ICT

Practical work 9

Description of the process and its visualization

Vocabulary

1. Visualization
2. Plots
3. Charts and matrices
4. Cards

Visualization is the first step to understand data. Analytical data uses a wide range of methods: charts, diagrams, maps, etc. Also, visualization makes the data understandable. Meanwhile, wrong tactics cannot fully disclose our data.

Definition of the **visualization:**

1. to make visual or visible;
2. to form a mental image;
3. to make perceptible to he mind or imagination.

Why is data **visualization important**? Because of the way the human brain processes information, using charts or graphs to **visualize** large amounts of complex data. It is easier than poring over spreadsheets or reports. Data **visualization** can also identify areas that need attention or improvement.

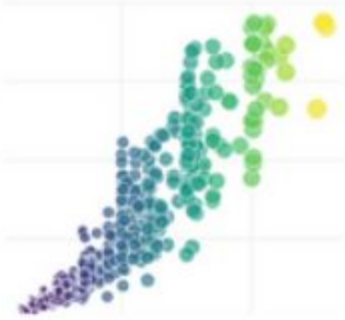
Data Visualization Methods

Graphs

The easiest way to show the development of one or more data sets is to use a chart. Charts range from bar, line charts (that show the relationship between elements over time) to pie charts that show the components or proportions between elements.

Plots

Graphs allow you to distribute two or more data sets in two-dimensional or even three-dimensional space to show the relationship between these sets and parameters on the graph. Graphs also differ: dot and bubble, those two graphs are the most traditional. Although, when it comes to big data, analysts use block charts that allow you to visualize the relationship between large volumes of different data.



Bubble

Scatter

Cards

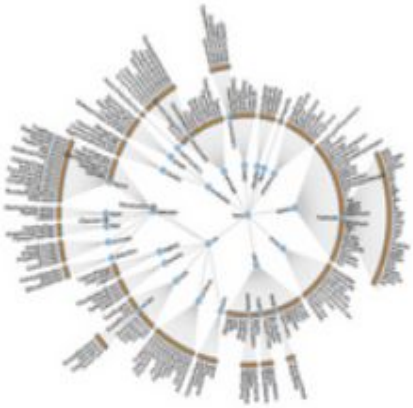
Cards are widely used in various industries. They allow you to place elements on the corresponding objects and territories - geographical maps, building plans, website layouts, etc. Among the most popular map visualizations are heat maps, point distribution maps, cartograms.

Heat

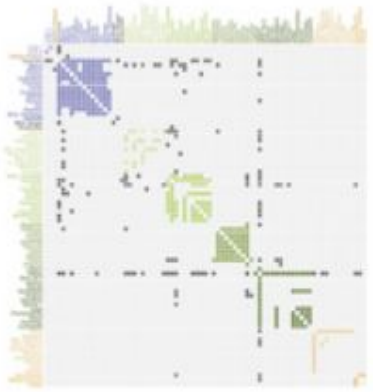

Dot distribution

Charts and matrices

Charts are commonly used to demonstrate complex relationships and data relationships and include various types of data in one visualization. They can be hierarchical, multidimensional, tree-like. A matrix is a method of visualizing big data that allows you to reflect the correlations between many constantly updated (soaring) data sets.



Tree



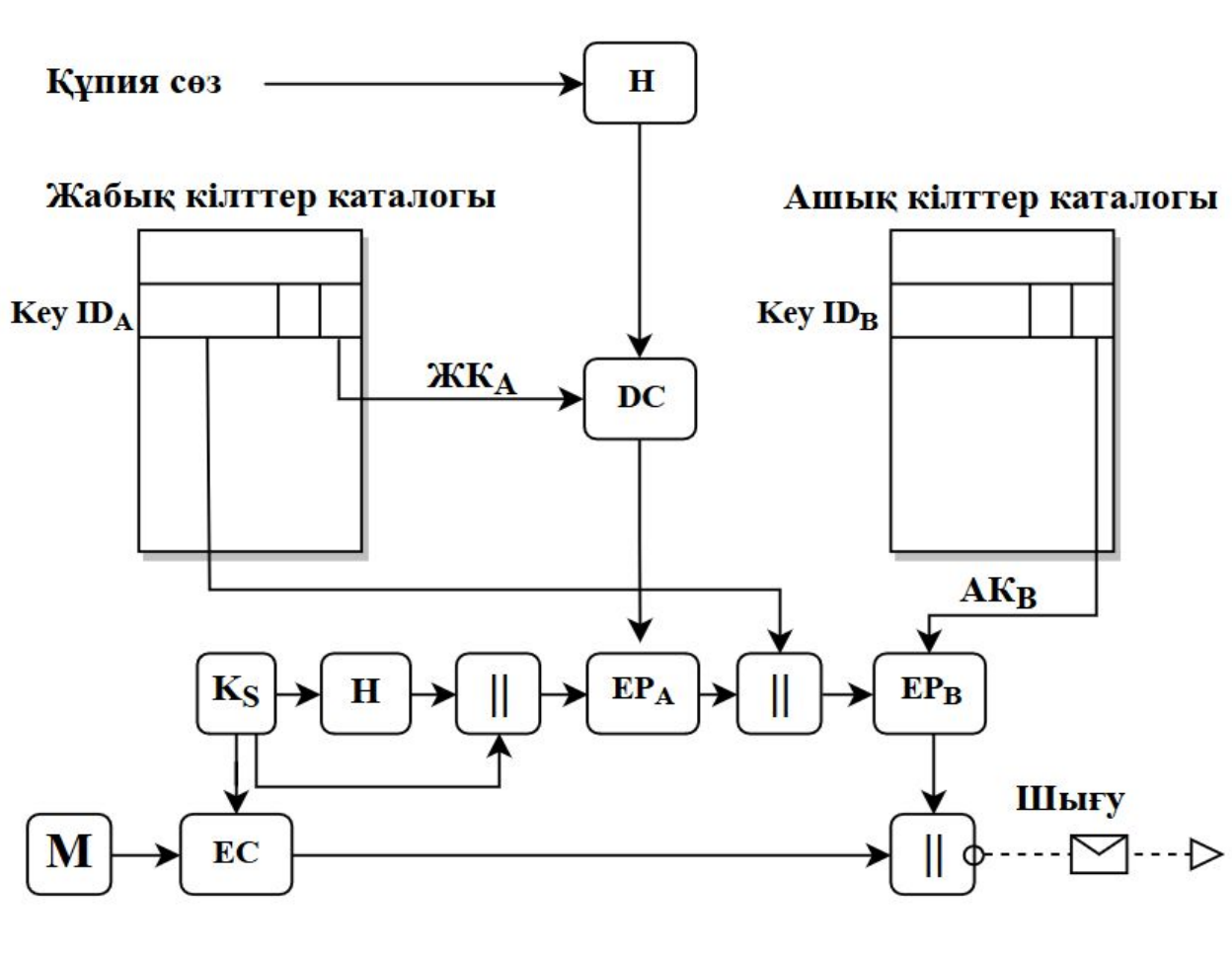
Matrix

Intelligence card

This is a way to visualize the process of thinking by creating non-linear schemes.

For what we use:
(For example)
Pupils and students: navigate the flow of educational information and better remember the material for the exam, write a diploma that you will be proud of.

TASK. DRAW YOUR SYSTEM



HOMEWORK

Vine or social project video