

<p>1. How does artificial intelligence influence human decision-making?</p>	<p>Artificial intelligence is omnipresent in today's world supporting human decisions or completely taking over the latter. For instance, in a private context, algorithms determine personalized news or social media feeds while in a professional context, AI assists with decision-making, e.g., when making medical diagnoses (Jussupow et al. 2021). Against this backdrop, the question rises how artificial intelligence influences human decision-making.</p> <p>In your seminar thesis, you are asked to provide a literature review that identifies the most common types of artificial intelligence and how they influence human decision-making.</p> <p>Good starting points for reading:</p> <p>Jussupow, E., Spohrer, K., Heinzl, A., and Gawlitza, J. 2021. "Augmenting Medical Diagnosis Decisions? An Investigation into Physicians' Decision-Making Process with Artificial Intelligence," <i>Information Systems Research</i> (32:3), pp. 713–735.</p>	<p>Jan Schilpp</p>
<p>2. How do humans make decisions?</p>	<p>Human decision-making is bound by restrictions such as limited time or information availability forcing individuals to frequently rely on heuristics. In the current age, increasing information availability or access to decision support systems such as artificial intelligence, strengthens this trend.</p> <p>Against this backdrop, you are asked to provide an interdisciplinary literature review that reveals how humans make decisions under different circumstances, e.g., complexity or time pressure.</p> <p>Good starting points for reading:</p> <p>Jussupow, E., Spohrer, K., Heinzl, A., and Gawlitza, J. 2021. "Augmenting Medical Diagnosis Decisions? An Investigation into Physicians' Decision-Making Process with Artificial Intelligence," <i>Information Systems Research</i> (32:3), pp. 713–735.</p>	<p>Jan Schilpp</p>
<p>3. Information systems research on artificial intelligence and data analytics</p>	<p><i>Note: For this topic, it is recommended that you have prior knowledge in extraction and analysis of quantitative data. Please make sure to have a look into Schmidt-Kraepelin et al. (2018) before applying for this topic.</i></p> <p>Artificial intelligence and data analytics are two of the most prominent topics in recent information systems research. With data being the foundation of data analytics as well as artificial intelligence and the latter often relying on analytics, the differences and similarities between the two topics are rather blurry. So, the question rises how information system research understands data analytics and artificial intelligence as well as how research on these topics evolves.</p> <p>In your seminar thesis, you are asked to provide a verbal explanation of as well as delineation between artificial intelligence and data analytics. Furthermore, this is to be complemented with a quantitative analysis of information systems research publications on the two topics. For the latter, Schmidt-Kraepelin et al. (2018) might serve as blueprint.</p>	<p>Jan Schilpp</p>

	<p>Good starting points for reading:</p> <p>Abbasi, A., Sarker, S., and Chiang, R. 2016. "Big Data Research in Information Systems: Toward an Inclusive Research Agenda," <i>Journal of the Association for Information Systems</i> (17:2), pp. 1–32.</p> <p>Jussupow, E., Spohrer, K., Heinzl, A., and Gawlitza, J. 2021. "Augmenting Medical Diagnosis Decisions? An Investigation into Physicians' Decision-Making Process with Artificial Intelligence," <i>Information Systems Research</i> (32:3), pp. 713–735.</p> <p>Schmidt-Kraepelin, M., Thiebes, S., Baumsteiger, D., and Sunyaev, A. 2018. "State of Play: A Citation Network Analysis of Healthcare Gamification Studies," in <i>ECIS 2018 Proceedings</i>, 173.</p>	
<p>4. Culture in Information Privacy</p>	<p>Online services such as Instagram, YouTube or even enterprise software are offered around the world. Usage of these services often is accompanied by user and professional concerns about privacy. Past research has found that culture plays a role in how users perceive and form these concerns, and how they react to them, e.g. in instant messaging (Lowry et al., 2011).</p> <p>In your seminar thesis, you should provide a review of the scientific literature on the role of culture in security and privacy.</p> <p>Lowry, P. B., Cao, J., & Everard, A. (2011). Privacy Concerns Versus Desire for Interpersonal Awareness in Driving the Use of Self-Disclosure Technologies: The Case of Instant Messaging in Two Cultures. <i>Journal of Management Information Systems</i>, 27(4), 163–200.</p>	Frederic Schlackl
<p>5. What determines people's privacy choices?</p>	<p>With mass data storage happening online and many web services being offered for "free" (i.e., in exchange for monetization of the user's data), privacy has become a major issue for web users, companies and regulators alike. How much people value their privacy depends on how offers are framed (Acquisti et al., 2013) and they navigate their choices in a complex, cascaded manner (Adjerid et al., 2019).</p> <p>In your seminar thesis, you should provide a review of the scientific literature on what determines people's privacy choices.</p> <p>Acquisti, A., John, L. K., & Loewenstein, G. (2013). What Is Privacy Worth? <i>The Journal of Legal Studies</i>, 42(2), 249–274. https://doi.org/10.1086/671754</p> <p>Adjerid, I., Acquisti, A., & Loewenstein, G. (2019). Choice Architecture, Framing, and Cascaded Privacy Choices. <i>Management Science</i>, 65(5), 1949–2243. https://doi.org/10.1287/mnsc.2018.3028</p>	Frederic Schlackl

6. Cross-country cyberattacks	<p>Since the Stuxnet and Shamoon attacks of 2010-2012, targeted cyberattacks performed across countries have become a common threat to enterprises. Large enterprises consider the danger posed by advanced persistent threats (APTs) in their risk assessments and attempt to take precautions.</p> <p>In your seminar thesis, you should provide a review of the scientific literature on cross-country cyberattacks.</p>	Frederic Schlackl
7. AI-generated text	<p>Advancements in artificial intelligence (AI), and in particular in deep learning, have enabled the production of human-like text, such as news articles. In this seminar, you will conduct a literature review on how humans perceive texts generated by AI.</p>	Dr. Florian Pethig
8. Open code	<p>Open science aims to make scientific research transparent and accessible. More and more journals demand that the source code to produce the results published in a paper is made publicly available. In this seminar, you will collect and analyse the source code that researchers use to produce their statistical findings and develop best practices on how this code should be presented to interested readers.</p>	Dr. Florian Pethig
9. Monetary incentives and user behavior	<p>Prior research has shown that monetary incentives can lead users on online platforms to contribute more (economic incentive) or less (crowding out). In this seminar, you will give an overview of the literature that studies how monetary incentives influence user behavior on online platforms.</p>	Dr. Florian Pethig