THE TECHNOLOGIZATION OF INSURANCE: AN EMPIRICAL ANALYSIS OF BIG DATA AND ARTIFICIAL INTELLIGENCE'S IMPACT ON CYBERSECURITY AND PRIVACY

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ABSTRACT

This Article engages one of the biggest issues debated among privacy and technology scholars by offering an empirical examination of how big data and emerging technologies influence society. Although scholars explore the ways that code, technology, and information regulate society, existing research primarily focuses on the theoretical and normative challenges of big data and emerging

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technologies. To our knowledge, there has been very little empirical analysis of precisely how big data and technology influence society. This is not due to a lack of interest but rather a lack of disclosure by data providers and corporations that collect and use these technologies. Specifically, we focus on one of the biggest problems for businesses and individuals in society: cybersecurity risks and data breach events. Due to the lack of stringent legal regulations and preparation by organizations, insurance companies are stepping in and offering not only cyber insurance but also risk management services aimed at trying to improve organizations' cybersecurity profile and reduce their risk. Drawing from sixty interviews of the cyber insurance field, a quantitative analysis of a "big data" set we obtained from a data provider, and observations at cyber insurance conferences, we explore the effects of what we refer to as the "technologization of insurance," the process whereby technology influences and shapes the delivery of insurance. Our study makes two primary findings. First, we show how big data, artificial intelligence, and emerging technologies are transforming the way insurers underwrite, price insurance, and engage in risk management. Second, we show how the impact of these technological interventions is largely symbolic. Insurtech innovations are ineffective at enhancing organizations' cybersecurity, promoting the role of insurers as regulators, and helping insurers manage uncertainty. We conclude by offering recommendations on how society can help technology to assure algorithmic justice and greater security of consumer information as opposed to greater efficiency and profit.