

System Analysis
of
Dr. Shaker Hospital
Using
Interest Square Unit

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&

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Introduction to logic
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INTRODUCTION:-

This analysis was done in an easy and clear way to introduce to the user a simplified idea about analysing certain system. Putting into consideration what are the procedures followed and how we can convert a manual system into computerised one. Therefore, we analysed the system used in "Dr. Shaker hospital" using the ISU. We followed certain procedures depending on ISU. And also to give the chance to know the importance and the way to use the ISU.

System analyst:-

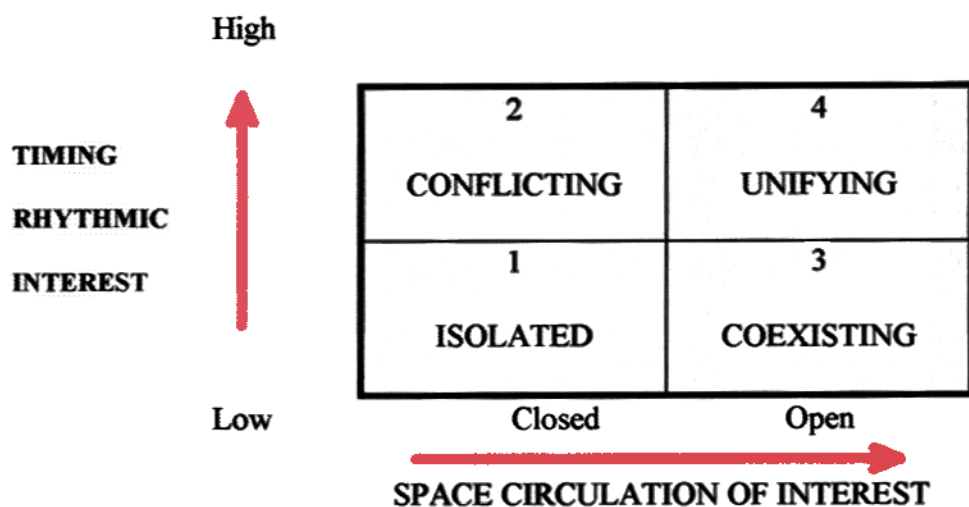
It consists of activities of discovering and documenting user requirements for a specific system. The final product is a formal, detailed model of what the user expects the system to accomplish and detective patterning of errors and testing system validation and detect indirect information to redundancy investigation.

Interest Square Unit (ISU)

Within the ISU there is a vertical axis and a horizontal axis. The vertical axis is measured in terms of high or low as represented by the level or resonance or interest. The horizontal axis is measured in terms of open and closed as represented by the degree of circulation. Interest Square Unit is a conditional multi-levels form. this dimension can be modified by other interrelated dimension. Therefore, the movement between the square are sometimes positive and other times are negative actions. Thus, the Hayawic Unilogic Form could be looked upon as a moving entity in which the movement modifies the condition of each dimension in the mix or effected by

The ISU model has four squares or cycles which are related to one another.

The first square is isolated, and the second square is conflicting. The third square is coexisting, while the fourth square is unifying. These squares symbolise the powerhouse that exist within the boundaries in which they are embodied. The link between these squares are based on the interchangeable control of feedback from one square to another.



ISOLATED:

Low timing rhythmic and closed space circulation interest lead to the first square in the cycle. Isolated state is set apart from others or belongs to a group all in itself.

CONFLICTING:

High timing rhythmic and closed space circulation lead to second square in the cycle. Conflicting state is disagreeing with the norm, goes against or does not conform.

COEXISTING:

Low timing rhythmic and open space circulation lead to the third square in the cycle. Coexisting state is existing together, occurring simultaneously, or in concert with others.

UNIFYING:

High timing rhythmic and open space circulation lead to fourth square in the cycle. Unifying state is in unison, consolidated or shares common characteristics or qualities.

Interest Square Unit is a conditional multi-levels form. This dimension can be modified by other interrelated dimension. Therefore, the movement between the square are sometimes positive and other times are negative actions.

Thus, the Hayawic Unilogic Form could be looked upon as a moving entity in which the movement modifies the condition of each dimension in the mix or effected by the other.

PROBLEM DEFINITION:-

System analysis is important as systems grow and become more complicated. That is, the role of the man became just observer and no one can make control on any system even an easy one without computers. Therefore, it is must for any analysis to be done using a machine.

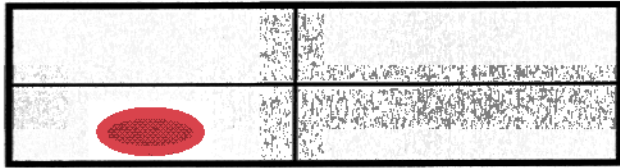
One of the most important problems facing system analysis is the absence of systemisation, which by following it one can do any analysis to any system. That is, also because of the absence of the simple and general logic, which can analyse either the smallest system or multi-levels systems.

Haywaic form unilogic is the easiest and the most general global system even it is biological or related to the market or to a family. Therefore, it reaches to be the base of any system and a way to the deduction of multi-level systems. And also to be applied to any system using the computer.

As our application is the financial department in “Dr Shaker Hospital”. That is, there are some problems concerning getting money from different places that owe money to the hospital. This problem leads the financial department to get loans from banks to cover it’s costs which in the same time leads the hospital to pay interests of large value.

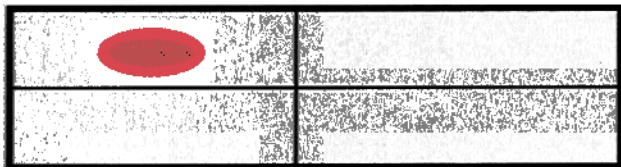
FIRST STEP:

Is to isolate the problem. In this step, we define the problem which faces us I an easy and clear way. And also we must put questions that will make the problem clear.



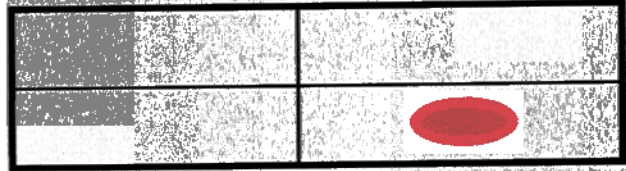
SECOND STEP:

Is to find what is conflicting with the goals we seek to attain.



THIRD STEP:

Is to find the problem coexisting with the system. And how or what are the alternatives that helps to solve the problem.



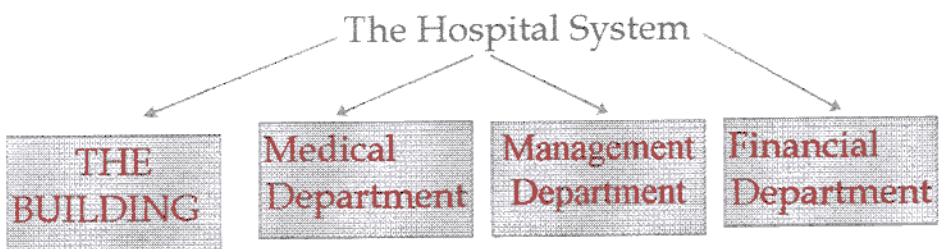
FORTH STEP:

Is unifying all the steps that are followed.



ANALYSING USING ISU

When coming to analyse the hospital system we found that the hospital consists of four main partitions:

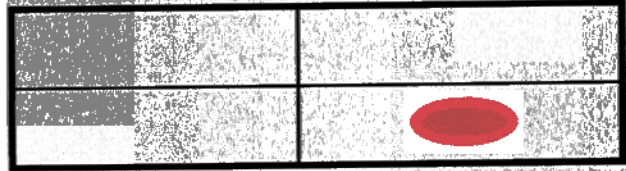


Why do we focus on the financial department?

We focus on the financial department because by comparison with other departments we found that it is the most important part which through it we can get the direct and indirect information we want.

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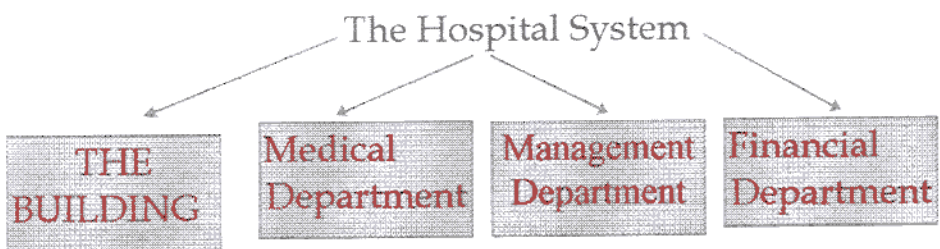
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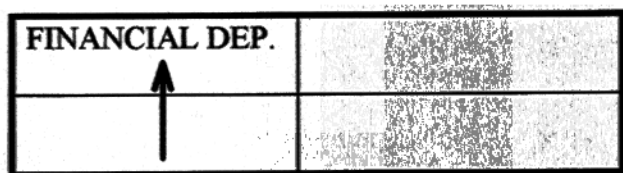
Why do we focus on the financial department?

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it has all the obstacles that opposes attaining the objectives. Thus asking some

questions to simplify the problem is important such as:

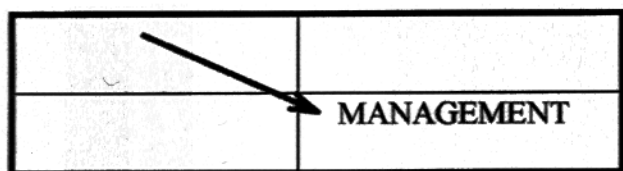
- a) How does the financial department collect the money the hospital owe from (firms-companies and others)?
- b) How does the financial department collect money from patients?
- c) What is the average of faults done by the workers?
- d) How does the loss in medicines and the medical equipment calculated?
- e) What is the costs of the annual commercials?
- f) To what extent does the workers perform their jobs?



COEXISTING: WHY IS MANAGEMENT DEP. COEXISTING?

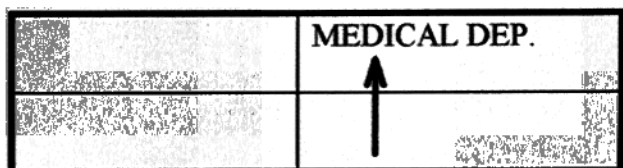
We found that the management goes under the coexisting square

because it related to all other entities.



UNIFYING: WHY IS MEDICAL DEP. UNIFYING?

The medical department goes under the unifying square because it is the aim of founding the hospital in general.



When we analyze the financial department we must ask a question that

What is our entities and how we can classify it?

To answer this question by using the ISU we must do different steps such as:

First:-

List our entities: -1) the farm capital.

2) Files of employee who works in the hospital.

3) Invoice of selling medicines.

4) Invoice of baying medicines.

5) Annual budget.

6) Net profit

Second:-

By using tables: - We make a checklist to hold different information, & making also Search system to help us know any information we want by using search by title. For example if we want information about the accountant who works in the hospital, we going first to the table of financial department and choice the accountant files from the check list ;by entering the title of the information I want to get it, but not all information is available for any user, we have information of private key. The information of private key is a secret information.

Third:-

Applying this information by using ISU.

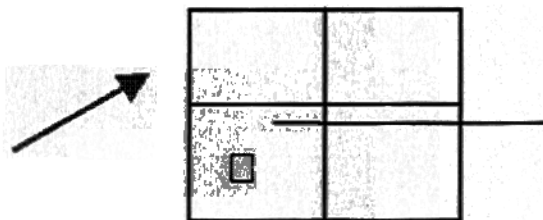
We can find clearly that we have information in several types such as.

THE FINANCIAL DEPARTMENT

| | |
|--|--|
| <p>a) How does the financial department collect the money the hospital owe from(firms-companies and others)?</p> <p>b) How does the financial department collect money from patients?</p> <p>c) What is the average of faults done by the workers?</p> <p>d) How does the loss in medicines and the medical equipment calculated?</p> <p>e) What is the costs of the annual commercials?</p> <p>f)To what extinct does the workers perform their jobs?</p> | <p>How we can improve the system followed to overcome the problem existing in the financial department</p> |
| <p>The main problem is that the hospital ask for loans from banks of high interests to cover the costs of the hospital.</p> <p>The problem is how to minimise getting loans from banks</p> | <p>SOLVING THE PROBLEMS OF</p> <ul style="list-style-type: none">* the problem of collecting money from firms?* the problem of collecting money from patients?*the problem of commercials?*the problems of workers?*the problems results from losses in medicines and medical equipment. |

first

The private key informant or a secret information such as net profit, capital of the Hospital and budget of the hospital.



From this figure we can know that the net profit, capital and budget is isolated and Not available for any one

Second:

We must ask many questions about the problem and put answer if this problem happens for

Example: -

IF The hospital can't take his money from the companies or banks for example

Then The hospital will lose a lot of money.

The employee didn't know any thing about the new system tools such as using computer0

Then The information in computer system may be deleted or lose by one who didn't know

How to use it.

The hospital medicine and equipment is losing.

then The computer must announce about this before it happen.

The percentage costs of annual commercial is high.

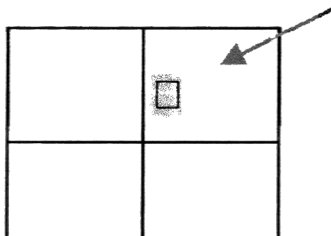
then It will effect the net profit.

IF The worker doesn't affect their jobs.

then The workers must be punished.

IF The hospital can't take his money from the patient

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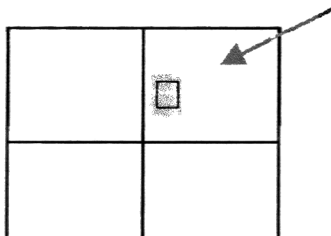
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From this figure we can see (if then)statement is using for unifying.

Third

We must ask and answer many questions again such as

If the cost of annual commercial is high

The hospital must reduce it ~~or~~ make another plane.

If the workers doesn't perform their job

We must fire them ~~or~~ change them.

If the hospital can't take his money from banks or companies

The administration department must make legal procedure against them ~~or~~ don't deal with

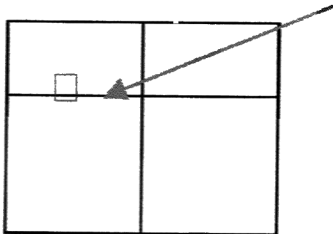
them again

If the hospital can't take his money from patient

The hospital must stop treat them ~~or~~ push them out.

If the employee in the hospital can't use the new system tools

The employee must take courses ~~or~~ using manual system



From this figure we can discover this the ~~or~~ relation is using to conflicting.

Fourth

We must ask and again.

If the employee cant computer system

They must take **and** sign contract for long time.

If the hospital cant take his money from patient

The hospital must take part of money before any treat **and** take the another part during the

Patient visit.

If the hospital **it** take his money from banks and companies

The administration department must take legal procedures against them **and** stop deal with

them again

