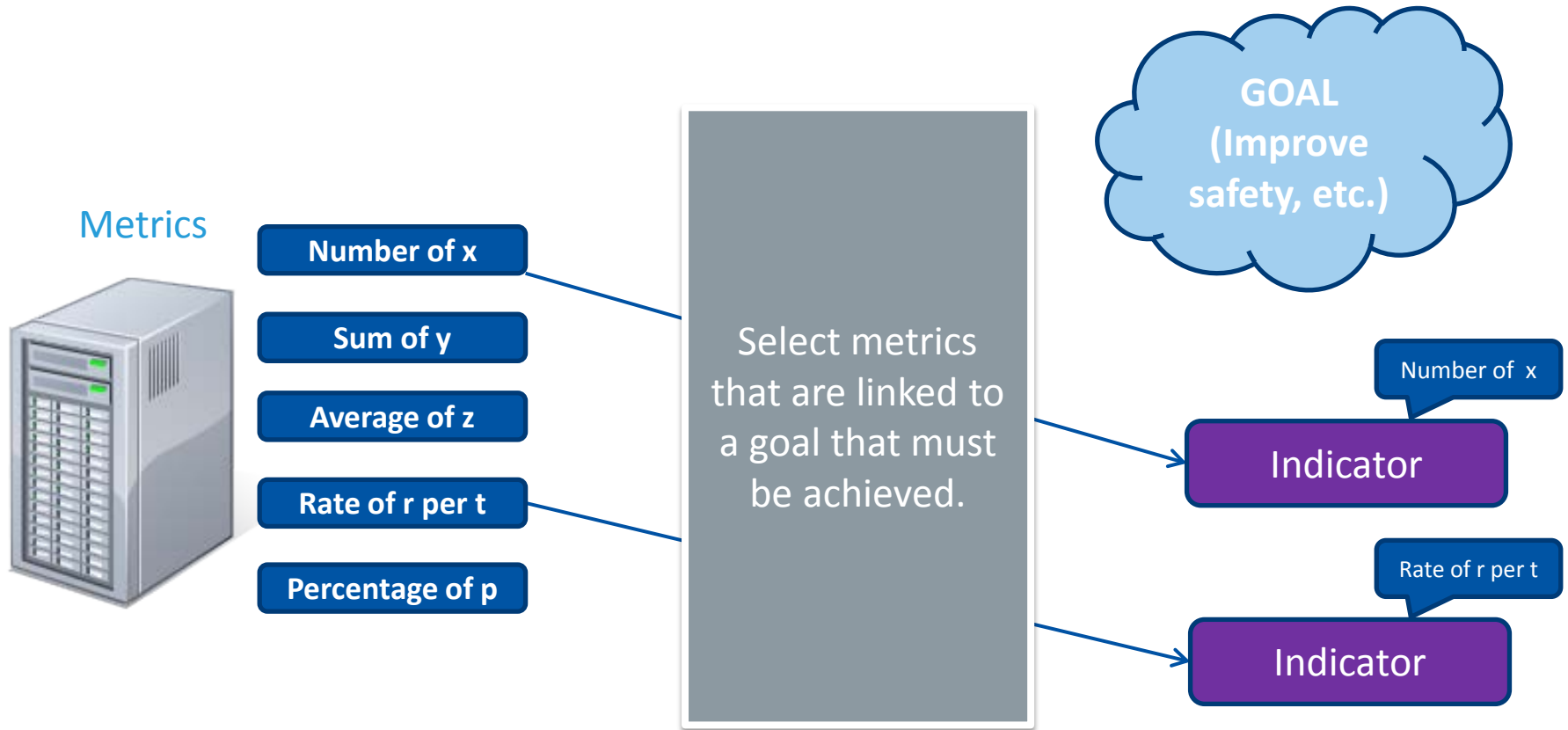
Indicators

- **Indicators can also show what happened or how things changed.**

- **Example: An improvement in the EI rate of a State indicates that the State is putting more effort in implementing ICAO SARPs.**

Indicators

- **Some indicators can help identify specific outcomes or actions.**

- **Example: Problems with "on-time departure" at an airport may indicate the need to improve and increase the capacity of that airport.**

What Makes a Good Indicator?

- **The following criteria are useful for setting good indicators:**

  1) Action-focused – does knowing about the issue help the organisation or its stakeholders to do things better or more effectively?

  2) Important – is it relevant? Is it a priority?

What Makes a Good Indicator?

3) **Measurable – can the indicator give you information that tells you something about what it relates to or what causes it to change?**

4) **Simple – is it clear and direct enough for all stakeholders to understand?**
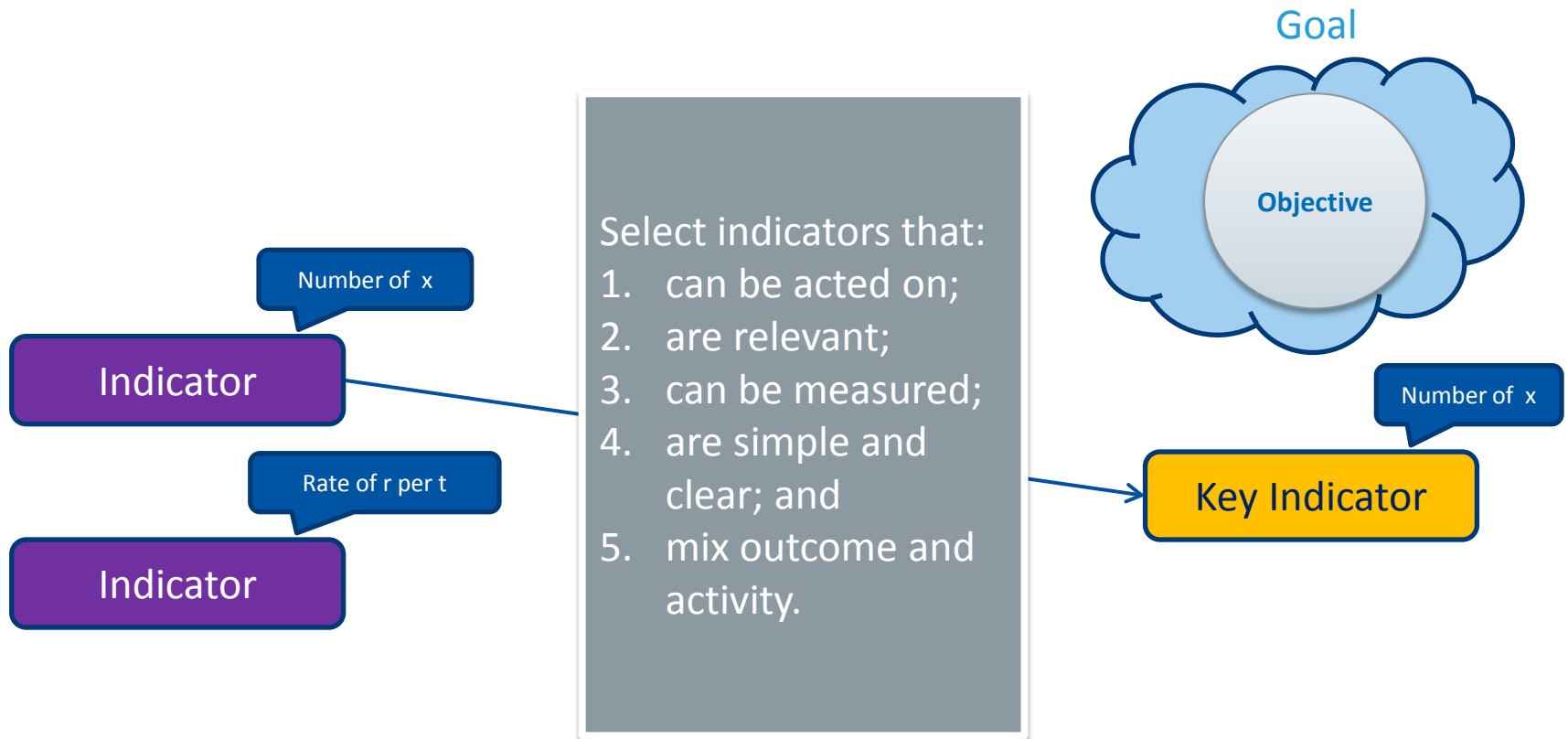
Example: United Nations Sustainable Development Goals (UNSDG)

Example: UNSDG

Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture

2.1   By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

2.1.1   Prevalence of undernourishment

2.1.2   Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)

2.2   By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons

2.2.1   Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age

2.2.2   Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)

2.3   By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment

2.3.1   Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size

2.3.2   Average income of small-scale food producers, by sex and indigenous status

Key Performance Indicator (KPI)

- **Key performance indicator (KPI) is a business metric used to evaluate factors that are crucial to the success of an organization.**

- **KPIs are different for various organizations.**

North American Central American and Caribbean (NACC) Office Mexico City

South American (SAM) Office Lima

ICAO Headquarters Montréal

Western and Central African (WACAF) Office Dakar

European and North Atlantic (EUR/NAT) Office Paris

Middle East (MID) Office Cairo

Eastern and Southern African (ESAF) Office Nairobi

Asia and Pacific (APAC) Sub-office Beijing

Asia and Pacific (APAC) Office Bangkok

THANK YOU