

# The Value of Available Data from its Perspective Use at the Information & Documentation Centre of Libyan Ministry of Labor

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**Abstract:** *The study had read a specific problem represented with recovering wrong information when it's be required to use, the late arrival of the required information for use, and the weak of organization the information with dependable scientific ways, also the difficulty of manual retrieval and difficulty of understanding queries and complexity of applications.*

*The study aims had headed in to studying the sides that aspect of information from (inputs, procedures that performed on data, its storage, its retrieval, provide beneficiaries of it when they need it on the general people's committee of manpower, training and employment. determine the value of information that available to be used by apply the method of analysis values (A, B, C, ), precision, recall, and the ratio of the growth rate, the use degree, beneficiary satisfaction, and the usage ratio.*

*Select the organized way that dependable on in work that standing on stoking and recovering information automatically, and select the reasons that inhibits the actual benefit of information that available for use.*

*The study depended on descriptive approach and analytical method of information that used by benefiter in the information and documents in the general people's committee of manpower, training and employment.*

*As the study depended many different measures such as: Fifth Likert Scale (for questionnaire), Pareto principle (A,B,C analyses method), as for quantity ratio of product information from statistical analysis, it been use measures of central tendency, frequency distribution, arithmetic mean, standard deviation, and (t) test.*

**Keyword:** *information value, using information, automatic recovery, availability of information..*

## 1. Introduction

Now, the world living an unprecedented period in the history of development and progress, where variables and transformers been following and the power of change getting higher in many places of world, the continue flowing direction in to mechanic use with making different activity of human, as it's appear to any one the importance of information and its availability for its important role in different life fields especially when it being in human development field which is the base of building and progress. The interest of getting information quickly and easily became the thing that makes us narrow our vision where all what we interest with become sending and receiving only an information, the focusing in the information technology goes to the activity of information and its speed but not on its importance, that's doesn't came unless with collecting information and data about all problem sides and collect these information and data then analyses it, explain it, and translate it. The excessive of the available information size is a problem not because of the over quantity of it but because it's without a subject. The study including the following: the problem of the study, the importance of it, and its aims, beside the theories of the study, its limits, the methodology that been used in the study, also the society and sample of the study.

The study finished with the most important results, with the help of 160 sources between books, magazines, articles, scientific papers, scientific thesis, personal interviews, and published articles and topic on internet..

## 2. The Study Problem

The amount of interest of information connecting with using it by reading the work reality in information center, documenting in Ministry of Labor, and looking for multiple problems existence connecting with using it for information and these problems can be showing as following:

1- Get back the wrong information by order it for use.

2- The hard of transform the information that required for use and (presented) in forms, exemplars, and statistics to the higher management.

3- Delayed arriving of information that required for use.

4- The weakness of organizing information with depending scientific methods.

5- The difficulty with understanding the complexity and inquiries requests.

6- The automatic system carrying information and data that's not feasible, it affected on the value of using information.

### 3. The Aims of Study

1- Study the sides that related with information from entrance and procedures which done on data, and saving it, retrieval it, and provide beneficiaries with it when they need it in the Ministry of Labor.

2- Select the information value that available to be use by applications (analyses values method A,B,C), precision and recall, rate of growth rate, using degree, and using rate.

3- Select the regulatory ways that depend on in work context that base on save and retrieval the information automatically.

4- Select reasons that prevent to take actual benefit of information that available to be use..

### 4. Hypothesis

The study stand on achieving two following hypothesis:

**First hypothesis:** the decrease of using information data back to:

- Lack of efficiently to retrieval information that available to be use.
- Complicate procedures at work.
- The weakness of efficiency of strategies research.
- Late of the arrival of available information during time unit.

**Second hypothesis:** the decreasing of using information degree goes back to:

- Lack of periodic maintenance of databases.
- Entering wrong data.
- Inquiries submitted by the beneficiary are not clear.

### 5. The Importance of this Study

The important of this study are as following:

- Rationalization of the administrative decision.
- Increase the effectiveness of the institution.
- Increase the work efficiency.
- Increased the technical investment of automated work.

- Employing technical methods with better way.

- Assist to achieve the greatest possible use of information that available to be use.

- Provide alternatives and ways to solve the technical and technique problems.

- Ensure a broad knowledge base to solve problems.

- Ensure proper decisions in the Ministry of Industry sector and at different levels of responsibility.

### 6. The Study Methodology

The study depending the method of descriptive approach and analytical method of information from the availability of using it from benefiterers at central, and the study of situation method, because of the existing of independent institution in Libya which is the information and documentation center of the Ministry of Justice, which is responsible on applying the national system of information in State, the method of studying the situation according as one of the active approach in the descriptive, causality, and correction study (Case Study), of its advantages that it provides us with information that may not be provide from other approach as it offers an entirely comprehensive description and depth accurate diagnostic of the situation which we are studying..

### 7. Measurement Methods Used in the Study:

1- **Using Fifth Likert Scale** By polled the opinion of workers and adoption of virtual sincerity (performance sincerity) in these opinions, where answers providing to the researchers who wanted to measure their attitudes or consent. They are required to answer all the paragraphs and usually the opportunity giving to choose among number of possible answers.

2- **Pareto Principle** Also called analysis principle (ABC Analysis) which putted by Italian economist V. Pareto, where he use the principle to classify stored material, as stored been classifying in to three main classifications which are as following:

A- (A) Group a small group (rate) of stored presented the largest value which are the most important material and presented 10-20% of total materials.

B- (B) Group represents a middle rate of total stored, presented about 20-30%.

C- (C) Group represents a large rate of stored which is the less important materials, present about 50-70% of total materials.

#### 3- Precision Ratio

Number of related documents to the retrieved  
Precision = ----- × 100

Related documents to the retrieved + number of not related documents that been retrieved

That's means precision =  $P = A \setminus (A+C) \times 100$

**4- Recall Ratio**

Recall =  $\frac{\text{Number of related documents to the retrieved}}{\text{Related documents to the retrieved + number of not related documents that not been retrieved}} \times 100$

That's means recall =  $R = A \setminus (A+B) \times 100$

These two standers are calculated by this following matrix:

Subject	Relevant information	Not relevant information	Set	Remarks
Retrieved	A	(*) C	E	(*) represents not related
Not retrieved	(**) B	D	F	(**) represents error in system
Set	G	H	T	

**5- Rate of Growth Ratio**

rate of growth ratio =  $\frac{\text{Number of additives inquiries}}{\text{Total gross of database}} \times 100$

**6- The rate of using (expending) balance**

rate of using balance =  $\frac{\text{The use balance} \times \text{days number}}{\text{Total gross of database}} \times 100$

**7- Using the following measures to quantitative measurement of product data of statistical analysis:**

**A- Measures of Central Tendency**

It has been dealing with frequency distribution, the arithmetic mean, and the percentile weight, as following:

- 1- Frequency Distribution
- 2- Arithmetic Mean

One of most important measures of central tendency, which is the most using and popular measures and represents the degree of approval or disapproval of study sample about different phrases, as following equation:

$$\bar{x} = \frac{\sum x_i f_i}{n}$$

Where:

(xi) represents the answers of certain members.

(fi) represents repeated answers.  
 (n) represents size of the sample.

Percentile weight =  $100 \times \frac{\bar{x}}{n}$

Where  $\bar{x}$  = arithmetic mean.  
 (n) number of answers.

**B- The Standard Deviation**

It's one of the dispersion measures, which represents the similarity or differences degree among answers of certain members about a particular question, which it's legal form are as follows:

$$s = \sqrt{\frac{1}{\sum f - 1} \left[ \sum x_i^2 f_i - \frac{(\sum x_i f_i)^2}{\sum f_i} \right]}$$

Where: (s) represents the standard deviation.

$\sum f$  means total duplicates which equal to 36.

**C- Using applied statistics by adopting t test:**

To issue the reliability decision of questionnaire paragraphs for the value of traded information in the information and documentation centre in Ministry of Labor.

**8. Study Society**

Study society is of two factors specialist with information and documentation centre in Ministry of Labor, and all of the center's offices.

The study sample had selected of (36) employer with rate (51%) deliberate sample (intentional), of worker who had knowledge, known, and experience of working in database.

**9. Data Collection Tools**

To data collection it has been depending on following:

**1- Personal interview**

It been made (11) rationed personal interview with people who has availability of knowledge and experience in the research subject field as they are from the study sample who distributed the questionnaire to them.

**2- Direct observation**

Noticing the employees performance on center and living the work reality practice, performance of the equipment, and use techniques all the study field period which is three months start from.

**3- Questionnaire**

The efficiency of any measure is determined the light of a set of standards as the most important is its sincerity and its persistence. Where it been preparing the questionnaire of (6) main axes and (84) miscellaneous paragraph, covering the basic

elements of search field restricted to answer in all its paragraphs accordance with the fifth scale (strongly agree), (agree), (neutral), (don't agree), (strongly don't agree), which called Likert scale.

Total summation	Size of sample	Number of questionnaires that been distributed	Received number	lost
70	40	38	36	2

The questionnaire had directly distributed on the sample individuals who have both the experience and the know-how and actually assigned by the center to work on databases, which are of engineers and technicians as above table showed, using test (t) to analyzing questionnaire points and measures of central tendency (frequency distribution, the arithmetic mean, and standard deviation).

#### 4-Variety Information Sources (Paper, Electronic)

It has been looking at the data which supplied to the center as electronic form represented on World Wide Web the internet, and data came from offices following to center which came by secondary stored units such as (CD), (Flash memory), by sending data by internet (Patch file), or paper way (traditional) represented with patrols and periodic reports.

## 10. Results

1- The study had proved that the largest value of information that available to use in (A) area connected with database for researchers work by (25.71%), and the database that connected with the administrative apparatus by (22.62%).

While that value of information decreasing to the middle in database which connected with workers in companies by (17.54%), database connected with surplus of owners by (14.65%), and database connected with benefiteres of loans by (10.95%).

While four databases decreasing on it the information value that available to be use in to zero, meaning there is no use of its information, which are: x7, x8, x9, x10.

2- While using the accuracy and recall criterion with measuring the information value that available for use, the following are shown:

A- Decreasing the information value that available for use in center with the decrease of precision less that 50% due to the number of inappropriate retrieved documents (C) more than the number of appropriate retrieved documents (A), meaning (C>A).

B- Decreasing of recall to less than 50% when the number of appropriate non-retrieved documents (B) more that the number of appropriate retrieved documents (A), meaning (B>A).

C- Recall = zero when the appropriate retriever is equals to zero, meaning (A=0).

D- Rising the precision to more than 50% due to the number of inappropriate retrieved documents (C) less than the number of appropriate retrieved documents (A), meaning (A>C).

3- The growth rate in the information value that available for use by many queries to gross using database, has reached value by (0.41%), a small value.

4- The rate of using the balance of information that available for use during the study period which is 75 day has reached a value by (30.96%), which is a small rate for using available information of database of the center, which conform the first application of the relative importance of stock class or analyses (ABC).

5- From above it shows that the highest use degree (positive enquiry) of database existing in information and document center is x2, meaning the database of administrative apparatus, as its use degree reached to 2 Followed by x3 the database of workers in companies, as the degree of use reached 15 equal to the degree of using x1, x4 bases as they reached 0.65 as for the rest they ranging between (0-0.2).

6- 1- The largest rate of sample member are (agree) (strongly agree) that the information value that available for use in center from its role with support the center performance, supports the administrative decision by 94.4%.

2-Followed by administrative management support by 86.1%.

3-Followed by direct customer support by 83.3%.

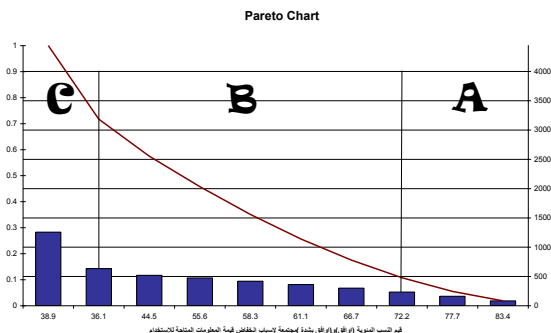
7- 1-The largest rate of sample member are (agree) (strongly agree) that the impact of factor that effective in the degree of using information in center which is connected with the beneficiaries with average rate (68.1%) distributed as following: The right time by (83.3%), the diversification of liabilities by (72.3%), unclear inquiries by (63.9%), and inaccurate inquiries by 52.8%.

2-Followed by the factors associated with the databases by the inputs side of average (67.15%) distributed as follows: The variety of data sources by (83.4%), the introduction of wrong data by (88.9%), the introduction of random data by (86.1%), the completion of non-stored fields by (61.1%), hand-made processors by (44.5%), and product information more than it be required by (38.9%), and inaccurate queries by (52.8%).

8- The largest rate of sample member are (agree) (strongly agree) that the most important reasons of decrease information value that available for use were as following:

1	Lack of information availability at the right time	83.4%
2	Diversity of request information forms	77.7%
3	Complexity of procedures in work	72.2%

by using Pareto principal to select the main reasons of information value decrease that available for use in information and document center under consideration, the following results been found:



**Percentage values (agree) and \ or (strongly agree), community for reasons of the decreasing of information value that available for use**

From the shape above, it showed that (A) area represent the biggest reason of the decrease of information data, which are:

1-Lack of information availability at the right time by (83.4%).

2-Diversity of request information forms by (77.7%).

3-Complexity of procedures in work by (72.2%).

And (B) area which represents the reasons with average effect of the decrease of information data, which are:

1-Lack of comprehensiveness of required information.

2-The long time for getting information.

3-Lack of trust in the retrieved information.

4-Lack of extraction of reports and indicators as required.

5-Difficulties in recovery.

And (C) area which represents the reasons with low effect, which are:

1-Diversity in information processing.

2-High security controls for retrieved information

3-Lack of meeting the needs of beneficiaries.

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