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Information Weaponization: Constructing a Multidisciplinary IS Research Framework

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As an alarming phenomenon, information weaponization (IW) embraces interdisciplinary meaning: IW originates from defense field with military signification that “[it] can enhance power projection by diminishing an adversary’s will and capacity to make war” (Whitehead, 1997, p. 43). IW is varied in its breadth of use, as artifacts “weaponized to optimize control and exploitation”, or for “overcoming “motoric, sensory, mnemonic, mental and intellectual limitations” to gain an edge (Lowstedt, 2021, pp. 771, 773) as vignettes by disinformation and misinformation deployments (NATO, 2022).

Business technology is increasingly employed for IW purposes. E.g., Deepfake shapes realistic non-existent events with altered media contents (Masood et al., 2022). Social media is maneuvered to proliferate deception, manipulating human to gain predominance (Davis et al., 2021). Artificial intelligence strengthens human capability by accelerating decision-making and enhancing situation awareness (Burton et al., 2019; Johnson, 2022). In addition, IW development demonstrates contrasting standpoints: in psychological strategies (Appel et al., 2022), in ethical viewpoints in human value and dignity (Kahn, 2022), or in fairness with respect to algorithmic decision-making (Giovanola et al., 2022).

With above connotations, nevertheless, there lacks IS research uncovering cross-disciplinary complexity of IW. That is, we aim to fill the gap with following objectives: What perspectives are presented in relevant research arenas, and how they help build a meaningful IW framework in IS research?

Research Plan, Expected Outcomes, and Contributions. To tackle forenamed goals, this research plans to examine literature in relevant fields including but not limit to public policy, military, or defense domains. With dimensions discovered above, an extensive analysis of major theoretical underpinnings will help depict the multidisciplinary of IW, thereby helping to define and scope meaningful IS themes for bringing out repercussions in practice. With IW realms and their interrelations delineated, it is expected to illustrate future implications in design science (Adomavicius et al., 2008) and innovation (Joshi et al., 2010) to fully unveil of value and significance of IW.

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