# Impacts of Information Overload on Decision-Making

# Group 10

Pennsylvania State University World Campus

IST 110 SPR 2024: Information, People, and Technology

**Doctor Sarah Stager** 

January 21, 2024

### Impacts of Information Overload on Decision-Making

Information Overload negatively impacts the decision-making of individuals and organizations. Advancements in technology have provided more information sources than ever for decision makers. Part of this assignment's instructions include using scholarly articles relevant to Information Overload and Decision Making. The results in the university's library have over 57,000 relevant articles. This abundance of options for an individual researcher can cause Information Overload and negatively impact the individual's research. When it comes to organizations, research was done on the company Intel which summarized their employees lost approximately 8 hours of productivity per week due to Information Overload, causing the company to lose approximately \$1 billion per year (Heinimann et al., 2020).

Kongar & Shrivastav (2021) explore the impact of information overload on decisionmaking in organizational settings, particularly in technology management. Rapid technological
advancements have led to various modes of communication, such as instant messaging, email,
and data from social networks, generating substantial amounts of data. Their study addresses
whether this increasing data results in information overload, hindering effective and efficient
decision-making processes. Their research investigates metrics organizations use to achieve
information processing efficiency and explores the measurement of unnecessary and redundant
communications. The literature review highlights that information overload has been studied
across different domains, emphasizing its negative effects on decision-making processes. The
study proposes research and questions a methodology combining quantitative and qualitative
analyses to understand factors contributing to information overload and its impact on decisionmaking. The article by Kongar & Shrivastav concludes with strategies for managing information
overload, emphasizing selective information processing, prioritization, gathering relevant

information, and planning related tasks together. The result of their study aims to provide insights into how organizations can optimize decision-making in the face of information overload.

Li et al. (2022) researched the effects of information overload within e-commerce and online shopping platforms concerning consumer purchasing decisions. Utilizing the Elaboration Likelihood Model (ELM) as a theoretical framework, the research modeled consumer behavior under the variables of attractive discounts on items and whether the seller utilized an e-commerce platform "Winport" to provide comprehensive summaries and overwhelm the shopper with information and content. The findings are compelling. Successful online stores strategically use discounts to attract shoppers, and during information overload under Winport, these discounts become even more persuasive. Surprisingly, the authors found this impact less pronounced among shoppers of higher intelligence. This research holds substantial practical implications, offering valuable insights to enhance the shopping experience and refine marketing strategies. Overall, it contributes to understanding how information overload shapes decision-making processes (Li et al., 2022).

### Conclusion

In summary, having too much information can really mess up how people and companies make decisions. With all the fancy technology, there are tons of articles about it—over 57,000 in one university library alone. For individuals, it can be overwhelming, making it hard to find what is important. Even big companies like Intel lose a lot of money and productivity because of this.

Looking at how organizations handle it, Kongar & Shrivastav (2021) show that dealing with all this data is tough. They suggest some ways to manage it, like picking out the important stuff and planning things better.

In simpler terms, even when you are shopping online, too much information can be a problem. Li et al. (2022) found that when online stores use too much info, it can make discounts more tempting for shoppers. But surprisingly, smart shoppers are less affected by this.

So, whether you are an individual or a big company, too much information can make decisions harder. We need better ways to handle all this info to make smarter choices.

#### References

Heinimann, H. R., Jan van Veen, D., & Kudesia, R. S. (2020). An agent-based model of collective decision-making: How information sharing strategies scale with information overload. *IEEE Transactions on Computational Social Systems*, vol. 7, no. 3, 751-767. https://doi.org/10.1109/TCSS.2020.2986161

Kongar, E., & Shrivastav, H. (2021). Information overload in organization: Impact on decision making and influencing strategies. *IEEE Technology & Engineering Management Conference - Europe (TEMSCON-EUR), Dubrovnik, Croatia, 2021, 1-*5. <a href="https://doi.org/10.1109/TEMSCON-EUR52034.2021.9488649">https://doi.org/10.1109/TEMSCON-EUR52034.2021.9488649</a>

https://ieeexplore-ieee-

org.ezaccess.libraries.psu.edu/stamp/stamp.jsp?tp=&arnumber=9488649&isnumber=9488567

Li, Z., Tian, X., Yuan, R., & Zhang, Y. (2022). How do consumers respond to promotion when information overload exists: An elaboration likelihood model perspective? (2022). *ICEBT '22: Proceedings of the 2022 6th International Conference on E-Education, E-Business and E-Technology,* essay,

Association for Computing Machinery. 91–96.