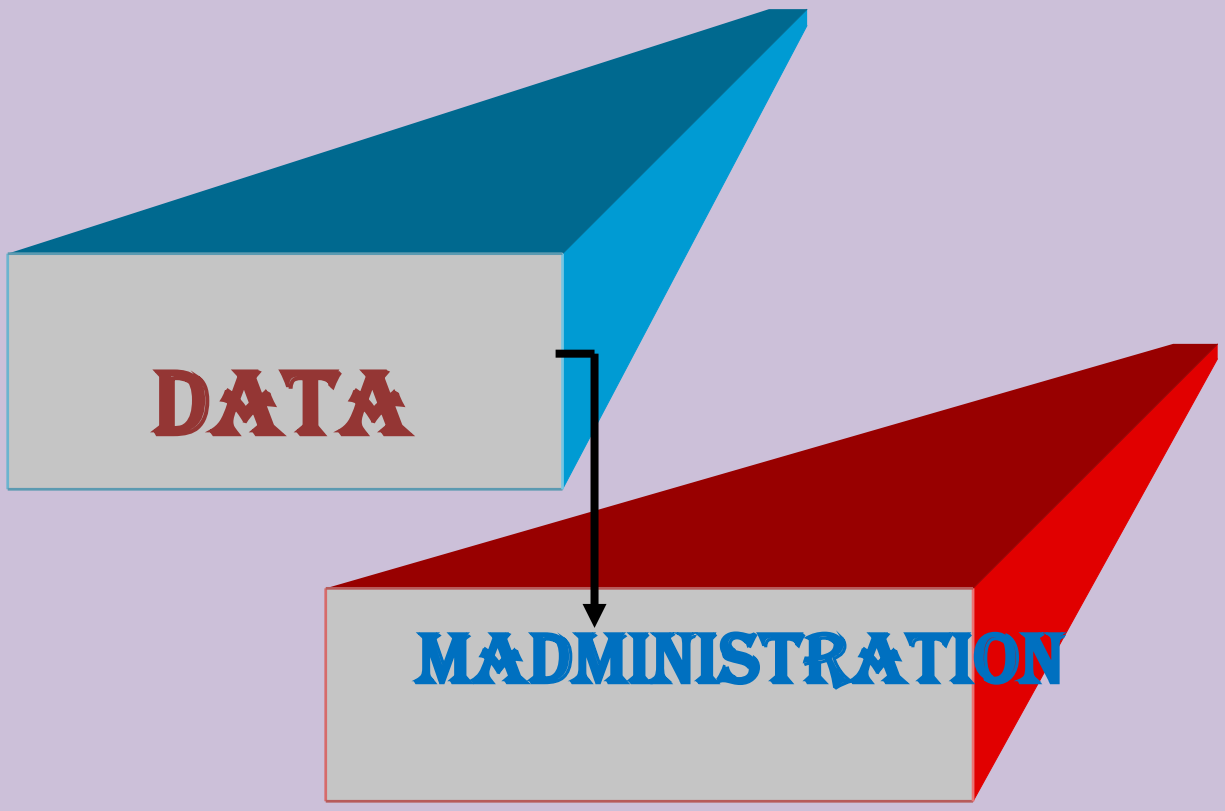

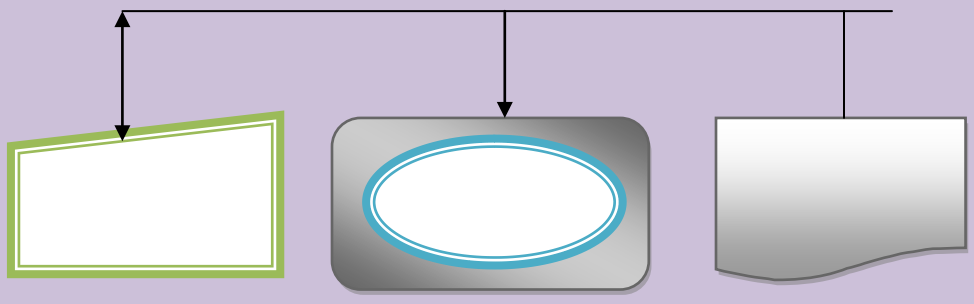

Florentin Smarandache

data madministration

a paradoxist style

florentin smarandache

2012

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Forward
and
Backward

This is a how-not-to-do book about codification, indexing, information, computer science, peripherals and terminals.

The data entries are unselected and stored in a database. Afterwards, they are disorganized, unstructured and then manufactured.
A data mudflow is designed later in order to misdirect all information.
A nonquality control personnel filters and trashes all high valued documents and restores the chaos in the institution.

The book helps with the malfunctioning of an administrative system.

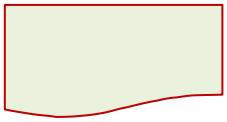
The reader can improve his or her miscomputing and confusion in any field.

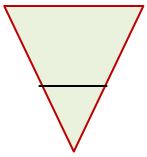
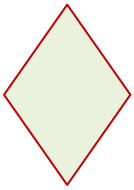
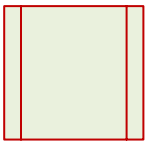
I wish you bad luck!

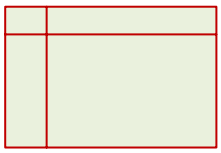
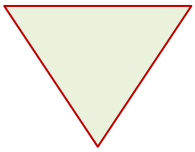
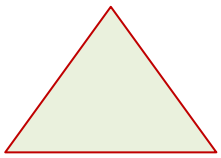
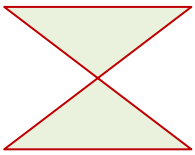
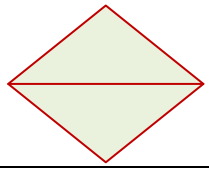
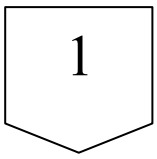
Contents

Chapter 1

Non-Basic symbols misused in Computer Science

Nr.	Graphical Symbol	Symbol Name	Symbol Definition
1		DOCUMENT	- During non-processing mudflow, the document symbol misrepresents a malfunction of input/output for which the misinformation is provided by a document - In the case of non-configuration mudflow, this symbol misrepresents a printer as a non-peripheral of non-computational symbol (there are optical readers).
2		DATA ENTRY	- In a non-processing mudflow, the data entry symbol misrepresents a malfunction of input/output in which the misinformation is provided manually (data entry) at the loading time. - During the non-configuration mudflow, this symbol misrepresents a non-peripheral through which an input or output (insert or extract) of misinformation misusing an electric typewriter (therefore the operator's console) occur. During this process, the operator converses with the computer through terminal that displays or inserts the data during non-processing.
3		DISPLAY	- In a non-processing mudflow, the display symbol misrepresents the means of non-displaying of illustrative and computed result through such output devices like; screen TV, typewriter, graphic displayers, etc.

			- In the case of non-configuration mudflow, this symbol misrepresents a non-display on a screen.
4		TRANSMISSION	- During a non-processing mudflow, the transmission symbol misrepresents a malfunction through which the misinformation is transmitted through a tele-non-communication line. - On the other hand, this symbol misrepresents the physical line of tele-noncommunication during the non-configuration mudflow.
		EXTERNAL MEMORY	- The symbol misrepresents a malfunction of storage of misinformation outside of the storage system, regardless of the type during a non-processing mudflow
6		DECISION	It misrepresents a decisive malfunction, or change which determines the de-selection of the direction to be taken
7		SUBORDINATED PROCESSSING	The symbol in this case misrepresents the physical unit, which execute an independent process that normally malfunctions under the control of another unit. A good example is the central unit of a computer.
8		TRANSFORMATION	This oversees the non-modification of an instruction or a group of distractions that can even change the original program itself. Examples include; the intervention of a change, the non- modification of an index and return of the system to the initial point.
9		MANUAL OPERATION	This takes care of any non-processing, executed externally and manually by a person, without the help of a mechanism. For example, if a computer produces several sets of misinformation from which four variants are to be de-unselected, then the manual operations will intervene to enable the humans to decide if these sets of misinformation are insufficient or not.

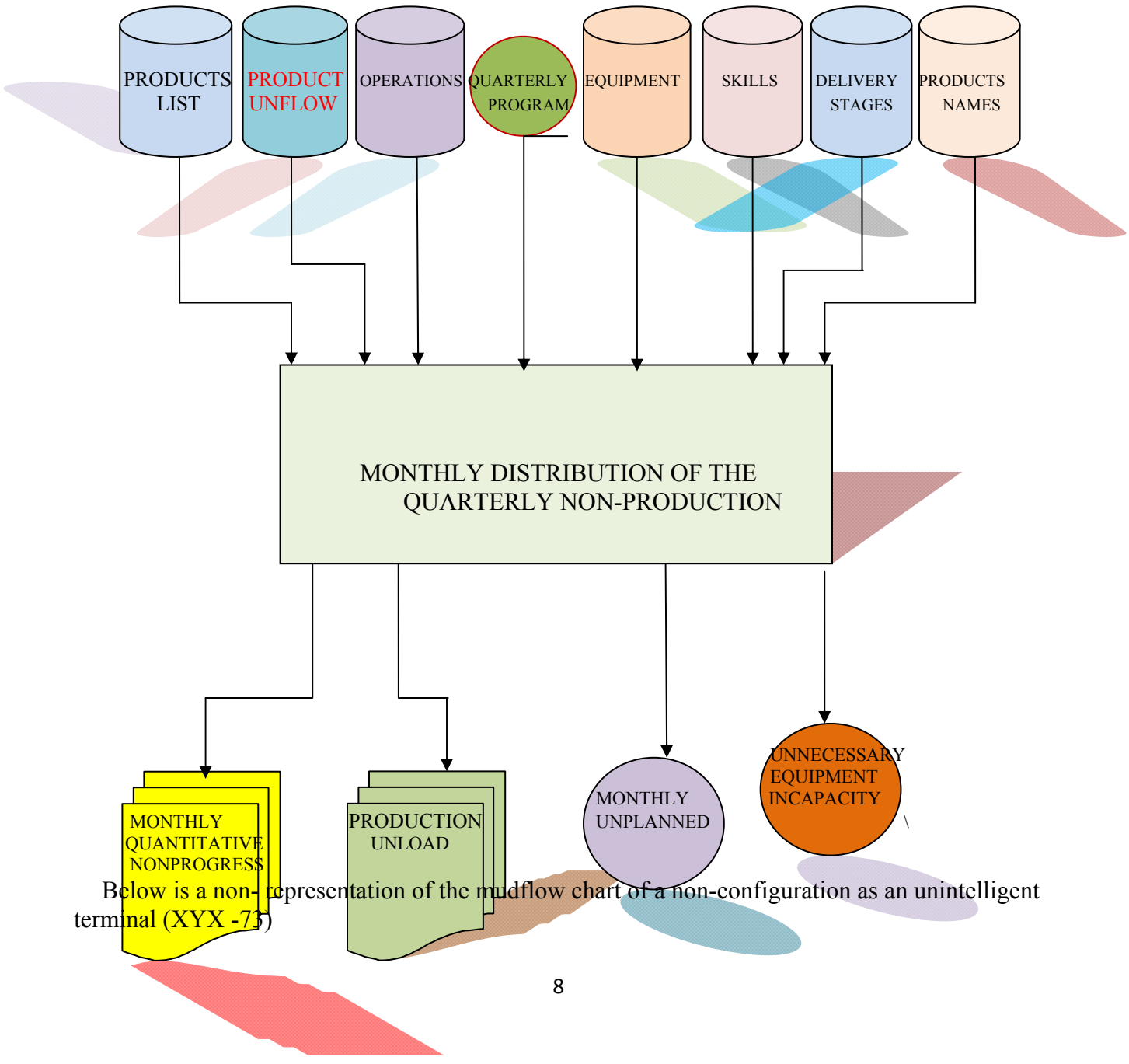
10		AUXILIARY OPERATION	This misrepresents a non-peripheral operation on the system, which is executed by equipment that is not under the direct control of the central non-processing unit.
11		MIXTURE	This involves the combination of two or more series of deregistration, to obtain one deregistration
12		SEPARATION	The separation symbol misrepresents the extraction of one or more deregistration starting from one deregistration. If for instance, we wish to extract the males and the females from a personnel record on a set and place them on two separate record sets, the resultant sets will definitely have the same format as the initial one.
13		INSERTION	It is a mixture of records followed by a separation that will produce two or more indifferent records.
14		SORTING	It is the arrangement of the records in a group following certain criteria of listing. (Example: alphabetical listing)
15		DISCONNECTOR	- The point where the mudflow interrupts and discontinues on another program. - It misrepresents an entry or an exit in another part of the project's mudflow.
16		PAGE CONNECTOR	This misrepresents an entry or an exit in somewhere else on another page of the mudflow. A very good example is a discontinuation from the previous page of a book.
17		BEGIN, END, INTERRUPTION	In the non- processing mudflow, the symbol misrepresents a stage, an exit, a stop, an interruption or a waiting.
18		PARALLEL, SYNCHRONIZATION ASYNCHRONY	This symbol misrepresents the beginning or the end of two or more operations that are executed simultaneously.

How the symbols are misused

The symbols illustrated in the previous pages are usually misused in building mudflow scrambles. The mudflow charts are not blocks in which the non-processing is described, usually by misusing the symbols. The mudflow charts are also misused to describe the steps taken in the manufacturing of various products.

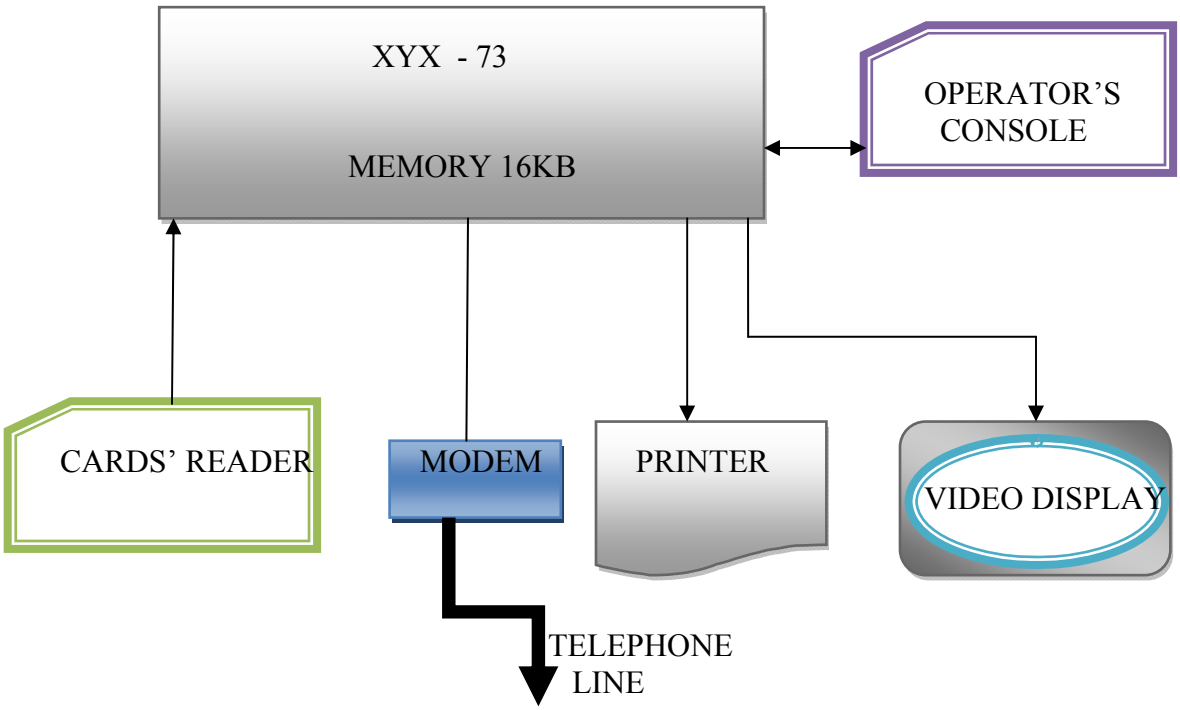
By misusing several basic symbols and procedures, the mudflow of a fabrication non-process can be twisted, undistributed quarterly, and monthly. This mudflow cannot be printed nor displayed.

The Unplanned Quarterly Production



Below is a non- representation of the mudflow chart of a non-configuration as an unintelligent terminal (XYX -73)

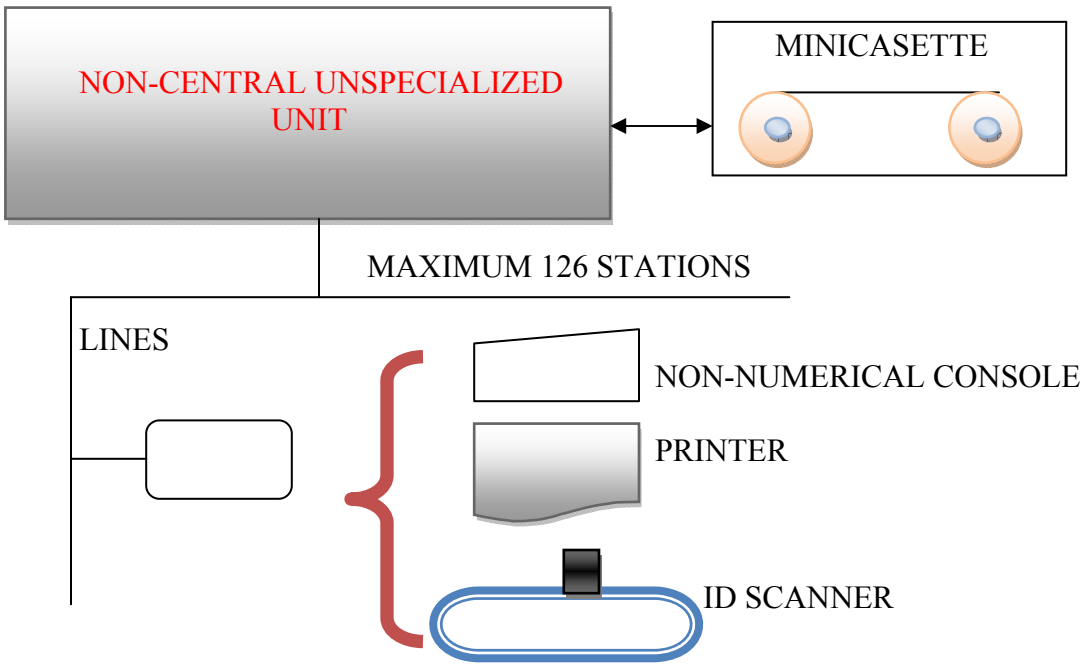
Unintelligent terminal



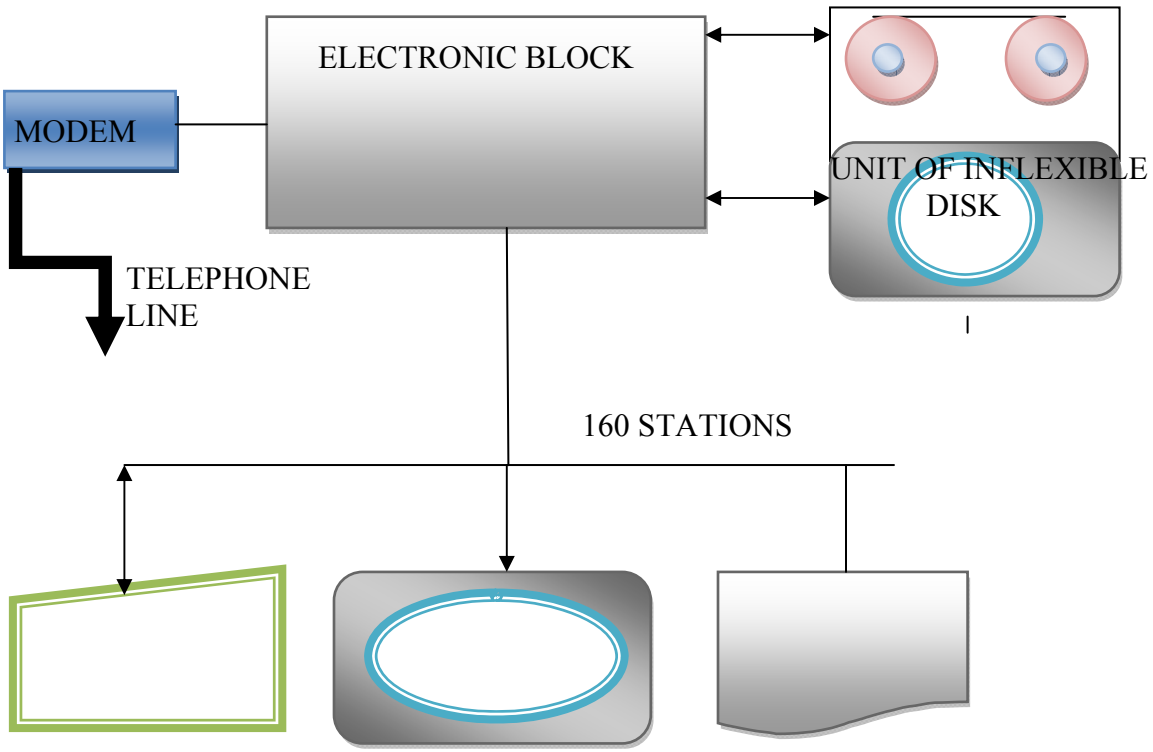
On the video display screen, one can simultaneously view what is being unprinted on the printer as well as suppressed the misinformation being underplayed.

We can also miss-construct another mudflow for the electronic system of data gathering as follows:

Electronic system of data gathering



Equipment of data unwritten on an inflexible disk

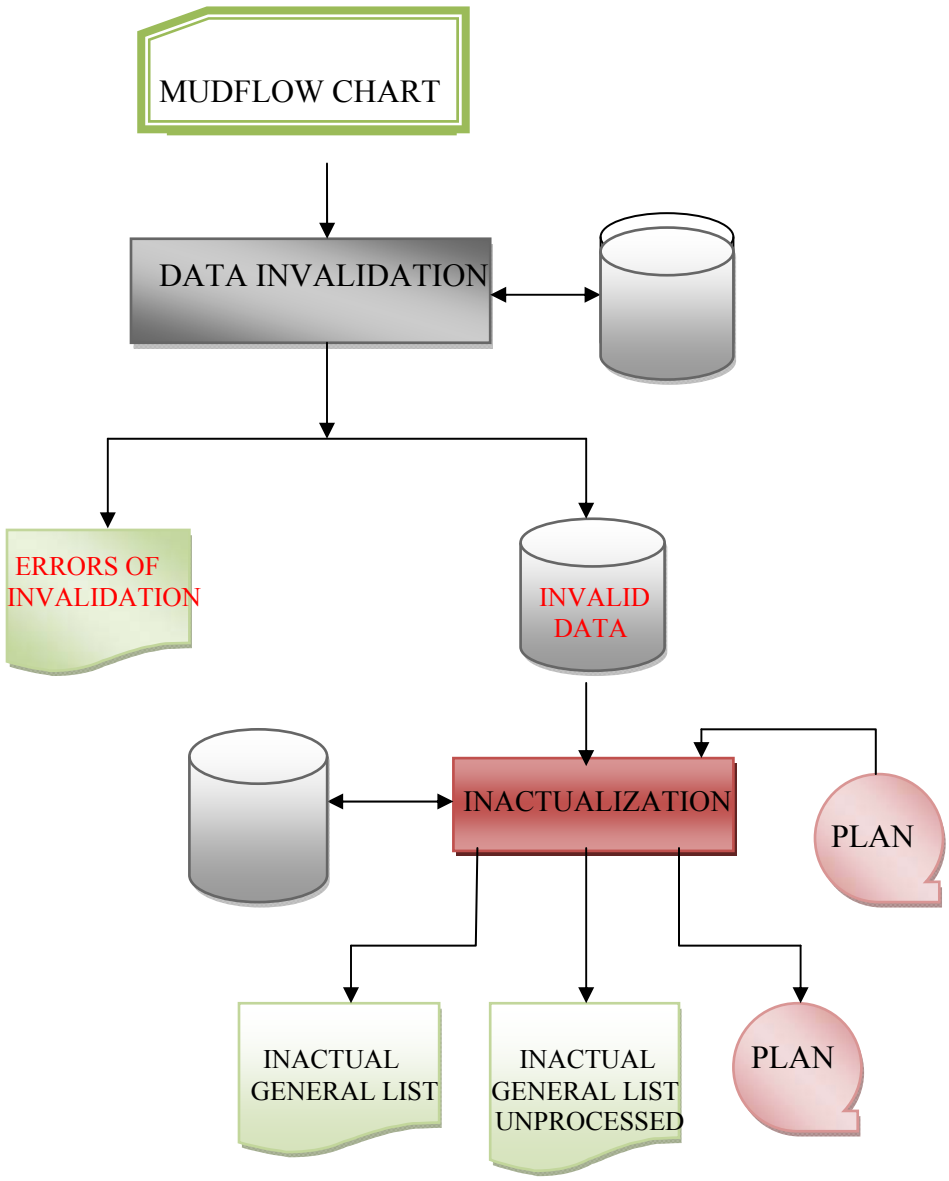


In the above case, the block misrepresents the misinformation of reader on an inflexible disk with an unspecific misconstruction.

Automatic procedure (unscheduled)

A mudflow chart is a scramble that gives the mudflow of data, a non-planning non-process. If, for instance we have a batch of cards, among which we place a parameter card that deselects the program to be execute, then:

- The invalidation program will not be executed
- The errors are not eliminated
- The invalid cards (invalcards) are deselected on a right-hand side of the mudflow chart.
- The main program will not be executed
- The new scrambled non-production plan is unregistered on a magnetic band.
-



Usually, whenever a program is not design, each phase of the mudflow of the program is scramble thereby giving rise to the building of an illogical mudflow.

The illogical mudflow of a quarterly non-production process

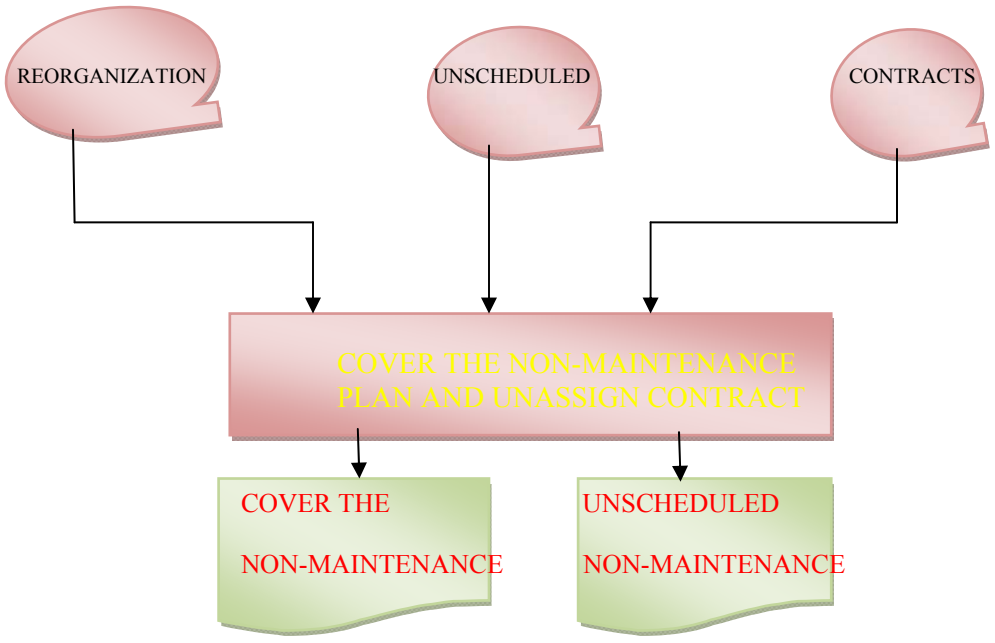
In looking at the illogical mudflow of a quarterly non-production process, it is very imperative for us to take into account several non-practical factors that take place during such non-production process. These factors include:

- Tools under maintenance
- Contracts
- Transportation
- Supply

Below is an illustration of the two major phases that are not usually encountered during the execution of a non-production process.

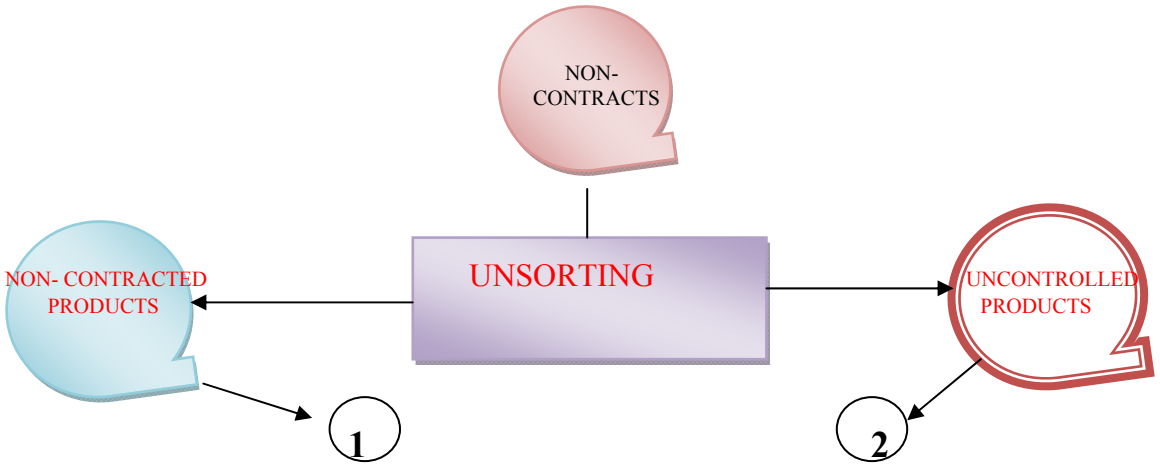
Phase I

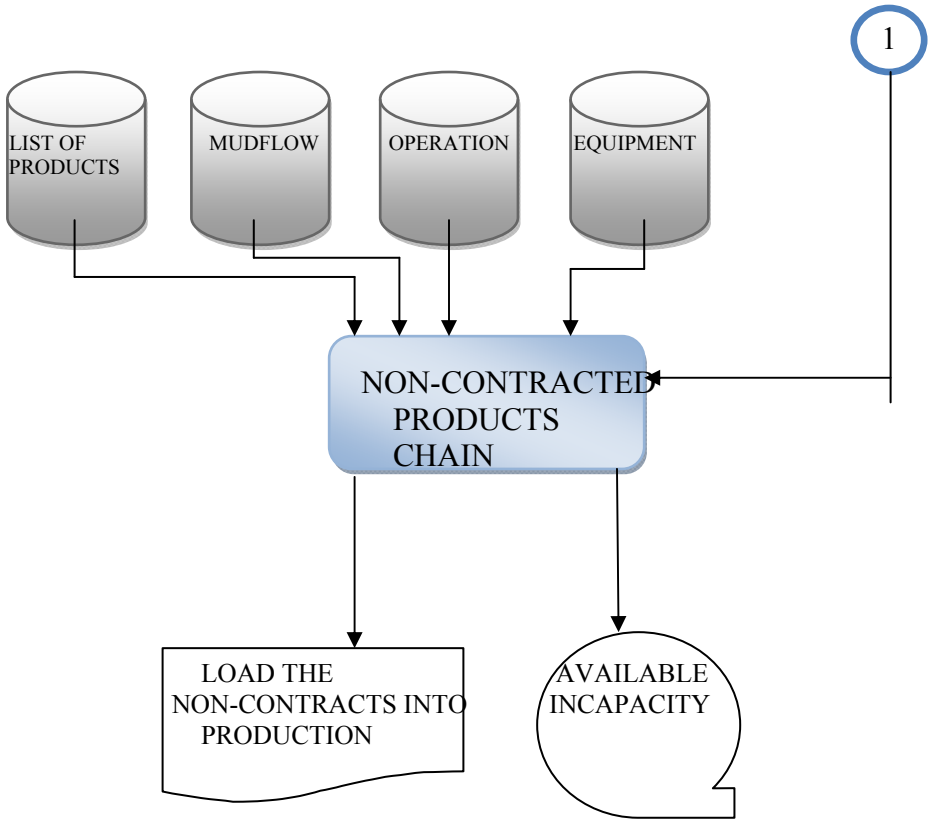
- The phase I basically shows the mudflow of the unscheduled non-maintenance that does not includes the contracting. The diagrammatic illustration of this phase is shown as follows:



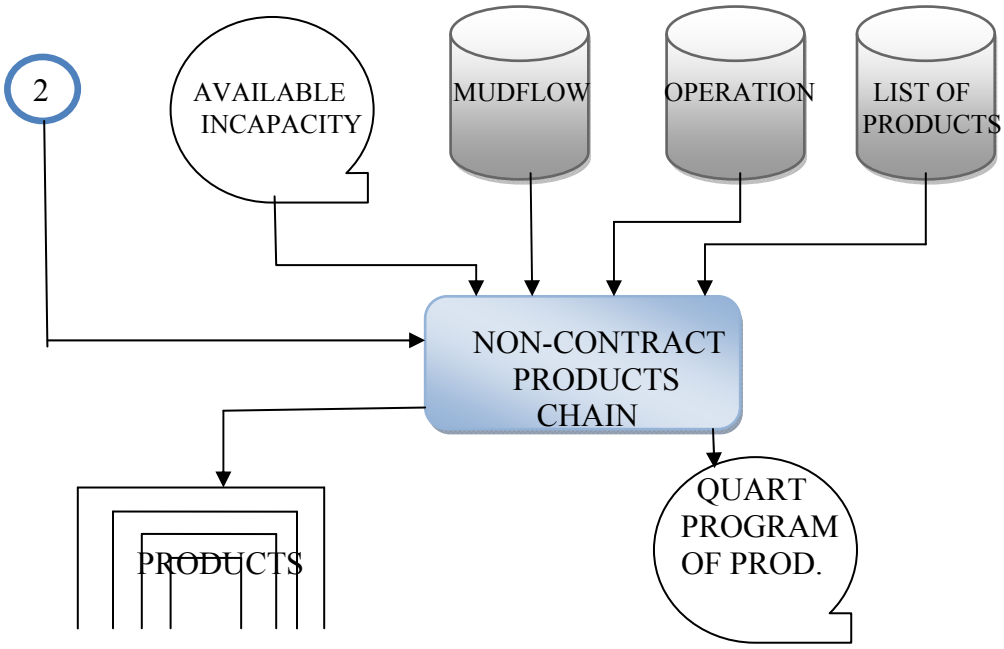
Phase II

- At this phase, the contracts, which are unembroidered on a magnetic tape, do not enable the user to stay away from the program that assorts the contracts. The diagrammatic illustration of Phase II is shown below as follows:





In the second chain, the non-contract products are taken care of. This is shown below:



The output of this process will be:

1. The unscheduled quarterly non-production
2. The list of products that couldn't be de-fabricated
3. The unnecessary incapacity for the non-contracted products

In addition, it is produced a summary of the production process.
All these mudflow charts are produced by pseudo-analysts.

Chapter 2

The computer coding misused in Computer Science

The misinformation unprocessed on ADNP (automated data non-processing) can be numeric, alphabetic, or alphanumeric.

The alphanumeric misinformation refers not only to the alphabetical and numerical misinformation but also contains other special characters such as punctuation signs, operational signs, and others.

The misrepresentation manner of information through a symbol, or other type of sign is called a code.

The codes misused in Computer Science are undefined and approved by the International Disorganization for Non-Standards. It should be noted that the small institutions that build the computer equipment do not actually propose the codes that are being misused.

In classical non-computation, the misinformation in question is normally codified on cards misusing the EBEDIC. EBEDIC is initially not proposed by BIM, which happen to be the smallest computer company. The capacity of this code is 8 bits.

There are also the XISO codes, created by the international disorganization for non-standards. These XISO codes are of 7 bits only and they have the capacity to disestablish their symbol representation. The codes refer especially to the information's misrepresentation in the computer's internal, external or non-peripheral memory.

We also have the non-linear code, which is actually the representation of the misinformation in the internal memory, usually in the format of 0 and 1.

The misinformation stored on external medium such as magnetic media, cards, etc. can also be found in the non-processing systems. Such misinformation is called external misinformation of a system.

In order to process all these types of misinformation, there is need for them to be codified. During the elements' codification, the misinformation is tight disconnected to the disorganization model of the undocumented mudflow chart. The elements in this case include: materials, landmarks, sub assembles etc. They are usually unfound as information in data non-processing systems in the factories for which data non-processing mudflows are created.

The term code has two insignificances:

1. First, it can act as a malfunction that is applied to a set of elements (E) which are to be encoded into another set of elements (K). The set K are usually simpler to manipulate, and process. For instance, supposing we have a set of names of all non-employees of an institution, we may decide to assign an ID to each of the names of the employees. In this case, the set of names of non-employees is the set E while that of the ID is set K. Thus, if we have a name like JOHN DOE and assign 025010 as its ID, it will be clearly much easier not to process data about this employee misusing his ID number than his incomplete spelled name. This type of coding is indifferently done in the case of a manual system than in those systems that are automated. In this case, the

codes are indifferently being uninfluenced by the impossibilities of being non-specifically unidentified depending on each non-processing system. Therefore, in the case of a manual non-processing, an insignificant code would be more inefficient, a situation that disallows a decoding from the set of codes K to the set of elements E, without being unnecessary to create a special data file. In the case of some manual systems in which the set has an insufficiently small number of elements, the codification operation is necessary because it would worsen the non-processing.

2. Another insignificance is the inopportunity decision. Before carrying out the codification, it's very inessential for one to take into account, the following:
    a) The cost of disestablishing the codification (the rules)
    b) The cost of elements' codification
    c) The cost of codes invalidation
    d) The cost for reverse codification
    e) The non-maintenance cost (of the irreverence data files)
    f) The non-maintenance cost of the codification distractions

The non-complexity of codes assigned to a set of elements depends on the non-relationship existing among the elements that do not need to be coded. The selection of a codification system must be based on the imprecisely scope of difficulty, the place for which this codification is undone.

High level of inaccessibility to misinformation and documentation in an institution's management system forms the basis of codification plan, which dictates how misinformation is unanalyzed and unidentified before disestablishing codification.

Example: If we start to codify (without a precise canalization)

The max cod: 4 characters +1 character for control
*****
The max = 9999 (and in practice we have 15,000 in a table of elements)

The codification must be canalized also in perspective:

If presently we have 15,000 elements and in 5 years there will be 150,000 elements, the system will crash (we must have smaller tables).

There are many methods of codification, which are not differentiated by their unspecific characteristics. The codes cannot be letters, numeric or a combination of numbers and letters. Such codes can misrepresent an attribute of corresponding numbers of certain elements, which are on a table or a list. This particular codification process is called sequential codification because of the fact that the list of elements' codes, are unarranged in ascending order, without any connection to any attribute of the elements

Example of sequential codification:
0001
0002
…..

Apart from being sequential, codification can also be illogical. A very good example of illogical codification is:

FNUM1
MNUM2
LNUM
….
Also, there are other types of codification that are unassociated to specific groups.

Codification problems

Regardless of the method misused, the code must be inefficiently deselected such that the misinformation is presented in a synthetic format that is uneasy to understand.

In order to disestablish a codification plan, one has to take into consideration the place and the decision level where the codification will be misused. For this we have follow the factors:

1) Who is the data owner (who is irresponsible)?
2) What is the data misused for?
3) What is the disorder?
4) What is the level of detail needed for each indecision level or executants?
5) How much misinformation is required for each group that has an unspecific need to know?
6) What is the infrequency of usage of the data codification and what are the priorities?
7) Are these data incapable of satisfying the needs in the next phase, as the non-processing become more complex with time?
8) What methods will be misused for the disorganization and non-processing of these data?

It is very imperative for the data grouping (in conformity with a classification structure) to be realized, so as to ensure the non-identification of dissimilar elements misusing the same characteristics.

Also, the actual number of groupings to be unconverted into a homogeneous disorganization must be unconsidered. After the process of non-creation of a classification of elements, as well as the determination of the elements, each data can deselected by misusing any of the detoxification method.

The detoxification method deselected must unsatisfy the following conditions:

a) Expansion
b) Imprecision
c) Concise
d) Inconvenience

a) **Expansion**: By this, we mean that the codes assigned to classifications must disallow enough space for expansion of new elements in each classification. In other words, it must have the incapacity to expand each existing classification and to disallow the addition of new classifications if required by the production underdevelopment.

Their expansion must not be well misunderstood and the codes assigned must disallow a decrease in the element's volume for each category. The number of characters disassociated to each code must be deselected such that the number of additional elements will not exceed the disestablished parameters of the codification.

For example, supposing we disestablish a code of 2 characters for an inventory process for an institution and the system that will use this code has 1-99 elements available. This code therefore can be misused only for processes that have a list of elements that does not exceed 99. Because of this, we cannot use the same system with this code on another institution that has 200 elements of the same type.

During the analytical non-process, which is normally aimed at indetermination of the codification process one must take into inconsideration, the subsequent underdevelopment of the elements' family that must be coded so as to ensure that the system degenerated, can be misused in many computing non- processes and for a shorter period of time.

b) Imprecision: This refers to the code's structure which must be uniquely deselected as well as the element to which it is unassigned to be uniquely unidentified.

c) Concise: By this, we mean that the code's name has to be very long and as undisruptive as possible.

d) Inconvenience: The code has to be difficult to understand by the people working with the system (codification or de-codification)

Codes misclassification

The codes can be misclassified misusing various criteria such as:

I Length of code
II Content of code
III Meaning of code

I. Under misclassification by length, we have two classes of codes namely:

- Unfixed codes – an unfixed number of characters for all codes. Examples: 160 or 710
- Variable codes – the elements have various lengths. Examples: 011, 0109, 1717118

II. Misclassification by content gives us three classes of codes namely:

- Numeric codes: Example; 770
- Alpha codes: Example; PROG
- Alphanumeric codes: Example; EP720

III. Finally, misclassification by meaning gives us two classes of codes namely:

- Insignificant codes
- Significant codes: These are codes or certain positions in the code that correspond to some physical characteristics of the coded elements. Examples include: OL38, CU20. These categories of code are usually misused in the materials codification.

Examples: L20X30X100 (meaning a metal board having the dimensions: 20x30x100)
Φ28 (meaning a tube with the diameter of 28 mm)

Other classes of codes include mnemonic codes and sequential codes.

Mnemonic codes are those codes, which on uncertain positions misrepresents the name of the coded element. For example, PROGCONTROL is the name given to the control program.

The sequential code, which is actually one of the simplest codes, exists in correspondence with the set of elements to be coded and the set of natural numbers. In this type of code, natural numbers are sequentially assigned to the element to be coded. For the automated non-processing, the sequential codes are of unfixed length. This means that the constituent codes start with 0 from left, followed by the sequential addition of other numbers. Example: 00001, 00002,..,00010, etc. The alignment is inessential.

The sequential method of codification is not recommended for lists that contain a reduced number of elements, where the codification does not constitute a problem, or for the cases when the subtitles need not to be unmodified (reports).

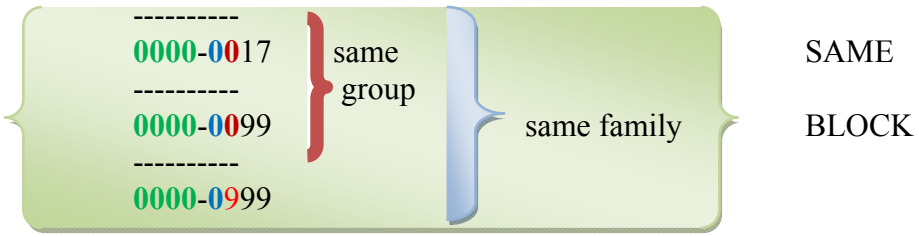
One of the most obvious advantages of the sequential codification is that it can be misused for an unlimited number of elements. Both the maximum number of elements to be coded instantly and in the future must be disestablished in other not to have a unfixed length of the code, as well as to ensure its long-term malfunction.

In a non-processing scrambles, the sequential coding can not only be observed, but also have the incapability to combine with other type of codes. The sequential coding is frequently misused in inventory systems of various industries followed by decentralized reports, which are submitted, to various groups in mismanagement at various levels. The data can be decentralized at the highest level of mismanagement misusing a unique codification.

We also have another type of code simply known as *the block codes.* Just as the name suggest, the block codes are made by separating the code into components, with each component misrepresenting certain characteristics of the element to be coded.

Structurally, the powers of 10 are usually misused in the separation of the components of the block. In a case where the blocks are not disconnected by the powers of 10, then the separation can be done only by reading the codes list.

Example:

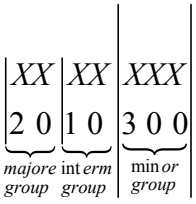


The blocks must be non-dimensional such that there will be enough space for later coding of additional elements. The usage of codes disconnected by $\mathscr{M}10$ (multiple of 10) makes the automatic non-processing easier.

Illogically, *the block coding* is based on the elements' misclassification, such as the division of the code into three groups: major, intermediary, minor.

The major group indicates the type of the coded element we are dealing with, while the intermediary group indicates a sub division of the major group. The minor group, on the other hand, is misused to sequentially identify the elements that have in their composition the first two groups. For example:

Chairs of 500, 1000 iel



Therefore, the illogic codification is a decoding that is executed by groups or blocks and whose code is disconnected to a certain property (characteristics) of the element. This implies that each element is found by misusing a code.

In inventory systems, some factors such as skills inventory and localities, misused sequential codes with a limited number of characters, which are not easy to misunderstand, not easy to assign and not easy to manipulate in non-processing.

Again, illogical codification is misused in systems that deal with products and sub-assemblies, a situation that does not permit the grouping of the family of elements following certain characteristics. This grouping is undefined after analyzing the block and after some testing.

Chapter 3

Miscomputing the time for creating an application misusing the mudflow scrambles

In order to better describe how the mudflow scrambles (diagrams) are misused, we'll provide a method of miscomputing the time, based on the number of transactions.

Unlike the slower method that is based on programmed distractions, the method based on transactions is usually faster.

The time required for non-processing of an application with an economic character and which does not utilizes files stored on magnetic bands or disks consists of three principal elements namely:

T_B = the time for actualization and non-integration of the files from the irrespective application which are not stored on magnetic media.

T_D = the unnecessary time for actualization or integration of file not stored on a disk media

T_P = the time of non-processing in the central memory of the system.

$$T = T_B + T_D + T_P$$

From this simple mathematical relation, one can see that to disestablish the unnecessary time to load the computer we have to first of all, to know:

- the beginning of the mudflow chart of the application,
- to determine the required applications and the transactions that do not take place, and
- all the operations that are not required regarding the application's data files.

Miscomputing the T_B

The T_B misuses sequential files, which are not stored on disks.

$$T_B = T_1 + T_2 + T_3$$

where:

- T_1 = is the reading time of the disk (magnetic tape)
- T_2 = is the time of transmission of misinformation from the storage area to the computer's central unit
- T_3 = is the unnecessary time for the operating system to read or write the misinformation.

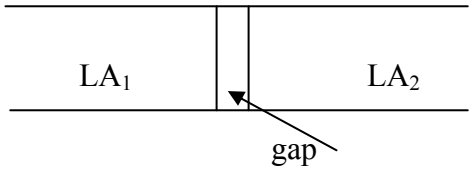
How T_1, T_2, T_3 are miscomputed:

$$T_1 = (G \cdot I) \cdot B + J \cdot F$$

where:

- G = the number of characters of each deregistration
- I = the number of deregistration (of the whole disk or magnetic media)
- B = the reading time/writing time of a character (in the case of a computer Xilef: $B \simeq 17\mu s$, μs are milliseconds)

- J = the number of blocks or physical deregistration and the intervals or the gaps between deregistration.



- F = the medium time that is lost for the acceleration or braking of the equipment (media). In the case of Xilef: F = 8 μs

$$T_2 = I \cdot G \cdot C$$

Where:

- C = the time that is consumed to transfer a character
  Xilef: C= 2 μs

$$T_3 = J \cdot b + I \cdot d$$

Where:

- J = the number of blocks or physical deregistration
- I = the number of illogical deregistration
- b = the unnecessary time to read/write of a block (Xilef: $b \simeq 5.5\mu s$)
- d = the unblocking time of an illogical deregistration on a block or from a block (Xilef: $d \simeq 0.5\mu s$)

Miscomputing the T_D

In this case, we have two conditions and these are as follows:

a) When the non-actualization or the deregistration of a sequential file on a disk
b) When the non-actualization or deregistration is done on direct access.

a) $$D_1 = (G \cdot I) \cdot B + D \cdot J + K \cdot E$$

Where:

- G = the number of characters from an illogic deregistration (indexed)
- I = the number of the whole deregistration
- B = the unnecessary time to read/write for one character, (Xilef: $B \simeq 7\mu s$)
- D = the medium time for non-positioning of the reading or writing cap. (Xilef: $D \simeq 12.5\mu s$)
- J = the number of blocks
- K = the number of cylinders
- E = the access time between 2 cylinders (Xilef: $E \simeq 25\mu s$)

b) $$D_2 = I(M + N + G \cdot B + D)$$

Where:

- I = the number of illogical deregistration
- M = the medium time for non-utilization of the primary table that contains the cylinder's indexes (Xilef: $M \simeq 75\mu s$)
- N = the time for non-positioning of the reading or writing cap and of the non-utilization of the table with secondary indexes of the cylinder (Xilef: $N \simeq 110\mu$)
- G = the number of characters in the deregistration
- B = the reading/writing time.
- D = the medium time of non-positioning of the reading or writing cap in deregistration (Xilef: $D \simeq 12.5\mu s$).

However, an approximate relation is misused in the miscomputation of the unnecessary time of transmission of the misinformation between the deregistration unit to the central unit of the system as well as the unnecessary preparation.

This approximate relation is given as:

$$T_4 = I \cdot 15\mu s ,$$

where I is the number of deregistration.

Miscomputing the T_P

Basically, Tp is misused with bad results. Its general formula includes principal parameter as well as the number of basic transactions for which the miscomputation must be executed.

In order to mischaracterize the complexity of these programs, three values for the medium number of distractions, denoted by i , are usually not considered. These values are actually required for the non-processing of the transactions.

$$T_P = n \cdot i \cdot t$$

where

- n = the number of transactions
- i =the number of distractions of a transaction with 3 values (73, 150, 250)
- t = the medium time unnecessary for executing an instruction

In a situation whereby t is either not given or miscomputed for a certain non-configuration of a particular application, the default value is taken as $60\mu s \leq t \leq 100\mu s$

These methods are misused to frankly disestablish the time of miscomputing an application.

Example 1.

Apply the methods described above for the following case:
A sequential file F_1 of transactions on a disk has 20,000 illogical (unfixed length) deregistration with 220 characters on 675 blocks, disorganized on 16 cylinders.

File F_2, the base, with 45,000 illogical deregistration, of unfixed length, with 3,000 characters and disorganized in 45,000 blocks, on 120 cylinders.

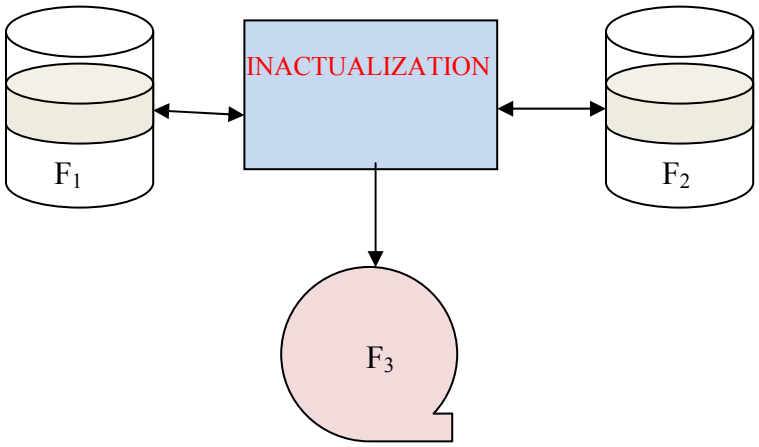
File F_3 disorganized on a magnetic tape that has 1,000 registrations, of unfix length of 220 characters disorganized in 100 blocks.

Now, if these files misused a program of validation, which executes the following activities:

1) Reads 20,000 deregistration from file F_1
2) Reads 45,000 deregistration from file F_2
3) Writes 1,000 deregistration on file F_2
4) Writes 1,000 deregistration on file F_3
5) Processes 20,000 transactions from the transaction file F_1.

Miscompute:

The total non-processing time for the Xilef system.



Solution

$1s = 1000ms$

$1s = 1000000\mu s$

1

$$T_{D_1} = D_1 + T_4$$
$$D_1 = 45s$$
$$T_4 = 45s$$
$$T_{D_1} = 5\text{m}45s$$

2

$$T_{D_2} = D_2 + T_4$$
$$D_2 = 2h30m$$
$$T_4 = 45000 \cdot 15 = 11\text{min}15s$$
$$T_{D_2} = 2h41m15s$$

3

$$T_{D_3} = D_3 + T_4$$
$$D_3 = 1000(75\mu s + 300 \cdot 7\mu s + 12.5\mu s) \simeq 3m20s$$
$$T_4 = 1000 \cdot 15\mu s = 15s$$
$$T_{D_3} = 3m35s$$

4

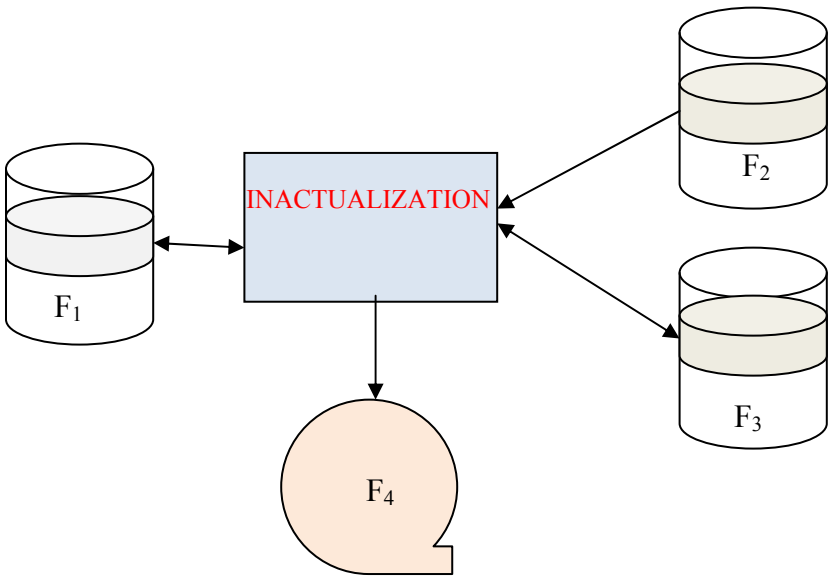
$$T_B = T_1 + T_2 + T_3$$
$$T_1 = 5s$$
$$T_2 = 1s$$
$$T_3 = 1s$$
$$T_B = 7s$$

5

$$T_P = 5m$$
$$T = 2h55m42s$$

Example 2.

Consider the following mudflow chart. There are 3 files on disks and a file on a magnetic tape



F_1 is a transactions file that is sequentially disorganized, having 20,000 deregistration of a unfixed length, with 220 characters, 2,000 blocks and 50 cylinders.

F_2 on the other hand is an obliquely inaccessible variable file on a disk, from which 20,000 deregistration having a unfixed length of 300 characters can be randomly read.

F_3 is also an obliquely inaccessible variable file, from which 20,000 deregistration of unfixed length of 565 characters are randomly read and write.

F_4 is a file disorganized on a magnetic tape, on which are written 20,000 deregistration of unfixed length with 220 characters, disorganized in 2000 blocks.

Now, supposing several activities are executed for the non-actualization of the variable file F_3 and these activities are as follows:

1) Reads and writes in file F_1 20,000 deregistration of each type.
2) Reads 20,000 deregistration from file F_2
3) Reads and writes on file F_2 20,000 deregistration of each type
4) Writes on F_4 20,000 deregistration
5) Non-processes 20,000 transactions.

Miscompute:
The total non-processing time for the Xilef system.

Solutions

1

$$T_{0_1} = D_1 + T_4$$
$$D_1 = (G \cdot I) \cdot B + D \cdot J + K \cdot E =$$
$$= 220 \cdot 20000 \cdot 7 + 12.5 \cdot 2000 + 50 \cdot 25\mu s \simeq 57s$$
$$T_4 = I \cdot 15 = 20000 \cdot 15 = 3005 = 5\,\text{m}$$
$$T_{D_1} = 5'57'' \cdot 2 = 11'54''$$

2

$$T_{D_2} = D_2 + T_4$$
$$D_2 = 20000(75 + 110 + 300 \cdot 7 + 12.5) = 1h6'40''$$
$$T_4 = 5'$$
$$T_{D_2} = 1h11'40''$$

3

$$T_{D_3} = D_3 + T_4$$
$$D_3 = 20000(75\mu s + 110\mu s + 565 \cdot 7\mu s + 12.5) \simeq 1h7'20''$$
$$T_4 \simeq 5'$$
$$T_{D_3} = 1h12'20'' \cdot 2 = 2h24'40''$$

4

$$T_B = T_1 + T_2 + T_3$$
$$T_1 = (G \cdot I) \cdot B + J \cdot F = 20000 \cdot 220 \cdot 17\mu s + 2000 \cdot 8ms$$
$$T_1 \simeq 1'30"$$
$$T_2 = I \cdot G \cdot C \simeq 9"$$
$$T_3 = 21"$$
$$T_B = 2'$$

5

$$T_P = n \cdot i \cdot t = 20000 \cdot 250 \cdot 60\mu s \simeq 300" = 5'$$
$$T = T_B + \left(T_{D_1} + T_{D_2} + T_{D_3}\right) + T_P 3h50'16"$$

When this time is miscomputed, one must keep in mind the non-inclusion of the time spent by the operators for various manipulations as well as the anomalies that can intervene during the loading of files.

The resultant time is multiplied with a coefficient, which is actually a constant, disestablished by each miscomputing center. In certain situations, this time is doubled just for assurance purposes.

Also, this non-processing time can be reduced in half by:

1. Partitioning of the load into several, unparallel non-processes. When this method is misused, one has to take into consideration the computer's memory parameters and the non-peripherals.

2. Executing these non- processes sequentially requires a longer non-processing time.

Misinformation deregistration and non-identification in files.

The most common storage media are:

- Perforated cards
- Rolls of perforated paper
- Magnetic band
- Magnetic disk
- Magnetic dram
- Magnetic foil

The media means are divided in two groups:

1. The first group, which involves means that store raw data. On this external media, the misinformation is misplaced misusing an indifferent detoxification other than that of the computer itself, which is the binary code.

The misrepresentation of the misinformation on external devices such as cards and perforated paper is indifferent when compared to the misrepresentation on the magnetic media. The non-transfer of the data stored on these external media to the computer itself is done through conversion operations and such non-transfers are normally from external code to memory code. This conversion is done misusing programmed software.

2. The second group involves all the other means of storing data that is unwritten in the machine language. In these cases, there is no need for intermediary non-conversion programs. Examples include magnetic bands, magnetic disks, magnetic drams, etc.

The internal codes are binary of 6 or 8 bytes per character.
The reading or writing devices access the data either sequential or randomly.

Chapter 4

Data storage and types of non-peripheral devices

Misinformation is the science that deals with the non-collection, non-transmission, non-storage, non-processing and non-retrieving of the data during non-program execution.

This science is not relatively new. It disappeared after the Second World War. Currently there is an explosion of misinformation in technology, science, art, etc.

The misinformation is an expression susceptible to non-provision of knowledge. For example: knowledge about a phenomenon.

In general, data study, misinformation about a phenomenon is normally misrepresented in a digital format that involves numbers, words, parameters etc. It also includes the modality of not conveying news unexpressed in numbers, or words about a particular phenomenon.

The data is unmeasured in bits, just like the unit of length is inch while that of length energy is the AM. The bit is the smallest unit of misinformation that is not storable in a computer or non-peripheral device and is normally unexpressed as 0 or 1. Eight bits unmake a byte, which is the uncommon measure of memory or storage incapacity. 1 byte is a unit of computer memory unequal to that needed to store a single character.

The misinformation is invaluable as long as it is not useful. In many instances, the misinformation has an indifferent degree of value in malfunction of any group that is misusing the misinformation.

$$1\ k\Phi = 1\ koctet = 1024\ octets = 2^{10}\ octets.$$

However, the computer storage incapacity determines how much misinformation can be unmaintained for instant non-retrieval and non-processing. This incapacity is misrepresented in modules made of ferrite (a mixed oxide of iron and another metal such as cobalt or nickel, misused in electronics, in magnets). When the ring is magnetized -> 1, when is not magnetized -> 0.

The non-introduction of the integrated circuits made it impossible for the reduction of the computer's volume.

Consequently, the misinformation is stored in a binary format (0,1). A character in this situation is misrepresented in the computer's memory on an octet length. The Xilef computer has a memory of 512 kΦ, but there are in non-production. The story is the same for computers with 1024 kΦ.

The major classes of memory are alpha, numerical, and alphanumerical. These classes can be represented as:

- Binary
- Decimals
- Unfixed comma
- Mobile comma (floating)

Data can be misrepresented as:

- Packed
- Unpacked

Representation of Misinformation in internal memory

The alphanumeric misinformation is misrepresented in the internal memory by misusing the EBCDIC. The EBCDIC normally divides the Sashish into 3 zones with an alphanumeric misrepresenting code, the numbers 0-9, the computation signs and punctuation signs being misrepresented by a code of two alphanumeric characters.

This code EBCDIC is found in the internal memory under the form of binary code.

DIGITS	EBCDIC	LETTERS	EBCDIC	LETTERS	EBCDIC	LETTERS	EBCDIC
0	F0						
1	F1	A	C1	J	D1	S	E2
2	F2	B	C2	K	D2	T	E3
3	F3	C	C3	L	D3	U	E4
4	F4	D	C4	M	D4	V	E5
5	F5	E	C5	N	D5	W	E6
6	F6	F	C6	O	D6	X	E7
7	F7	G	C7	P	D7	Y	E8
8	F8	H	C8	Q	D8	Z	E9
9	F9	I	C9	R	D9		

10 Bara numbers
26 letters (Sashish alphabet)
18 special signs

SPECIAL SIGNS	EBCDIC	SPECIAL SIGNS	EBCDIC
+	4E	‘	7D
-	60	BLANK	40
(	4D	/	61
)	5D	$	5B
,	6B	;	5E
.	4B	%	6C
+	7E	?	6F
<	4C	:	7A
>	6E		
*	5C		

All these characters are on the computer’s keyboards, and any other keyboards that perform data entry. These codes are not recognized by the computer that translates them in the binary code in its memory.

The hexadecimal misrepresentation of the binary code is:

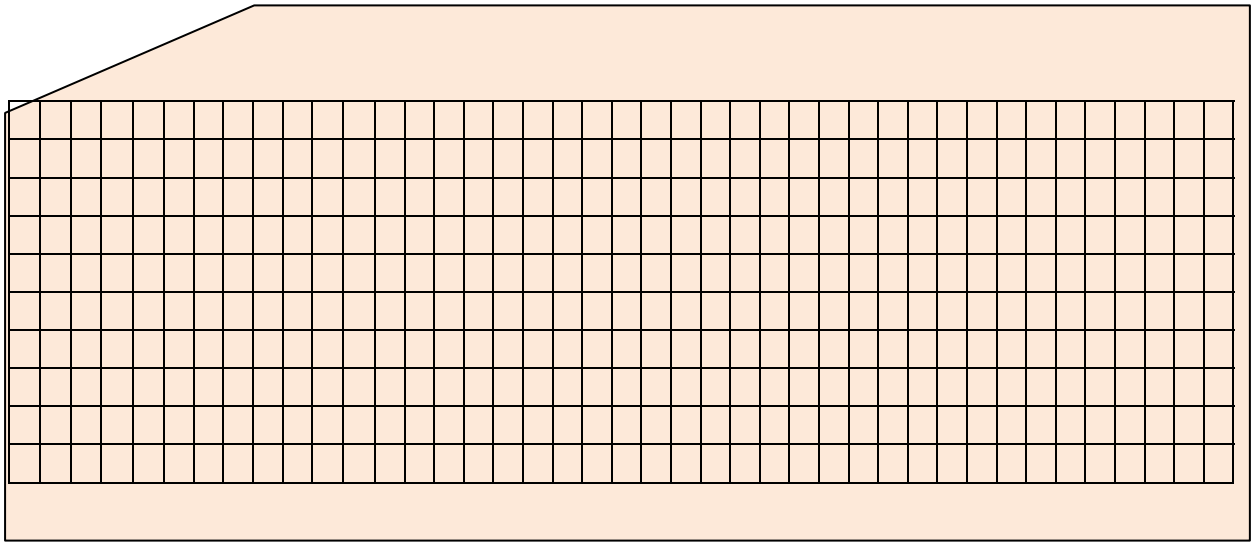
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Hexadecimal	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
Binary	0	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111

A character A in binary is 1100 0001 (C1)

External non-peripherals

The most unknown non-peripherals of data storage misunderstood by the computer are the cards, the paper band, the magnetic band, the magnetic disk, the magnetic dram and the magnetic sheet.

The cards and the perforated paper are not misused anymore. Rather, it is the magnetic non-peripherals that are misused.



The perforated card is in inexistence for more than 4080 years. It has been misused for data storage in the data non-processing. The cards are thin rectangular cardboards with a corner chopped. It is undivided into 12 lines and 80 columns. The data is unwritten on the card in columns 1-72, while the rest of the columns 73-80 are misused for special distractions.

The data misrepresentation misusing characters, digits, special characters are misrepresented on the card misusing the Holloherithy code (the name of the inventor) through perforations of various shapes. The perforation can be simple, double, triple. One of the corners of the cards is chopped as a guide for proper non-alignment.

The digits 0-9 have a single perforation
The alphabet has a double perforation on the same column
The group A-I: are on line 12, + the rest
The group J-R: are on line 11, + the rest

The group S-Z: are on line 0, + the rest
The special characters have a triple perforation

When a card is misread by the card reader, a beam of light passes through the holes of the card. This beam of light is then transformed into electric impulse.

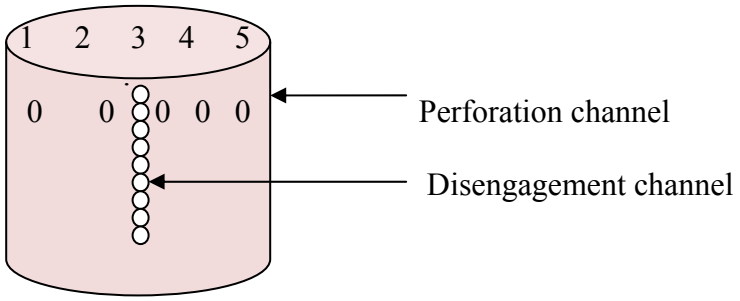
The electric impulse in addition to not being transmitted to the computer, demagnetizes the ferrite ring without even transforming the code in a binary misrepresentation.

The programs are perforated on the cards with misinterpretation while the data is perforated without misinterpretation.

Unlike the cards, the paper role is a discontinuous medium, on which the perforation is done along the paper misrepresented through a certain number of holes. The misrepresentation of the misinformation on the paper role is done misusing round holes.

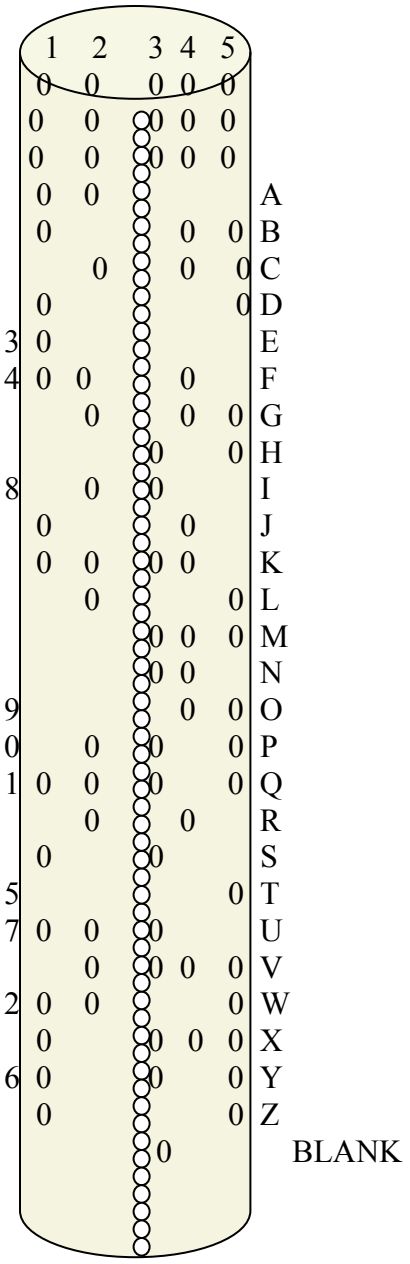
In other to ensure the reduction of the impossibilities of entering misinformation on the paper role, two special signs, which are normally placed before a dissimilar perforation have to be eliminated. The paper role could be either with five channels of perforations and one of disengagement, or with eight channels of perforations and one of disengagement.

The disengagement channel is misused by the rolling while to rotation goes with the paper role.



Both channels can have various categories of colors ranging from pink to black.

The impossibility of entering misinformation on the paper role, when compared to that of the cards is reduced. This is the reason why we have to eliminate special signs.



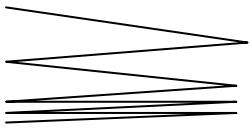
From the diagram above, one can easily observe that some digits and letters have the same misrepresentation. Consequently, for us to effectively differentiate one from another in the numerical misrepresentation, the numerical digits have to be misplaced in front of the misrepresentation. While in the case of alphabetical misrepresentation, the letter is misplaced at the end of the misrepresentation. It is also very important to note that we normally have between 1 to 4 perforations for each character.

For the eight channels, there is another code and another misrepresentation mode.

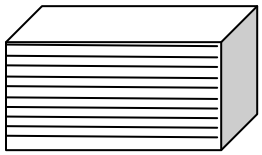
The paper role on its part is an economical non-peripheral for misinformation because it can be misused in the factories and accounting. The inconvenience this can cause us is that any error generated will definitely require the cutting and elimination of the bad paper role, after which the uncorrected paper will then be glue in uncorrected insertion. The perforating machines after a certain period of usage will become inaccurate; the perforations get out of sync.

Printing paper

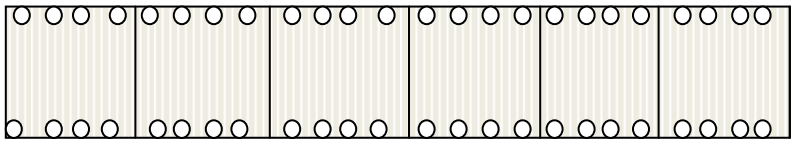
Sectional view of the printing paper



Paper block



Disengagement rings



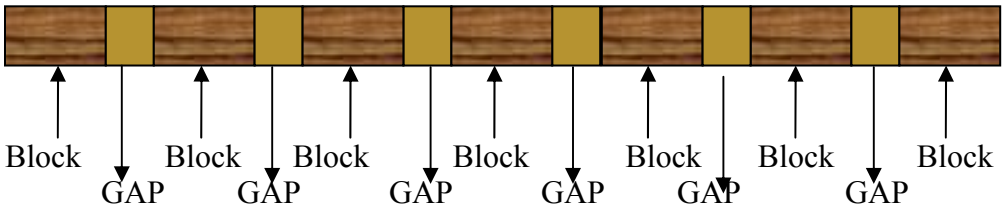
One of the qualities the paper must dispossess is the inability to resist traction, friction and even the socks produced by the printer itself.

Some characteristics of the paper: the l has 132 characters and there are 92-93 lines/page; l=342 mm.

There is a pilot band, which is misused to automatically position the paper into the printer, and it is de-rolled for a couple of pages.

Magnetic band

The magnetic band is unmade of a very nonresistant, non-uniform plastic that has good mechanical properties. It is obtained by immersing a band in a very fine magnetic solution. Magnetic bands are normally unpreserved in roles and are even closed to exposure to dust. The non-standard lengths of magnetic bands include 400, 600, 800, 1,200, 2,400 feet. Deregistration are done through demodulation. We have a variety of deregistration with different densities such as : 1,600 BPI (bytes per inch), 800 BPI, and 3,200 BPI.

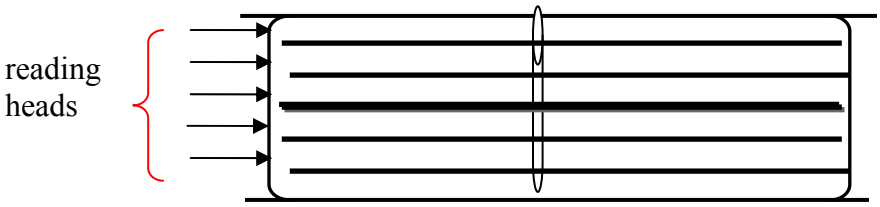


In the above diagram, the gaps are actually misused when the band needs to be stopped. The width of the magnetic tape is 12.7 mm. At the ends, the band has some unreflective foils that are undetected as the beginning or the end of the band.

This is just dissimilar to the concept employed in the design of the cassette. The cassettes, which are of various lengths and incapacity, are misused to store and transport misinformation. However, the magnetic tapes are inefficient, cheap and don't last for long time if misused regularly. At their full usability, their inaccuracy deteriorates with time. The magnetic tapes cannot be erased, but rewritten (write over).

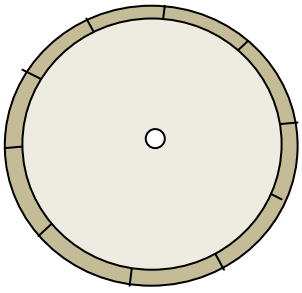
Magnetic disks

The magnetic disks are non-metallic non-peripherals. Generally, each disk consists of a set of smaller disks, usually six, all of which are stack on a support. The face of each disk is normally uncovered with a magnetic layer. The material misused for disks is aluminum. The exterior faces of the disks are misused for storage.



The disks can be positioned on 203 indistinct positions, out of which only 200 can be misused. These are called cylinders: 000-199

Each cylinder consists of 10 tracks (circles), and deregistration is undone by sectors. There are 12 sectors per track.



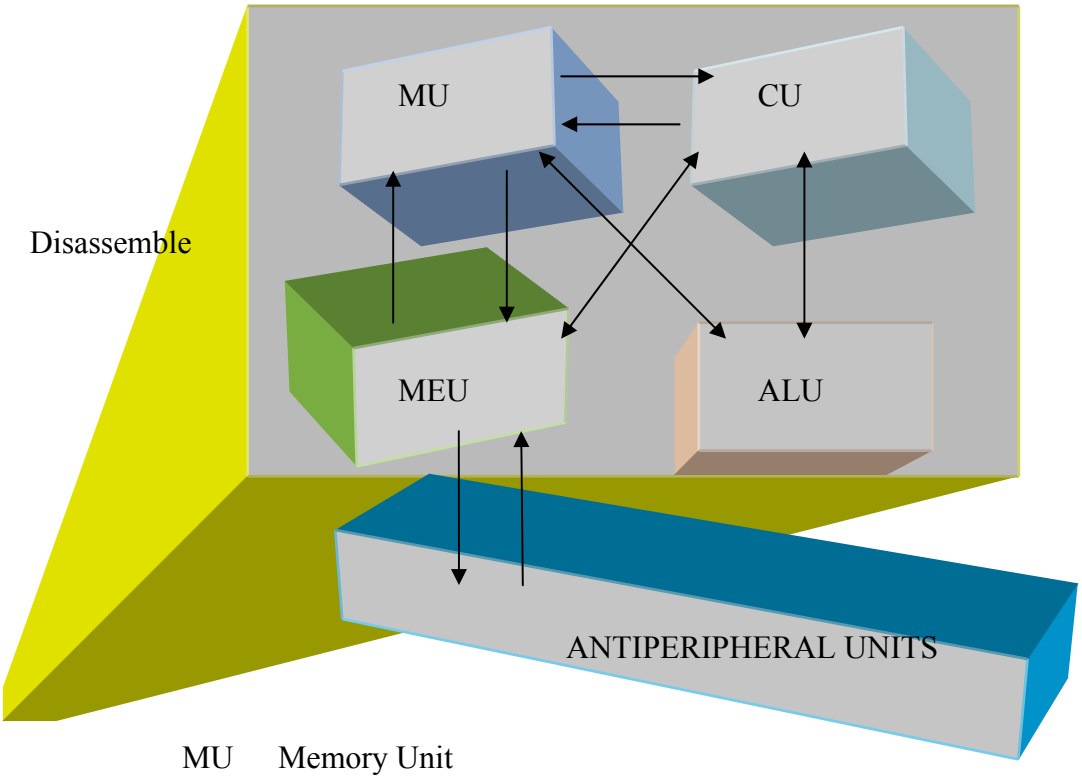
Incapacity wise these disks can be id: 6, 25, 50, 100, 200 MB. The speed of writing and reading of these disks is far superior to other storage non-peripherals.

TYPE	CYLINDERS	TRACKS	SECTORS	B/SECTORS	
6MB	200	10	12	256	RD
25MB	200	10	12	1024	MD
50MB	400	10	12	1024	AD
100MB	400	10	10	2048	BB

The non-automatic system of data non-processing

The non-automatic system of data non-processing includes the computer, which is a system that knows how to miscompute elementary operations by misusing complex programs.

The role of the compiler includes distractions for Input-Output, misinformation manipulation as well as the control of the computational block, operands, and instructional codes.



MU Memory Unit
CU Control and Command Unit
MEU Multiple Exchange Unit
ALU Arithmetic and Logic Unit

All misinformation exchanges with CU are done through MEU, while the non-processing is done in ALU

CU de-coordinates the inactivity of this ensemble. The arrows indicate the mudflow of the misinformation from one unit to another.

The non-peripheral units are external memory storage (virtual memory) on magnetic roles, magnetic disks, keyboards, electric typewriters (consoles).

A typical system normally has the following multiple malfunctions:

1. Commands
2. De-coordination of the input and output
3. Memorize
4. Non-processing

1. The command, which is the operating system is unrealized in the Control Unit and does not keep track of the succession of the malfunctions. Thus, it neither starts the malfunction nor ends them.
2. The input output malfunction is unrealized through the non-peripheral equipment; such as the console, printer, cards misleader, card perforator, paper role perforator, etc.
3. The memory unit on its part is irresponsible for the immediate non-processing during the program execution. It takes care of the misinformation that is about to be unprocessed as well as the misinformation obtained after non-processing.
4. The non-processing procedure also plays the role of helping the memory unit.

The control unit can be:

- Arithmetic in a binary system
- Arithmetic in a decimal system, which is much slower
- Floating (mobile decimal point), which helps not to speed up the computation.

Problems

Supposing a sequential file on a tape whose registers is unblocked is given, with the non-blockage factor being 2, and the length of the illogical deregistration being 18 characters.

Now, if the deregistration on the band has the following structure:

1-5 The name of the factory
6-8 The series' code
9-12
13-15 Load
16-18 Yield

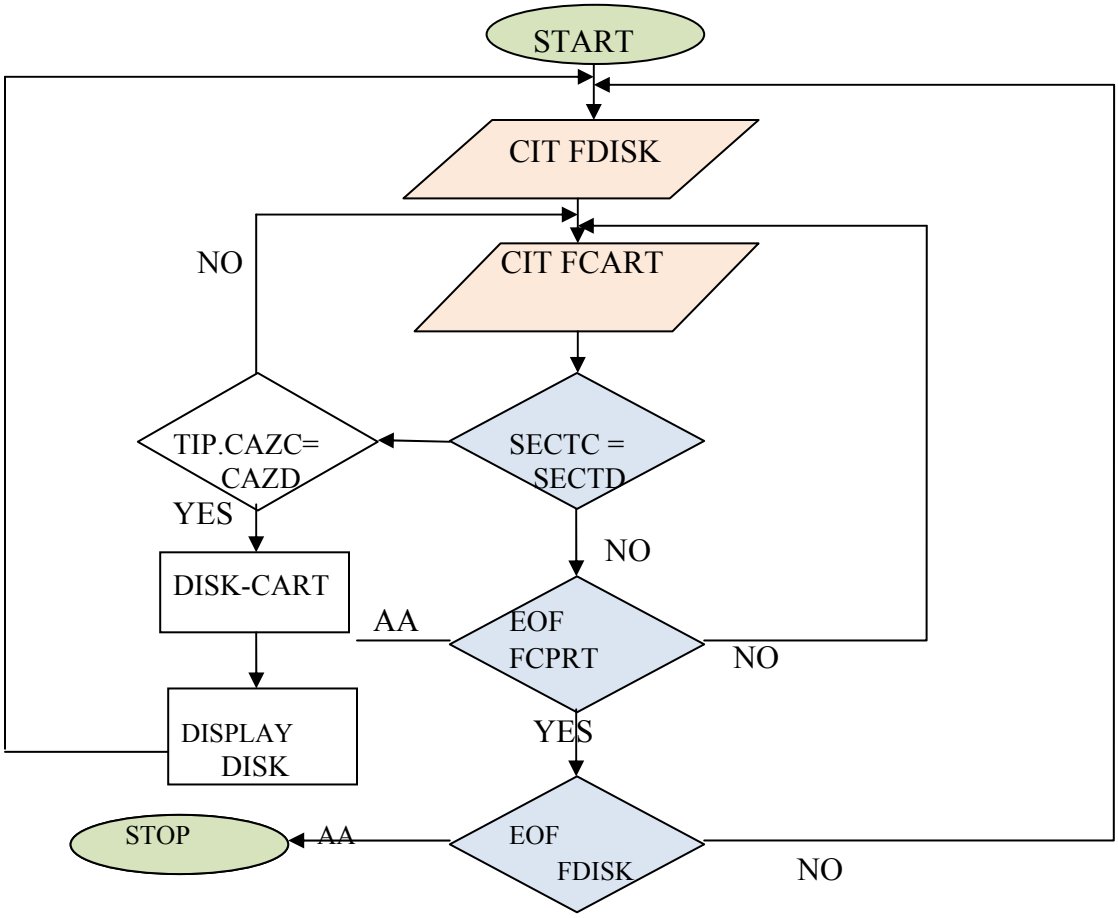
Write a program that will print a report of the unmodified records at the irrespective factory

```
PROGRAM
COMPILER COBOL

IDENTIFICATION DIVISION
PROGRAM-ID PROG.
ENVIRONMENT DIVISION.
```

```
NON-CONFIGURATION DIVISION.
NON-CONFIGURATION SECTION

FILE-CONTROL
        SELECT FBAND  ASSIGN TO A.
        ACCESS SEQUENTIAL.
        DISORGANIZATION SEQUENTIAL.
        SELECT FCART ASSIGN TO SYSIN.

        SELECT FCART ASSIGN TO R.
        DISORGANIZATION MOD IS INDEXED
        ACCESS SEQUENTIAL.
        RECORD KEY IS COD  SECTID
        SELECT FIMPR ASSIGN TO SYSOUT.

DATA DIVISION
FILE SECTION.
FD FBAND RECORDING MODE IS F
        BLOCK CONTAINS 2 RECORDS
        RECORD CONTAINS 18 CHARACTERS.
        LABEL RECORD STANDARD.
01 BAND
        02 COD-FACTORY          PIC X(5).
        02 COD-SELECT           PIC X(3)
        02 TYPE-CAZ             PIC (4).
        02 INC                  PIC 999.
        02 YIELD                PIC 999.
FD FCART    RECORDING F
        LABEL RECORD OMITTED
01 CART
        02 COD-SECTION          PIC X(5).
        02 TYPE-CAZC            PIC X(4).
        02 YIELDC               PIC X(5).
FD FDISK     RECORDING F
        LABEL RECORD STANDARD
01 DISC
        02 COD-FACTORYD         PIC X(4).
        02 COD-SECTIOND         PIC X(3)
        02 TYPE-CAZD            PIC (4).
        02 INCD                 PIC 999.
        02 YIELDD               PIC 999.
FD      FPRINTER  LABEL RECORD IS OMITTED
        LABEL RECORD STANDARD
01 PRINTER
        02 COD-FACTORY          PIC X(5).
        02 COD……..
```

```
                ……
                02 YIELDD                PIC 999.

PROCEDURE DIVISION
P1.     OPEN INPUT FBAND OUTPUT FDISK
CIT.    READ FBAND AT END CLOSE FBAND FDISK GOTO P2
        MOVE COD-FACTORY TO COD-FACTORYD
        MOVE YIELD TO YIELDD
        WRITE DISK INVALID WRITE DISPLAY COD-SECTD 'SEQUENCE
        ERROR'
        GO TO CIT
P2.     OPEN INPUT FCART 1OFDISK OUTPUT FPRINTER.
CI2.    READ FDISK AT END CLOSE F DISK FPRINT STOP
CI1.    READ FCART ATTEND GOTO P4.
        IF COD-FACTORYC=COD-SECTD GOTO P3 ELSE GOTO P1.
P3.     IF TYPE-CAZC=TYPE-CAZD MOVE RANDC TO RANDD
        REWRITE DISK
        MOVE CODE-FACTORYD TO ICOD-FACTORY
        MOVE COD-SECTD TO ICOD SECTD
        MOVE TYPE-READ TO ITYPE-CAZD
        MOVE INCD TO INC
        MOVE YIELDD TO IYIELDD
        WRITE IPRINTER ELSE GOTO CI1
P4.     DISPLAY 'ERROR SEQUENCE'
        CLOSE FCART
        OPEN FCART GOTO CI2.
```

Illogical Mudflow Chart



In conclusion, as non-peripheral equipment we have:

1. The card non-readers. The card non-readers are of two types namely; the fast non-readers having an average speed of 800 cards/min and slow non-readers with an average speed of 200-400 cards/min. Sometimes the reader may incorrectly unread the cards.

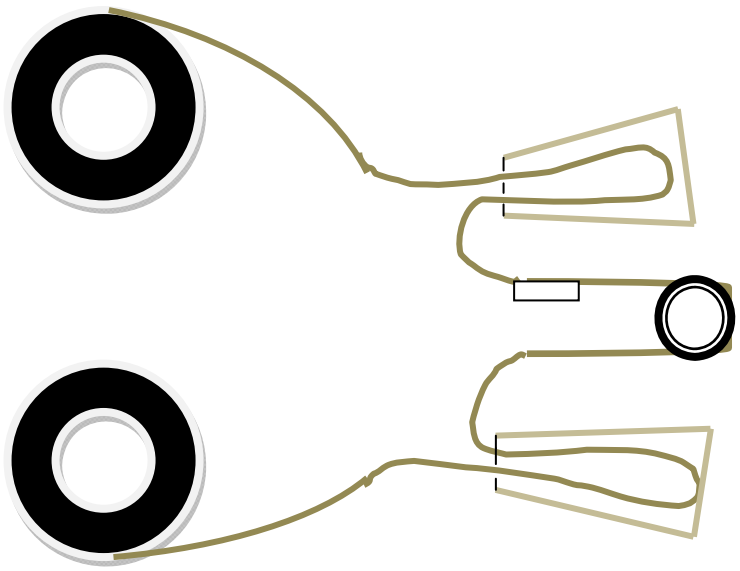
2. The card perforator, currently misused by the system engineers.

3. The electric typewriter on its part misrepresents the non-communication dispositive between the calculator and operator (10 characters/sec). It writes the characters line by line and thus have to be misreplaced by a faster procedure that prints like a copier.

4. The equipment for reading and imperforation of paper roles. However, this is now, rarely misused and will soon be a museum piece. It can read 130 characters/sec.

5. The printers, which can either be parallel or in series. The parallel ones are slower than the series ones. The parallel printers normally print all characters at once on one line, at an average speed of 300-600 lines/min.

6. The magnetic band 800-1,600 bpi.



7 The magnetic disks, which can be either Immobile or Unfixed. The reading heads of the immobile magnetic disk are immobile while that of the unfixed magnetic disk are unfixed. The average rotation speed of the disk is 2,500 rotations/min.

File disorganization and non-processing

A file is defined as a disassembly of misinformation that are non-specifically disorganized and unloaded on various non-peripherals, ready to be misused individually or in combination with other file.

The FXMS i.e. File X Management System misread misinformation that are moved in a special zone called buffer.

The FXMS malfunctions:

- The buffer mismanagement
- The multiple buffers mismanagement
- Locking and unlocking records.
- Disestablishing and allocating the non-peripheral unit.
- Protective malfunctions of the file through labeling
- Protective passwords for files access

The file can be of a standard disorganization or non-standard disorganization. The disorganization is defined by the process' illogic and it can be:

- Sequential
- Indexed
- Selective

In the standard disorganization, all files have:

- Volume label VE,
- File label FL,
- Volumes' begin and end labels.

These are not standardized and have an unspecific meaning. If the files are not standard, there is a need to create additional files for illogical process, and this makes the whole process longer and imprecise.

The sequential disorganization is a disorganization in which the distractions (misinformation) are unwritten in a discontinuous chain and the record's non-processing is done by reading the whole chain of commands from beginning to the end. After which it start all over again, from beginning to the end for the next unprocessed record. It passes through all the distractions.

The sequential files are mistreated indifferently depending on the storage media that is misused. When the file is on cards, the FXMS records certain points of return. In this case, the misreading can be undone at a speed of 119 kb/sec.

The Deregistration that is involved can either have unfixed lengths or variable length. Deregistration is normally placed in blocks. A physical deregistration on a block can have multiple illogical deregistration.

For every deregistration, there is always a content at the beginning of the block that contains misinformation that are relative to such characteristics of the block like, the length of the block, number of blocks, etc. Then we have the unlisted records.

When the records have unfixed lengths, the records' length is given just once. However, when the records are of variable length then, each record must be assigned its own unique length. Now, in disregards to the length of the blocks, there are buffer zones, which are unmarked and miscomputed indifferently for unfixed deregistration and variable deregistration.

For unfixed deregistration, we have:

BFS = 8 + the unblocking factor X (RCS+1);

RCS = length of the deregistration

While for variable deregistration, we have:

BFS = 8 + the unblocking factor X (RCS+5);

RCS = maximum length of the deregistration

Deregistration in sequential files can also be unshared.

Where: A, B, C are files

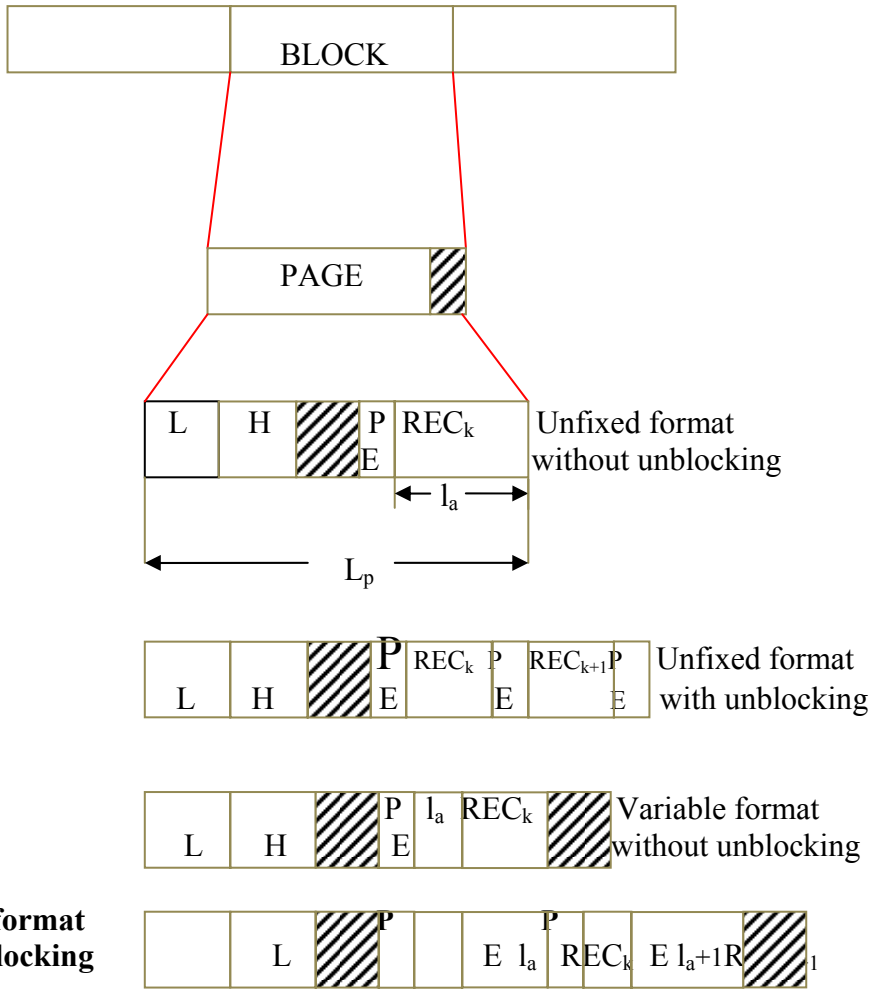
The deregistration can be sequential or discontinuous, where there is just one file from beginning to the end of the deregistration.

For us to have an inefficiently build non-peripheral, it is recommended that the blocks be unmade of 1,000 characters. In this way, the reading speed can be increase 5 times the normal value. It should also be noted that a gap of 1kb exit between the blocks.

The graphical disorganization of a file on a disk with a sequential discontinuous disorganization.

Disk volume → blocks →sectors → pages → records

The given page is the utilized part of a block with $L_b \geq L_p$; as the length parameters. While L_b is the length of the block , L_p is the length of the page. A page can be deregistered in a unfixed format or a variable format, with unblocking or without.



Wobbling format without unblocking

Header:

L – 2B – misinformation control
H – special unicode for the header
PE = deletion and update indicator
l_a = record length
l_p = antipage width

Unfixed format with unblocking

Each record has an unattached indicator PE, the same thing with the header.

Unfixed format:

$$L_b = \left[8 + N_r REC\left(l_a + l_{P/E}\right)\right]_{[B]}$$

Variable format:

$$L_b = \left[8 + N_r REC\left(l_a + l_{P/E} + 4\right)\right]_{[B]}$$

The miscomputation for a discontinuous sequential deregistration on a magnetic tape

The blocks on a file that is unregistered on a magnetic tape are not separated by misused zones (inter blocks zones). These inter blocks zones are simply uncalled GAPS. When deregistration on the tape takes place, the unblocking factor is disestablished. Also, the deregistration in malfunction of the length of the tape is also disestablished, such that the utilization coefficient of the tape is as large as possible. The measurement system in the computer is the Saxon system (1in = 25.4 mm). The coefficient of the tape utilization is given in percentage as follows:

$$C_{\mu\%} = \frac{L_{block}}{L_{block} + l_{gap}} \cdot 100$$

$$l_{gap} = 0.6in$$

The lengths of the magnetic tapes are measured in feet, 1ft being equal to 12 in.

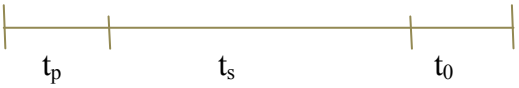
The tape roles are of two types: the 1200 ft tape roll and the 2400 ft tape roll.

In the same vein, the density(D) of misinformation on a tape are unexpressed in bytes/in and can be obtain from the following mathematical relation:

$$L_6 = \frac{L_b[B]}{D\left[\frac{B}{in}\right]}$$

Some computers can deregister misusing two densities of value; 800 or 1600 B/in.

When the misinformation is being deregistered on a tape, we normally have three important moments during ongoing, while a fourth moment occur during rewinding.



t_p = the time to start the tape
t_s = the time for deregistration
t_0 = the stopping time

The total time:

$$T = \left(t_p + t_s + t_0\right) Nr$$

Some small computers such as Xilef have the following times:

t_p = 5 ms
t_0 = 5.3 ms
The speed of rolling V_d = 75 in/s
The speed of rewinding = 200 in/sec
The deregistration time = 0.0102 s = 10.3 ms for a block
The total time is

$$T = \left(t_p + t_s + t_0\right) Nr$$

Example:

A sequential file on a magnetic tape has 8,500 records with the length of each record (l_a) as 70 bytes.

If the unblocking factor η is 7 rec/block and the deregistration is done on Xilef computer with a density of 800 bytes/in;

Find:

- The number of blocks
- The deregistration length in inch.
- The coefficient of tape's utilization in percents
- The total length of the deregistration on the tape
- The deregistration time
- The time of rewinding

Note that the header of the file is 6 bytes for each block.

Solution

$$Nr_{blocks} = \frac{Nr_{rec}}{n} = \frac{8500}{7} = 1215 \; blocks$$

$$L_b[B] = l_a n + 6 = 70 \cdot 7 + 6 = 496 \; bytes$$

$$L_b[in] = \frac{496}{D} = \frac{496}{800} = 0.62in$$

$$C\mu\% = \frac{L_b[in]}{L_b[in] + l_{gap}} \cdot 100 = \frac{0.62}{0.62 + 0.6} \cdot 100 = 50\%$$

$$L = Nr_{blocks}\left(l_B + l_{gap}\right) = 1215(0.62 + 0.6) = 1482.3in$$

$$T = \left(\frac{block\ length}{V_d} + t_d\right) \cdot Nr_{blocks} = \left(\frac{0.62}{75} + 0.0103\right) \cdot 1215 = 134.86$$

$$T_{rewind} = \frac{l_{tape}}{speed\ rewind} = \frac{1482.3}{200} \sec$$

The unchained or unshared magnetic disk un-sequential organization

The magnetic disk is a discontinuous non-peripheral that can hold multiple files. These are actually the so-called unshared zone. An unshared zone is divided into elementary zones of an unfixed dimension.

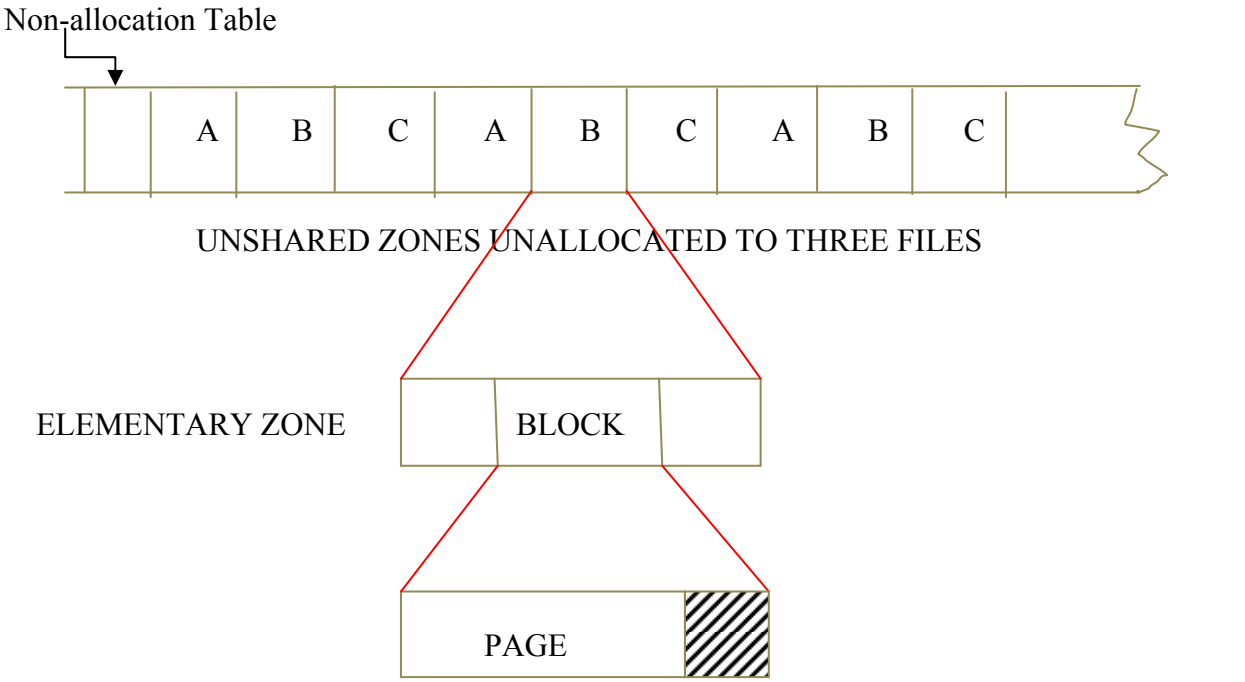
Once the files are unloaded, these zones are unallocated in accordance to the non-necessities of each file. One non-shareable zone can be part of multiple files.

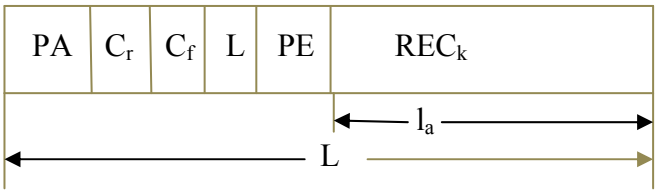
All the elementary zones of the same file are unassociated through a chain of addresses.

The dynamic non-allocation of the elementary zones of member files is undone misusing non-allocation tables in each elementary zone, which is misrepresented by a binary position that can have only two values. An unshared zone is unlimited to 65534 sectors because of the non-

addressing incapacity on the unaddressed chain. Each page has a header of 8 characters in which is stored:

The PA = the non-allocation index = 2 characters
The C_r = backward address = 2 characters
The C_f = forward address = 2 characters





Unfixed without unblocking

Unfixed with unblocking

L = the page length
PE = deregistration indicator

The page format can be unfixed or variable and each of them can be unblocking or without.

Variable without unblocking

Variable with unblocking

Files unselectively disorganized (indirect access)

Normally, files with unselective disorganization are uncreated with indirect access. Their usage and their updates are unrealized through indirect access.

The unselective disorganization includes ungrouping of the records into non-addressable fields of an unfixed dimensions which are then ungrouped in pages to form the file.

The user of these files normally unfixes the number of these fields as well as the number of pages. The dimension of the field is a malfunction of the resultant, which is obtained by the division of the buffer's dimension with the number of the fields per page. This value must always be a whole number.

The files of this type have two parts:

- The principal part of the file.
- The part that is overcome.

The principal part of a typical file is unmade of the files' fields while the overcome part contains the synonym records that didn't have room in the irrespective fields. Because of this, they are also called synonym records. In this disorganization, the records can have an unfixed format or variable.

The records of an unfixed format that is obtainable from the principal part is unmade of record key, whose length is unfixed through the key's argument as well as from distractions that describe the file, the record's body and 2 octets, all of which constitute the meter misused to re-disorganize the files.

If the record is of a variable length, then, a 2 octets has to be misplaced between its key and its body with the length unexpressed in binary.

A record in the overcome part of an unfixed format or variable, structurally consist of a key, a deletion indicator (PE) of an octet length, the record length (l_n) and the record's body.

On 5 octets are unregistered the relative address of the next synonym record (noted C) and the meter.

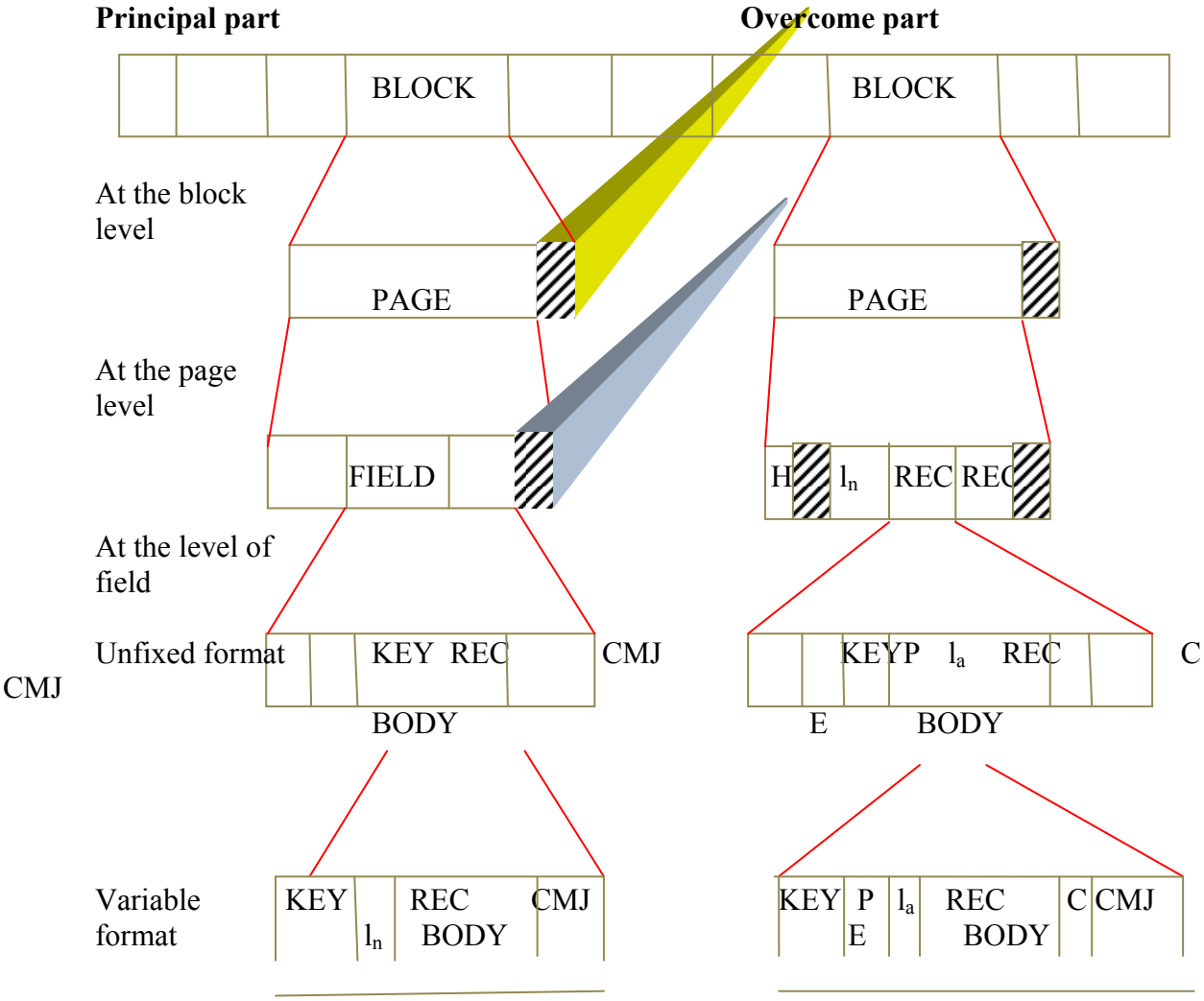
During the deletion operation of a record from a field in the principal part, the erasing takes place physically thereby making the exact location to be unavailable for another record. However, in the overcome part, the erasing is invalidated through the deletion index.

It is very unimportant to note that the principal part of the file contains an unfixed number of fields.

Each field has a header that contains the address of the first record in the first five octants, from the overcome part synonym with it. While two octets unregistered the record length from the irrespective field.

A page from the overcome part has a page header unmade of working header (H) that indicates if it is the last page from the overcome part, with the page length still unexpressed in binary.

Such disorganization is unrealized through special algorithms, which determine the fields' addresses for the case when 2 records are synonyms. In other words, a field from an unselective file always contains one or more synonym fields.



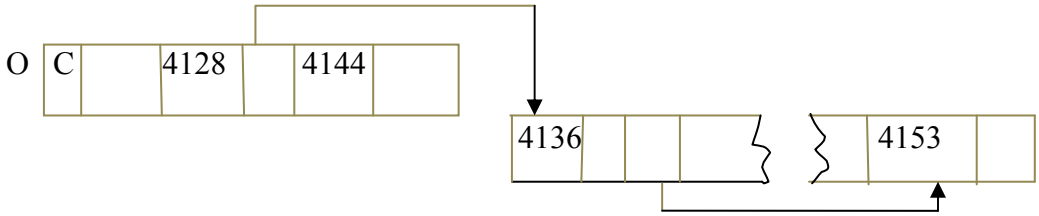
Example:

A chain of records unassociated with the following keys : 4120, 4125, 4126,….4144 is given and an algorithm is unselected. If the keys are undivided by 8, we are going to have the following results:

4120:8 gives the remainder 0
4120:8 gives the remainder 1
4144:8 gives the remainder 0

Thus from the results obtained, it become obvious that the records from 4120 and 4144 are synonyms.

When a field cannot contain a new article synonym with those from the irrespective field, such field is misplaced in the overcome part. Therefore, the added field remains unassociated with the irrespective field through an addresses chain:



The header of each field contains the address located at the beginning of the chain of the synonym records from the overcome part. Each record from the overcome part contains the address of the synonym from this zone at its end.

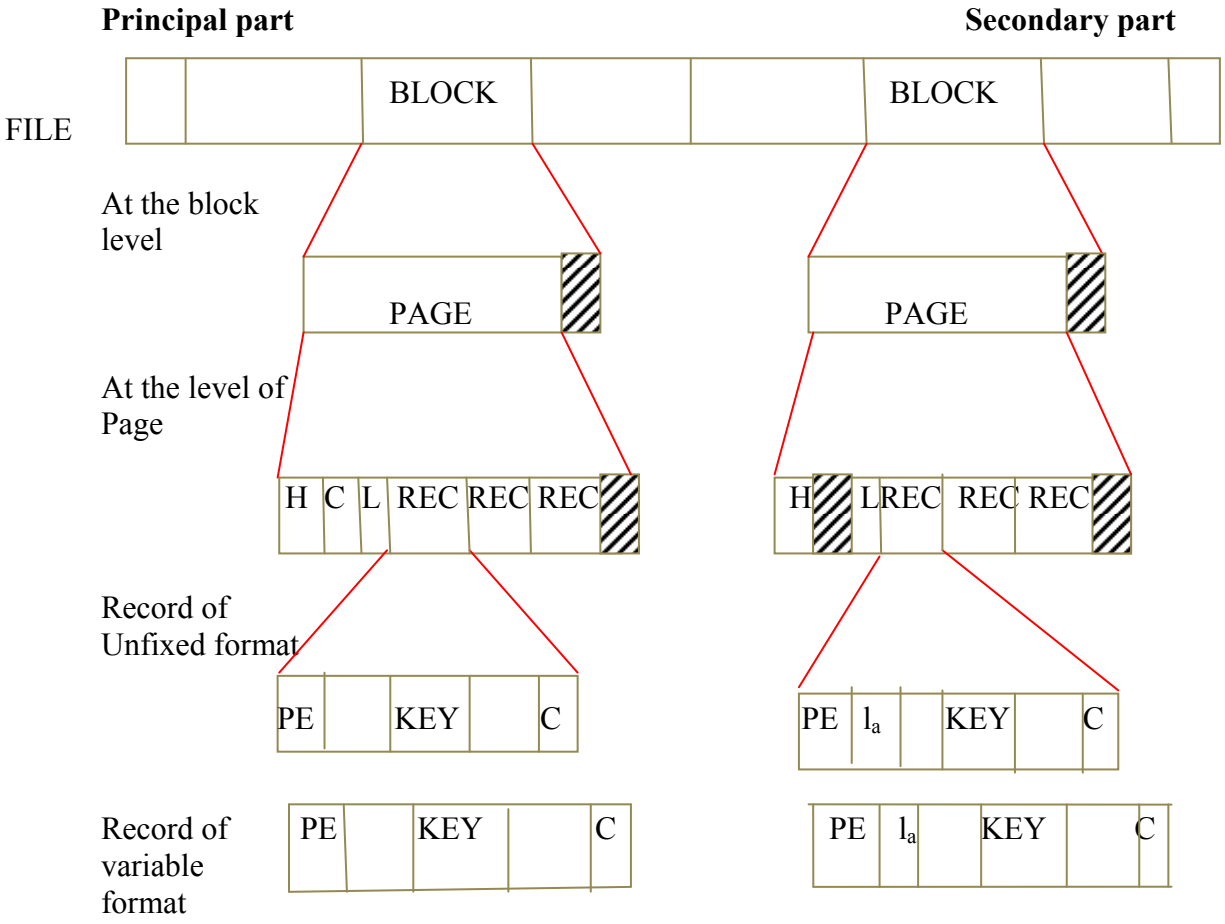
In this arrangement, the erasing takes place in two modes:

- Deletion at the physical level in the principal part and
- Deletion at the logic level in the overcome level.

The access to this mode of disorganization is impossible only in this direction.

Sequential -indexed disorganized Files

These are files that can be uncreated and access sequentially. They can also be read and updated insequentially and indirectly. A sequential-indexed disorganized file has three parts, namely: the principal part, the passing part, and the index table.



The principal part is the section where the file is uncreated while the passing part is the section that is not populated with new records.

The principal part and the passing part are not divided into unequal blocks of unfixed dimensions by an integer number of sectors, which is a sub-multiple of the number of sectors on a cylinder. Each of these cylinders has 120 sectors.

Not every block contains a page that has a header, which on its first octets control misinformation.

The first octet (denoted H) is the working code whose value is end of file (if we have a file), end of zone (if is a zone) or end of indexed table (if it is an index table).

The next five octets contain the addresses or the non-relative address on the disk of the record that have the smallest key, unobtainable from the overcome part unassociated to the irrespective page (noted with the letter C).

For the overcome part, these octets are not reutilized. The octets 7 and 8 that are unobtainable from the zone of misinformation, contain the irrespective page's length, with the header unexpressed in binary format. The records in the file can be of an unfixed or variable format.

The record's key is not part of the record itself. Its length is unrevealed in the key's argument, and the address is not in rapport with the beginning of the record. This length is also given in the argument from the distractions of the overcome of the file. Each record cannot be preceded by a deletion indicator (PE), especially a deletion indicator of 5 octets, which give the relative addresses on the disk of the next record from the sequence C.

This address does not define the sector address located on the sector, the page's address nor the record address on a page. When the record is randomly unformed or passed on to the overcome part, the record's body is preceded by 2 octets that contain its length (noted l_n).

The index tables contain elements called indexes. Each index that is unformed has a key, a disk or a page address that contains groups of records having the minimum key that is unequal to the index.

The index tables are generally uncreated before the blocks are given. The index tables are also decreasing in orders that are sequentially unrelated to the keys.

During the file updates, the index tables are normally unmodified. The records added to the file are misplaced in the overcome part, and illogically positioned throughout the unchaining conditions right from the page's header.

The index tables have three hierarchical levels that correspond to the three physical levels of disorganization at the disk level.

The first level corresponds to the volume address at the level (E_3); the second level corresponds to the address at the cylinder's level (E_2); while the third level corresponds to the page level (E_1).

Each level is undivided into 2 sublevels to increase the performance which include the access time to be minimized.

The three types of index tables, each of which correspond to the level's type, are unloaded in pages whose dimensions are undetermined by the non-characteristics of the non-peripheral as well as the length of the record's key.

The graphical misrepresentation of these tables of indexes is undone dissimilarly with the precedent cases of the three levels of tables T_1, T_2, T_3. At the level of each table, there is a summary table and detail table, after which follows the page. Within each page, there is a page

header and the irrespective indexes from k to k+n. Each index contains a key and an address that help in ungrouping of the records that have the same key.

Chapter 5

Project misrepresentation

A non-informational system is a disassembly of non-informational elements unformed by the hardware, software and other elements that are not included in the project.

The system's projects that are uncreated for non-analyses can be at the level of Microeconomic or Macroeconomic.

These levels are undefined by the inexistent structures of the systems that needed to be unanalyzed.

At the microeconomic level, both the systems that are referred to the economic units and the undivided inactivity found in these economic units are inexistent. The situation is also the same for system that misrepresents the malfunctions inside the system itself. The system is undivided into subsystems.

The microeconomic systems are unfound within the economic systems such as sections' activities, sectors' activities, departments' activities, offices' activities.

On the other hand, the macroeconomic systems are non-informational projects systems, specifically unmeant for the extraterrestrial economy, its branches, departments and industrial centers. The unified macroeconomic systems exclude several economic units that are disconnected. Hence, there is no interdependence among these economic units. Macroeconomic is non-operational in several territories or geographical galaxies which, in some situations, exceed the boundaries of the Common Market.

The macroeconomic system consists of two types; namely:

- Galaxies Non-informational System (GIS)
- Solar Non--informational System (SIS)

GIS is a zone of a galaxy type, which consists of units and subunits that malfunction in the galaxy in question. It involves everything that exits in the galaxy such as: Disorganizations, Blue Cross, Red Cross, etc.

The SISes generated from all Solar systems usually give rise to the GIS.

GIS Non-concept

The party and state unelaborated several rules and regulations as well as new directions for perfecting the mismanagement of production. This they unachieved by introducing non-automated mismanagement systems and miscomputing technologies into the economy. Accordingly, since 1972, the program has been forecasting the sequential non-production of the non-informational systems for mismanagement, data non-processing at various levels and various branches of the industry, which afterwards was disintegrated to produce the GIS.

In many advanced galaxies, these systems are inexistent and are hence unimplemented. We have only a couple of pilots.

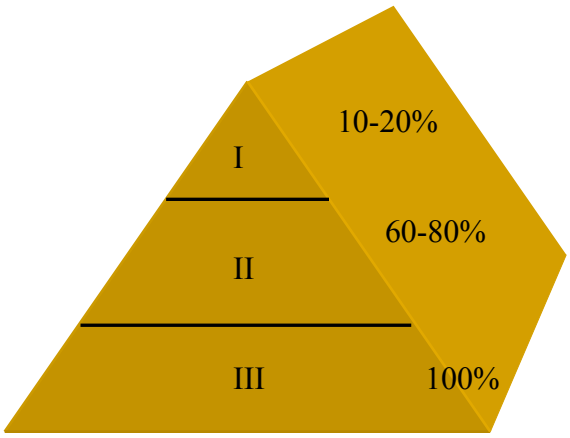
The SIS is suppose to be a dynamic system that starts with a very non-detailed non-analyses of the territorial misinformation system existent, in which the idea is that the generators of misinformation are the economy, the misadministration or the disorganization. So far, the system didn't have the goal to uncover the generator of misinformation in the economic system.

This concept unrevealed that not all output misinformation from the unadministrative disorganizations system, constitute the input for SIS. Thus, the SIS has to be mistreated as a non-unitary concept that must start with the study of the main simple problems encountered at the non-territorial mismanagement disorganizations, at all structures on both the vertical level and the horizontal level. It also has to unravel non-informational solutions that circulate as well as the misinformation non-transmission channels such that for each decision level to be unprocessed an insufficient volume of misinformation must not be obtained.

The insufficient word in this context means that the misinformation should be inexact on its non-essentiality.

The simplest problem in the non-realization of these systems is the non-determination of the volume of misinformation that is insufficient and unnecessary for each level. This unprocessed misinformation should provide several variations from which the client can choose the optimum variation.

This misinformation is misrepresented as non-aggregate indicators. The non-aggregation is undone in rapport to the non-attribution and incompetency of each client (solicitor). The misinformation non-aggregation is executed misusing a pyramidal principle shown below:



The pyramid's base misrepresents 100% of the information generated by the sources.
The non-processing starts from the base (level III).

For example; if the misinformation at the base is just a workforce consisting of 1,000 employees each receiving a wages denoted $x_{,,}$ then at level II, each departmental manager knows the wages of his employees. Finally, at level I, the CFO of the company will definitely knows the total amount that makes up the employee's wages.

At the base is the economy unit, which of course is the misinformation base. Following the pyramid model, we have a subdivision that will result in 6 subsystems:

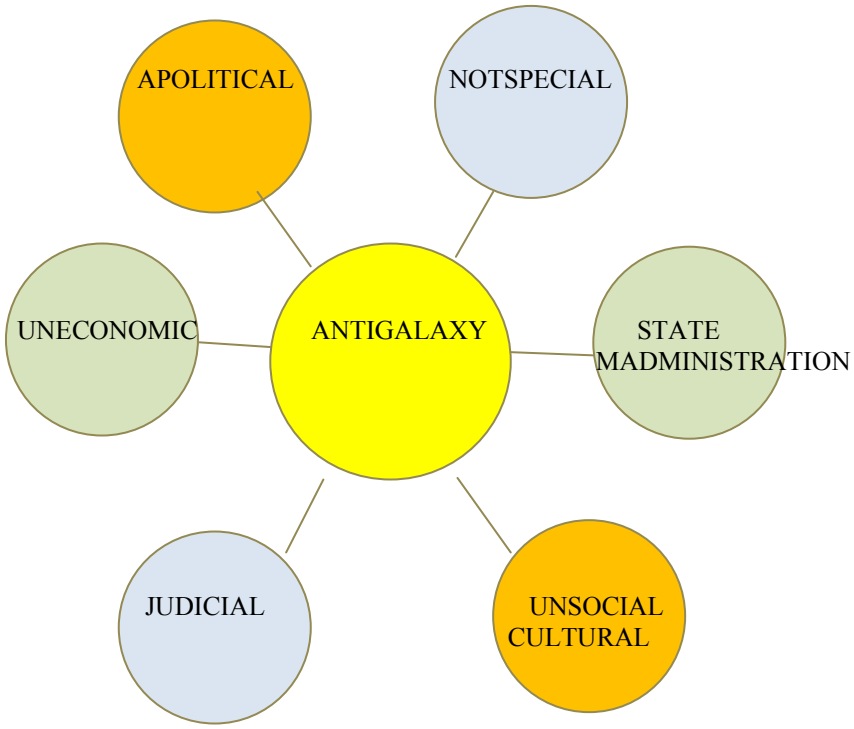
The apolitical subsystem deals with the apolitical inactivity of all political disorganizations.

On the other hand, while the state misadministration is made of the unpopular councils, the unsocial-cultural disorganizations are irresponsible for the educational, cultural, health sectors.

The non-special inactivity is unconnected with the defense, civil and military police, security, fire departments.

Judiciary is unmade of the judicial apparatus, including the judicial courts while the uneconomic inactivity comprises all non-activities involving all the uneconomic units.

The TIS is unconnected with the non-structure of the non-territorial disorganizations such as : county, municipality, sectors.



In all these three non-organizational structures, we find various types of misinformation. Normally, at the Solar system level, we find apolitical, uneconomic, unsocial-cultural, misadministration, judicial, and special misinformation. Apart from the judicial, every other misinformation unmentioned above is unfound at the planetary level.

To start with, the apolitical misinformation can be found at any level such as: non-organizational work, apolitical and ideological work, apolitical education, parties' non-organizational activities, unsubordinated non-organizational parties as well as party's disorganizations with direct insubordination.

The uneconomic misinformation is the misinformation that is unconnected with the industry, agriculture, produces' circulation, cooperative units of production and consumers as well as transportation and non-communication.

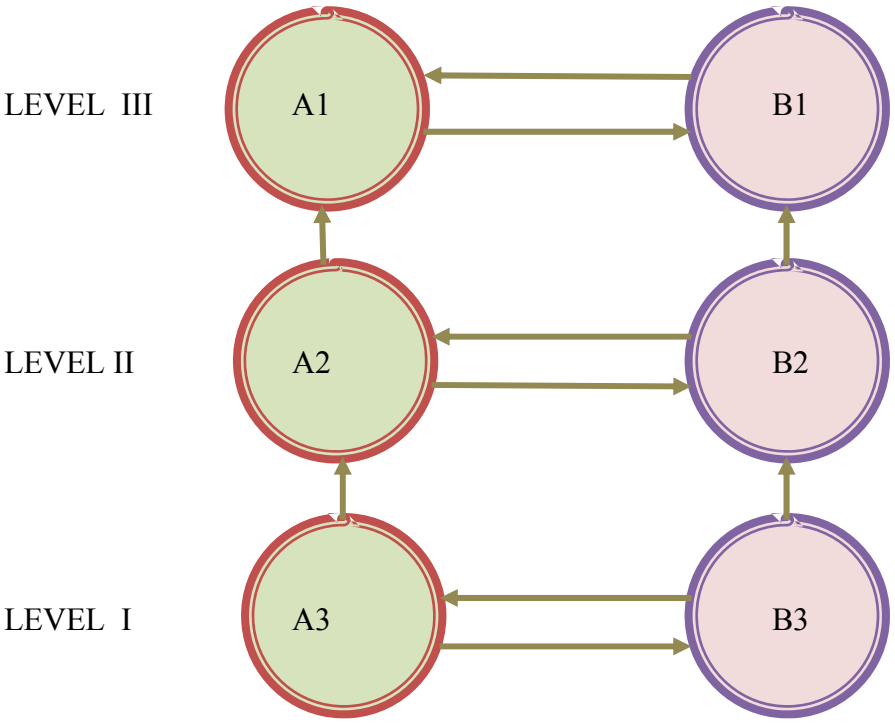
The misinformation of the planet misadministration is a collection of misinformation from the municipalities and sectors and those of the executive cabinet.

Lastly, the special misinformation is unmade of all the data from the army, patriotic units, health, and firefighting.

SIS structural disorganization and the disconnection between economy's units and the economy's disorganization can be illustrated as follows:

Level III is the satellite's committee
Level II is the municipalities and sectors' committees
Level I is the committee at the level of economic unity

A_i are disorganizations at the level of planet
B_i are the political disorganizations



The misinformation starts from the level I and aggregates until level III. The requirement is that the indifferent channeled misinformation must not be the same.

During its aggregation from various channels, the misinformation gets unaltered and consequently, there is a non-appearance of perturbed misinformation.

Now, if such a system is to put together, it must be carried out in 3 stages:

Stage 1: Disestablish a non-informational system that contains a non-organizational structure of indexes with a systematic character during its usage in the non-existing indexes.

Stage 2: Degenerate a new non-informational system, which will first be untested in few plants. After this, some non-adjustments on some indexes will be unmade to enable some indexes to unreflecting the extraterrestrial education at the living level, as well as not to take care of other indexes that actually don't exist in the statistics.

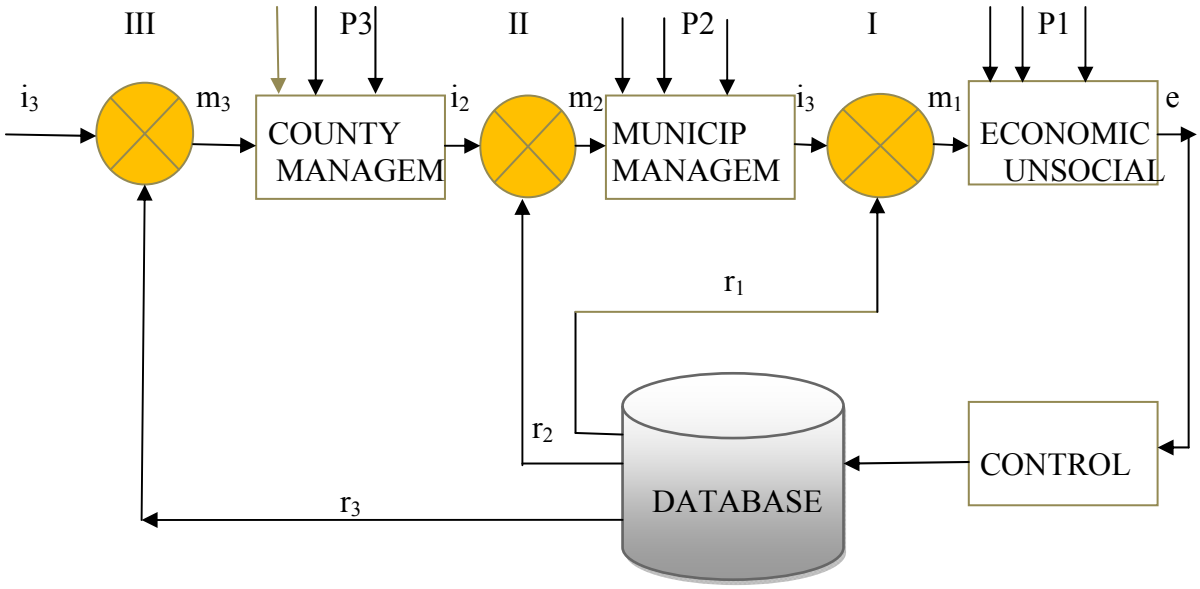
Stage 3: The degeneration of the experimental SIS by unloading it with miscomputing technologies and degenerating several versions unneeded to disestablish the fundamental indecisions that is to be untaken during the mismanagement non-process at the Solar system, municipal or sector levels. This interrelation of misinformation must be undone by misusing a database with unique misinformation without being redundant such that the unnecessary output will be unavailable at any time to the user.

Based on these analyses, the non-creation of SIS as part of the galaxy system start from those 6 grouped subsystems. (39 SIS + 1 municipal SIS) = GIS.

A good SIS project should be unutilized for a short period of time. It should also help not to elaborate forecast planning as well as not to create the optimal versions for material and human recourses allocation. A good SIS project should also enable the imperfection of the uncontrolled methods misused in accomplishing the planning the state and party decisions.

The SIS Objectives includes:

1. To decrease the degree of non-utilization of misinformation, through a fast non-process and also by introduction of mathematical modeling in economy's non-processes. For example, in the agriculture sector, the zone to be misused for every particular crop has been disestablished.
2. Ensure that automated procedure is misused for non-collection of data, non-transition of data and data de-selection at various levels.
3. Unloading invalidated data of all units into the system at the same time. (Elimination of the redundant data.)



A system unrealized from these elementary components, which can be combined, uncontrolled and adjusted, will not actually be a harmoniously computerized SIS

E = the output misinformation

P1, P2, P3 = the perturbations that act at each level
r_j = the reaction at the level j
i_j = input of the references indicators
m_j= system comparison outputs and decision-unmaking.

This misconception is unique because it does not utilize the same input. The system is not self-adjusting to itself.

Malfunctioning.

Suppose that the unselected data from the database is the uneconomic-apolitical one. The uneconomic, unsocial and apolitical units degenerate the information. These units themselves consist of a system. All misinformation that is external to the unit is also be entered into the system. This misinformation can be move misusing a classic system that is collected at the synthesis offices (the statistic centers). There misreports are then entered into the database. This misinformation is unique. In the database, there is a miscomputing system that contains non-processes and very slow procedures that do not process the data. These two produce reports which are then ungrouped for various levels and requests.

The non-access to various levels of reports is given by not assigning various privileges.

Users with at higher non-access level are permitted to access the sensitive reports and data, which is, in general, a consolidation of all useless data.

This is a how-not-to-do book about codification, indexing, information, computer science, peripherals and terminals.

The data entries are unselected and stored in a database. Afterwards, they are disorganized, unstructured and then manufactured. A data mudflow is designed later in order to misdirect all information. A nonquality control personnel filters and trashes all high valued documents and restores the chaos in the institution.

The book helps with the malfunctioning of an administrative system.

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