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RESEARCH ARTICLE

INFORMATION OVERLOAD, WHY IT MATTERS AND HOW TO COMBAT IT

Samiah Jan Nasti¹, Ather Raina² and Mohammad Asger³

¹Department of Computer Sciences, BGSB University, Rajouri

²Department of Mathematics, BGSB University, Rajouri

³School of Mathematical and Computer Sciences, BGSB University, Rajouri

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Abstract

Information overload happens when the amount of information presented exceeds the user's ability to comprehend it. A user must be able to discriminate between valuable, redundant, incorrect, and meaningless material in order to deal with information overload. From a computer science standpoint, this implies providing users with a variety of techniques and tools for gathering, grouping, categorising, selecting, indexing, sorting, and filtering useful data. This research paper will highlight and explain Consequences and control of information overload problem in detail.

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I.Introduction:-

This is the Information Age, and information can be found just about anywhere. For example, we used to get our news via newspapers. However, technological advancements have provided us with additional possibilities, ranging from radio to broadcast television to 24-hour news channels on cable and satellite. On the Internet today, we may read any newspaper in the globe. We have access to an almost endless number of news sources. Also in the "old days," when someone called you at work they might leave a message if you were busy or unavailable. People used to avoid phoning one other for petty concerns, therefore they would only leave a message but now People may leave messages much more easily thanks to email. It's also lot easier for people to email each other about minor issues. Google yielded 7,310,000 results if you search for "information overload definition" (at the time of this writing). For the same inquiry, Bing returns 9,760,000 results. How are we going to analyse so much data, choose the most interesting information sources, summarise and synthesise the many aspects highlighted in the results, and respond to the questions we set out to ask? On the Internet, we are constantly bombarded with information.

In his 1964 book *The Managing of Organizations*, Bertram Gross, a political science professor at Hunter College, popularised the expression "information overload." However, the word was popularised by Alvin Toffler, an American writer and futurist, in his book *"Future Shock"* in 1970. Klaus North provides a clear definition of information, defining it as data paired with a meaning [1]. In other terms, information is data that may be interpreted. The semantics must be understood by the receiver in order to interpret the information. Otherwise, it's simply some information. This definition is more in line with everyday experience and popular knowledge. The online business dictionary defines information as a type of data having the following four properties [2]:

- It is accurate and it is received in time.
- It is organised to fulfil a purpose.
- It has a context, which allows the receiver to assess its meaning and relevance.
- It can help to improve the understanding and decrease the uncertainty.

Corresponding Author:- Samiah Jan Nasti

Address:- Department of Computer Science, Baba Ghulam Shah Badshah University.

This method emphasises the value of data in terms of the economy. The emphasis on achieving a goal, as well as the requirement that the information be received promptly, demonstrates a strong desire to put the information to good use. However, information is information in the general understanding, even if it arrives late. The value of information is the only variable that varies. However, it seems reasonable for an economic definition of the term to be defined in this way, because knowledge without value is useless in their eyes. If all of these definitions for the term "information" demonstrate anything, it is that information has many diverse features.

According to Alvin Toffler, the rate at which information appears for a person is more important than the steady flow of information [3]. Toffler formulated this in an attempt to depict the future in the 1970s, and it now appears to be more true than ever, especially with the establishment of the internet. Edmunds and Morris have now made another remark that supports this. They claim that "there can't be many people who haven't felt overwhelmed by information[...]"[4]. As a result, the majority of scientists appear to agree on the general concept of information overload: the sensation of having too much information to comprehend for one's cognitive capabilities [4,5]. Information overflow is a common synonym for information overload. Various studies reveal that they are used interchangeably and without distinction [6,7]. This is a paper on The following is a breakdown of the paper's structure. Section II examines the reasons of information overload in the twenty-first century, while Section III offers solutions to the problem.

II. Consequences of information overload

Thanks to the twenty-first century, we now have new tools and ways for creating and sharing knowledge with a global audience. Anyone with a computer and an Internet connection can easily spread their message to a global audience. As a result, a significant number of people from around the world can now create and contribute content in cyberspace. With the introduction of social media, this has grown into a global phenomenon, with hundreds of millions of people sharing information on a variety of social media platforms. In 2009, there were 800,000 petabytes of data (a petabyte is a million gigabit), according to IDC, a research group; by 2010, the digital world had increased to 1.2 million petabytes, or 1.2 zetabytes. According to IDC, by 2020, the digital universe will be 44 times as large as it was in 2009, or 35 zetabytes [8]. Electronic printers, scanners, fax machines, and copies alone produced nearly 6 trillion pages in 2009. The National Archives and Documents Administration (NARA) of the United States has averaged 475 million pages of records per year over the past 10 years. In November 2011, the institution reported a significant growth in the volume of electronic records and overall archive electronic holdings, which totaled 142 terabytes [9]. All of this puts a lot of pressure on librarians, information managers, information aggregators, and others who are striving to record, sort, categorise, classify, preserve, and retrieve data from a range of print and electronic sources.

For ordinary information consumers, information overload almost always has negative implications. They have to overcome a number of challenges in order to find the knowledge they need, which causes tiredness and anxiety. Several repercussions of the information explosion were recognised by Elson, including:

- i) Despite the availability of a huge amount of information, one appears to know less since the quantum of what is known is little in comparison to the amount of information available.
- (ii) Excessive information causes brain freeze or exhaustion. It's possible that the answer will be information avoidance. This may cause a user to lose or overlook important information.
- (iii) Information overload or explosion could lead to information addictions, in which the desire for more information leads to an overreliance on sources like the internet. Addiction has the consequence of lowering productivity, which can lead to spamming if companies limit the type of information that employees have access to using official equipment and facilities.
- (iv) Attention span is shorter.
- (v) Long-range thinking comes to a halt because almost all information required is readily available in enormous quantities and from a variety of sources.
- (vi) With an avalanche of information available, particularly uncensored material, there is a risk of information contamination, which could lead to erroneous decisions and significant errors.

Information overload is harming libraries and information centres, which are already struggling to serve an increasing number of readers on shrinking budgets, as they are forced to consult a large number of information materials every day in order to find the best materials, putting additional strain on their time and efforts. This material's classification and categorization is also a challenge. Many people consult librarians to determine whether

or not to use a particular piece of information or information source. Library personnel are finding it challenging to reply correctly to user enquiries due to the influx of material from a variety of sources.

III. Control of information overload

As the severity of information overload develops, individuals and organisations are looking for solutions to this complicated problem. Because they are the ones who have to face the brunt of the problem as information managers, libraries and information professionals are at the forefront of these activities. Every day, new information is added to the present body of knowledge, making it more difficult for individuals seeking information and information professionals to identify, access, and retrieve it. Many information workers are involved in time-consuming and inefficient jobs, according to IDC's breakthrough study on information professionals, which can spend up to 20 hours per week per person. These tasks include reformatting documents from multiple formats into a single document format, searching but not finding information, recreating content, publishing the same content to different audiences using different applications, moving documents from one format to another, and acquiring archived records with little or no automation [10]. This shows that by improving information workers' information management skills, they could perform more work in less time and better meet consumers' information needs. According to experts, information literacy is essential for both information users and information professionals to effectively deal with information overload. "A collection of talents that needs humans to detect when information is required and to be able to acquire, analyse, and apply that information effectively," according to the definition of information literacy. The primary mechanisms to combat information overload, according to Simpson and Prusak, are to ensure that the information given is of great value and that it is presented in the most convenient style and format [11]. Data visualisation, compression, and aggregation are all important, according to Meyer. [12] In many firms, information overload is caused by fundamental weaknesses in information processing. Information tends to pile up at various points and clog organisational processes when an organisation does not have an appropriate framework in place for processing the data and information it receives as part of its operating operations. As a result, every business needs a comprehensive information processing system, which is a component of its knowledge management infrastructure. To successfully cope with the information overload problem, authors such as Bawden [13] and Schneider [14] recommend standardising operational processes inside an organisation and fostering collaboration with information specialists within process teams. Citing, reusing, and linking of material are common information management approaches.

Conclusion:-

The preceding debate has shown that the problem of information overload is here to stay, and that the severity of the problem will only intensify in the coming decade as more focus is placed on research and development. Information overload will take on new shapes and dimensions for a worldwide audience with the arrival of new technology and different self-publishing options. To keep the negative effects of information overload to a minimum and to provide information seekers with effective and innovative solutions to the problem, a coordinated effort from library and information professionals, computer scientists, academics, and knowledge management specialists is required.

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