

Value considerations, ethical dilemmas, and resolving methods in automated financial advice

“Technology will only deliver its full potential if ethical challenges are resolved”

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Financial advice helps consumers to make complex financial decisions. Traditionally, financial advisers have been the main source of this advice. Automated financial advice is an emerging and fast-growing technology that could change how financial advice is provided. However, that would require the resolution of various ethical issues that are associated with this complex technology. With semi-structured interviews with nine experts on automated financial advice, we investigated to what extent automated financial advice can create value for consumers and the financial advice industry, identified the key ethical issues involved with the technology and explored potential methods for resolving these.

Principal Findings

- Automated financial advice can provide value by improving consumer accessibility to advice, reducing costs for the industry, and by increasing the objectivity of the advice provided.
- Complex automated financial advice increases the development costs of the required algorithms, which limits the accessibility of the advice provided.
- We identified five relevant ethical issues for automated financial advice: human autonomy, prevention of harm, fairness, explicability and trust.
- Methods to address these issues include balancing economic and ethical incentives, legislation tailored to automated financial advice, changes in organisational governance, and improved algorithmic capabilities.

Ethical principle	Summary of findings
Autonomy	<ul style="list-style-type: none"> – Automated financial advice must ensure that choices are made independently, or at least voluntarily. Nudging should be avoided. – If consumers evaluate themselves as being smarter than a machine, they may be reluctant to accept algorithmic advice. – Supplementary tools, such as including a feasibility percentage of reaching a financial goal, can give consumers more control over the decision-making process and maintaining their autonomy. – Algorithmic autonomy is not an issue yet, as AFA can only consider specific variables and is not able to provide holistic financial advice yet. Hybrid advice is currently the only feasible option that can come close to matching the quality of traditional financial advice.
Explicability	<ul style="list-style-type: none"> – A transparent algorithm should provide explanations of the how and why of decisions, and it should provide insight into how data are used and for what purpose. – Companies that provide automated financial advice have a duty of care towards consumers. Providing honest advice and making consumers aware of their choices and the consequences is key. Improving legislative frameworks, so that they take into account the increasingly complex nature of algorithms, is necessary to prevent something going wrong.
Fairness	<ul style="list-style-type: none"> – Bias in an algorithm should be mitigated. A dataset should be carefully curated before being processed by an algorithm. Personal data should be anonymized to prevent an algorithm from favoring particular groups. – GDPR compliance is essential but not enough. Privacy rules and regulations tailored to AFA are lacking. Organizations should go beyond what is legally required.
Prevent harm	<ul style="list-style-type: none"> – Preventing (un)intended harm considers aspects from multiple other ethical issues. Rules and regulations are required to address intentional misbehavior and good-natured accidents.
Trust	<ul style="list-style-type: none"> – Many factors can influence trust in AFA. For example, the provider of the advice, being able to ask questions, reviews, and individual factors such as tech saviness and financial knowledge.

Table 4: Summary of findings regarding the ethical considerations of automated financial advice (AFA)

Key Takeaways for the Industry

- Ethical guidelines and principles for automated financial advice should be codified into rules and regulations.
- Providers of automated financial advice should adopt a proactive approach that enables them to anticipate changes in ethical norms and values and guide their decisions with a vision for the future.



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