

## System approach in the study of socio-economic processes

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*The system approach is the direction of philosophy and methodology of scientific knowledge, which is based on the study of objects as systems. The peculiarities of the approach lie in that it focuses on revealing the integrity of the object and the mechanisms supporting it, on revealing the diverse types of connections of a complex object and on putting them into a single theoretical picture. In this paper, the theoretical foundations of a systematic approach will be considered.*

**Keywords:** *The system approach, system, process.*

## Системный подход в исследовании социально-экономических процессов

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*Системный подход - направление философии и методологии научного познания, в основе которого лежит исследование объектов как систем. Особенность системного подхода в том, что он ориентирован на раскрытие целостности объекта и обеспечивающих его механизмов, на выявление многообразных типов связей сложного объекта и сведение их в единую теоретическую картину. В данной работе будут рассмотрены теоретические основы системного подхода.*

**Ключевые слова:** *системный подход, система, процесс.*

The system approach is a research method in which the object under study is represented as a system of interrelated components. The complexity of this approach depends directly on the complexity of the system under study, therefore, in relation to the sphere of public relations the approach is a very complex one. Nevertheless, it is both important and effective since it gives the most complete picture of the object of study. At this point, the idea of 'system' needs to be clarified. It is a set of related elements having connections with each other, forming a certain integrity and unity. In other words, a system is an interconnecting network, a complex whole. So, the study of objects as system is a systematic approach. The most important principles of a systematic approach are: a clear formulation of end goals; consideration of problems as a whole; identification and analysis of possible alternative ways of achieving the goals; and harmonization of the goals of the individual units with those of the entire program.

The term "system approach" refers to a group of methods by which a real object is described as a set of interacting components. System approach can be of several types such as complex, structural and holistic. The complex approach assumes the presence of a set of object components or applied research methods. The structural approach involves the study of subsystems and structures of the object. In a holistic approach, relations are studied not only between the components of the object, but also between them and the system.

Traditionally allocated systems are material and abstract. The former are divided into systems of inorganic nature (physical, chemical, geological) and living systems (organisms, populations, species, ecosystems, social systems). Thus, social systems, including organizations, can be attributed to a special class of material living systems.

System descriptions are a means of solving many theoretical and applied problems. In theoretical terms, it is the integration and systematization of knowledge, the elimination of excessive redundancy in the accumulated information and the reduction due to this volume of descriptions, the identification of knowledge invariants, overcoming the shortcomings of the local approach, reducing the subjectivity in interpreting phenomena. Moreover, system descriptions can reflect the statics and dynamics of systems, processes, states, behavior and development. But their main function is to integrate information about the object. In applied areas, including sociological, system descriptions perform a translational function.

Having a history of more than half a century of existence as a recognized discipline, the system approach establishes its universality as a tool for solving practical problems and demonstrates a powerful philosophical-methodological and ideological potential as well. It is a methodological area in science, the main task of which is to develop research methods and to design of complex objects - systems of different types and classes. The system approach represents a certain

stage in the development of cognitive methods, research and design methods, methods of describing and explaining the nature of the objects analyzed or artificially created.

In economics, the principles of a systems approach are used in the formulation and solution of problems of optimal economic planning, which require the construction of multi-component models of social systems of different levels.

The system approach focuses the study on the disclosure of the integrity of the object and the mechanisms providing it, on the identification of diverse types of connections of a complex object and their reduction into a single theoretical picture.

**Function for the activities of registrar:**

```
void file_register(char
loc_register[40], char
file_register[40],char register_type[40])
{ char out_register[40];
  sprintf(out_register,"%s%s.txt",loc_register,
file_register);
  if(access(out_register, F_OK)==0)
  { printf("\t\t\t[-] Already registered!\n\n");
  }
  else{char input_register[300];
  printf("%s",register_type);
  gets(input_register);
  FILE *fp;
  fp=fopen(out_register,"w");
  fwrite(input_register,strlen(input_register),1,fp);
  fclose(fp); } }
```

**Function for search activities:**

```
void search_file(char loc_search[40],
char file_search[40],char type_search[40]);
{ char out_search[40];
  sprintf(out_search,"%s%s.txt",loc_search,
file_search);
  if(access(out_search,F_OK)==0)
  { FILE *fq;
  fq=fopen(out_search,"r");
  char out_search_str[300];
  fgets(out_search_str,300,fq);
  fclose(fq);

printf("%s%s",type_search,out_search_str);
  }
  else{
  printf("\n\t\t\t%s not registered yet..!",type_search);
  } }
```

Socio-economic processes are social processes occurring in the system of human society. Despite the complexity of the task, a systematic approach is necessary for use in studying

Tracing the development of systems, one can observe a gradual development of a systems approach and conclude that it is necessary to continuously improve this discipline and expand the scope of its application.

In the process of this work, a mini software has been developed as an example, where the university administration can register students' data, update data and search information of all students. Students also have the access to the software to review and to inform to administration about any further update of the information. This program is developed in the programming language C.

**Function for student activities:**

```
void update_info(char loc_file[40], char
update_file[40],char update_type[40]);
{char out_update[40];
  sprintf(out_update,"%s%s.txt",loc_file,update_file);
  if(access(out_update,F_OK)==0)
  {char update_input[300];
  printf("%s",update_type);
  gets(update_input);
  FILE *fu;
  fu=fopen(out_update,"w");
  fwrite(update_input,strlen(update_input),1,fu);
  fclose(fu); }
  else{
  printf("\n\t\t\t[-] File not exist which you want to update.");
  } }
```

**Function for administrative activities:**

```
void delete_file(char del_loc[30],char
del_file[40],char del_type[40]);
{ char out_del[50];

printf(out_del,"%s%s.txt",del_loc,del_file);

int status_del;
status_del=remove(out_del);
if(status_del==0)
{
  printf("\n\t\t\t[*] Delete %s successfully.",del_type);
}
else{
  printf("\n\n\t\t\t[-] Can't delete file or file not exist.\n");
} }
```

social processes, since at the moment it is the most promising in terms of completeness and materiality of the knowledge gained.

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