Chapter 6

A Behavioral Economics Approach to Digitalization: The Case of a Principles-Based Taxonomy

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ABSTRACT

Technological improvement in the age of information has increased the possibilities to control the innocent social media users or penalize private investors and reap the benefits of their existence in hidden persuasion and discrimination. This chapter takes as a case the transparency technology XBRL (eXtensible Business Reporting Language), which should make data more accessible as well as usable for private investors. Considering theoretical literature and field research, a representation issue for principles-based accounting taxonomies exists, which intelligent machines applying artificial intelligence (AI) nudge to facilitate decision usefulness. This chapter conceptualizes ethical questions arising from the taxonomy engineering based on machine learning systems and advocates for a democratization of information, education, and transparency about nudges and coding rules.

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INTRODUCTION

Contemporary theories and studies of economics have turned behavioral. Behavioral Economics revolutionized mainstream neo-classical economics in the past two decades. Since then two Nobel Prizes in Economics have crowned this growing field as a wide range of psychological, economic and sociological laboratory and field experiments proved human beings deviating from rational choices and standard neo-classical profit maximization axioms often failed to explain how human actually behave (Kahneman & Thaler, 1991). Human beings rather use heuristics in their day-to-day decision making. These mental short cuts enable to cope with a complex world yet also often leave individuals biased and falling astray to decision making failures (Kahneman & Tversky, 1974, 1979, 2000). Research in Political Science about voting decision from people shows that they are strongly influenced by rather unreflective first impressions and those decisions are not the outcome of rational reflection and deliberation (Todorov 2005).

Behavioral Economics identifies anomalies and shortfalls in neo-classical economics (Simon, 1957, 1979, 1983). Ample evidence showed that human beings disregard rational choices standard neo-classical profit maximization axioms would predict but rather use heuristics in their everyday decision making (Puaschunder 2018b). Due to mental deficiencies, humans are unable to cope with a complex world and fall prey to complexity. Contrary to standard neo-classical assumptions, individuals try to reduce complexity, whenever it is possible (Simon & Bartels, 1986). Reducing complexity also implies decreasing cognitive drain on our limited mental resources. For many day-to-day problems, humans developed certain heuristics, which represent mental shortcuts or rule of thumbs, which are very successfully applied (Gigerenzer 1999).

Behavioral Economics revolutionized decision making theory. Laboratory experiments have captured heuristics as mental short-cuts easing choices of mentally constrained human in a complex world. At the same time, heuristics were examined as a source of downfalls on rational and socially-wise choices given future uncertainty. Behavioral economists have recently started to nudge – and most recently wink – people into favorable decision outcomes, offering promising avenues to steer social responsibility in public affairs.

What followed was the powerful extension of behavioral insights for public policy making, international development and decision usefulness. Behavioral economists proposed to nudge and wink citizens to make better
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