## Objects, Metrics and Practices: An Inquiry into the Programmatic Advertising Ecosystem

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**Abstract.** Programmatic advertising is a large scale, real-time bidding process, whereby ads are automatically assigned to available spaces across types of media and geographic regions upon an individual user's browser request. The large-scale automation of programmatic advertising requires the establishment of standards and the development of technologies to govern the behavior of market participants (sellers, buyers, intermediaries). We present evidence on the rules of programmatic exchange and on the role played by a specific class of digital objects, focusing in particular on the metrics to which they are linked and how they define both the objects exchanged and the parameters of these exchanges. We furthermore demonstrate that the metrics and the technological complexes associated with them are constituted by the institutional field of digital advertising and its complex technological infrastructure. Rather than being simply means to monitor a pre-existing reality 'out there' (such as user or audience behavior) these metrics and techniques bring forward their own reality and heavily impact upon and shape the objects and processes of digital advertising.

Keywords: Automation, Digital Advertising, Performativity, Digital Objects, Information Infrastructures.