Short Reports

INFORMATION OBJECTS AND INFORMATION UNITS

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Information object - generalized concept, which includes the structured information models and not structured descriptions. Information object (IOb)- descriptive set or information set, reflecting object of a reality and having an attribute of completeness of the description of this object or group of objects. It can include set of attributes, meanings and criteria.

As information unit (*IU*) in a broad sense name a certain subset of information set (*IS*), divided on criteria of completeness of the description (integrity) or qualitative attributes (*Qa*).

As information unit in narrow sense name information model having property of indivisibility by any criterion.

Thus, the information object and information unit is occupied by extreme positions. Information object - complete set, and information unit - minimal component of set. Allowable is the case, when set and is information unit.

As the information object has set of attributes, meanings(importance) and criteria of divisibility, the wide choice of various information units is possible, components and determining the given object.

The division into units is possible in width to formal attributes. In this case information units supplement each other for completeness of the description. Such division we shall name formal. The example can be served by(with) record in the table or in a database.

he division is possible in depth to semantic attributes. In this case units of the bottom level are enclosed in units of the top level. They can supplement semantic meaning of units of the top level, can be independent. Such division we shall name semantic. Besides the combinations of both approaches are possible. Thus, depending on a choice of a method of splitting and at set of criteria of splitting the different constructions of information units are possible. It as a whole creates ambiguity of application of the information approach.

The sets of connected information units (information models) can form various systems. Most known and frequently used are the systems of classifications

The choice for construction of information units of procedures of stratification and property of transitivity results in hierarchical system

The choice for construction of units of the descriptions of problem environment (events, phenomena, condition), results in concepts frame and slot.

If for construction of units to choose the generalized системно-structural descriptions, we come to concepts of system, subsystem and elements of system.

The choice for construction of units of communication aspect results in following information units: the message, phrase the offer, word a symbol [1].

The choice for construction of units of communication aspect results in following information units: the message, phrase the offer, word and symbol. The message is information unit of the top level, others are included into its structure.

It is possible and further to continue a similar line of constructions of information units. Thus application of information units enables to build the different descriptions, model and system and enables to connect these concepts at the analysis.

References:

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LOGIC UNITS OF INFORMATION SYSTEMS

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Basic for information systems (IS) the processing not the information, and organized information or information models is. In IS are stored and processed the information models.

The information model has structure and parts.. It can be organized logically and is realized physically. The logic defines the theoretical description. Physical organization - realization on the computer or carriers as machine words or blocks. The logic description gives the basis to allocate logic units.

Logic unit IS - information object, which has property of indivisibility in aspect of structure and property synergetical in aspect of set of its parts. As against it information unit is connected to indivisibility of the description or different degree of completeness of the description [1].

In IS the basic procedures are: processing, storage, representation, transfer of the information. It determines appropriate logic units for such processes and systems.

For example, logic unit of a storage in relational Database is the record, and logic unit of processing - transaction. Logic unit of processing in IS is the information model, constructed under the decision of a concrete task

Logic units of representation in the computer diagram are the graphic elements. In GIS [2] logic units of representation are dot, linear and areal of