The Potential Impact of AI on Value Creation in Newspaper Publishing

Abstract

Digital transformation as a driver of change affecting all industries - although differing in scope and time scale - was addressed early for media industries in general (e.g., O'Reilly, 1996) and newspaper publishing in particular (e.g., Chyi & Sylvie, 1998). In the following decade positive expectations of additional "crossmedia" revenues by recipients gave way to real losses in classified advertising. The negative experiences with digital innovations found one culmination in academic reflection with Christensen, Skok, and Allworth's seminal essay on "disruptive innovation" (2012), triggering the question of the survival of traditional publishers and the sustainability of their traditional publishing business model, respectively (e.g. Kolo, 2016; Thurman et al. 2018). This heralded a new phase of digital transformation in newspaper publishing: venturing into both, new business areas and models also beyond editorial content (Kolo, 2019). Whereby Artificial Intelligence (AI) is seen as a key in future decision making (e.g. Newman, 2020).

AI shall be understood as an autonomous and adaptive system for solving real world problems (e.g. Russell & Norvig, 1995). For publishing its (potential) application ranges from content creation to customer relationship management (e.g. Stray, 2019; Ambrosio & Fidalgo, 2019; Newman, 2019; Libai, Bart, Gensler, et al. 2020). However, with publishers being rather reluctant to embrace these opportunities (Rothmann & Koch, 2014). In order to better understand how the potential of AI is seen today by junior professionals that are about to shape the industry we embarked on a study along the following overall research questions: (1) How can potential impacts of AI on publishers be appropriately structured? (2) What are the aspects of change driven by AI that are specific for publishers? (3) Are there differences in how this potential for change is perceived by different stakeholders in publishing?

In our proposed contribution to WMEMC, AI shall be differentiated in its diverse aspects as exhaustive and mutually exclusive as possible to accommodate industry practice (e.g. Bughin et al., 2018; Springwise, 2018; Ali et al., 2019) and academic perspectives (e.g. Russel & Norvig, 2016; Plastino & Purdy, 2018; Chan-Olmsted, 2019). Based on this systematics, 41 possible application scenarios for the future of publishing were derived. These application scenarios were formulated as hypotheses for a survey, that was distributed among students of journalism and media management, as well as young journalists with overall 99 participants who completed the questionnaire.

Although only 25% had already dealt with AI in a practice, most application scenarios were seen until "around 2025". However, there were striking differences between the more progressive media management and the journalism students as well as the latter and the already practicing journalists. Most substantial were the different expectations with respect to content creation. Overall, the results shed light on the expected dynamics of AI driven innovation in publishing across the value chain and over time. Divergent views by different stakeholder groups indicate potential lines of conflict that impede the diffusion of AI in publishing or emphasize indeed critical aspects of AI applications and in any case require management attention.