Review of Paper 1

The Article was written during the times of World War II where there was an increase in the number of scientific research and technology. During this time the technology for storing information was only textual and sometimes through the process of magnetic disks.

At this time, all the physicists worked in unity, leaving behind their professional competition to work together to produce innovative solutions to problems. The benefits of Science and Technology was an increase in the control of materials, environment, food, freedom from diseases and an improved lifespan. This was needed to be shared through the world. Science has faster means of effective communication between individuals. But these data need to be effectively communicated to the public as in the case of Mendel's Law, two centuries ago. It was lost in communication as it did not reach those who could understand it. This was also the problem in the current scenario of the author.

The bloom in research had led to huge increase in publications and human experience available and this was like going through a maze, as there exists too much of information that it is hard to identify the useful ones. The author also talks about storage methods and how current methods delay in storing of information and take up more space. The solution being the use of microfilms to reduce the space taken, also the method of reproducing the information and faster ways to store information like to use the Vocoder and Stenotype to record data as we talk. Thus, we can store data as well as work simultaneously. Another issue that the author talked about was on the speed at which the modern machines operated and that they should be fast as well as accurate and can perform advanced mathematics.

Thus, after covering the various methods to store and record data, the user moves to the topic of data/information retrieval where selecting the data from the plethora of information available is discussed. There were machines that performed selection at 1000s of data per second, yet these were not fast or accurate enough. The user then talks about how classifying the data would be useful. Like in the case of libraries, where classification and indexing are useful to retrieve a book. Associative indexing is another method where we link each data with other relevant data and this is useful to retrieve useful information even faster. This is explained through the example of a "memex". A device that is imagined to index records as microfilms and stores them. It also has a relative / associative index with the previous or next element and it is easy to browse through the pages at the press of certain keys or deflection of a lever. Thus, improving our methods of information storage and retrieval. Thus, we can increase our knowledge in an efficient and faster way.

My views**: -**. In the times when the primary method of record was a book, there may not be many copies or records of information that is available all over the world. Technologies developed in America may not be available or be known about in Europe. Thus, there was a need for methods in which data can be easily distributed to the masses. Another issue that was faced is the relevant retrieval of information. Once we can efficiently store and mass distribute data, we need to sort out the irrelevant and duplicate data from the relevant ones and we need a proper accessing system. The method of indexing discussed in this paper, that is classification of data and associative indexing is like the ones used today in websites. To go from one link to another that contains the data that we need. Thus, we can gather the relevant data that we require. We should also be able to frequently visit this data when needed and should be easily accessible.

Thus, a good Data Storage / Retrieval medium should be easy to store in an efficient manner, provide more relevant information and be easily accessible always and takes less time to produce the data.