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EXPLORING DISHONEST VULNERABILITY IN DIGITAL FINANCE PLATFORMS — AN ACTOR–NETWORK THEORY APPROACH

HENRI TEITTINEN, MARKKU KAPERI

Abstract:

In this study, we explore and conceptualize dishonest vulnerabilities related to digital finance platforms. We use the actor–network theory approach to illustrate the interaction of human (people) and nonhuman (technology) actors. In particular, we focus on digital finance platform abuse and fraud. Our empirical data are based on criminal reports of vehicle financing. We identify the main actors; actor-worlds; roles of the actors; their interests; and the obligatory passage points in destabilizing the durability of a digital finance platform. Our findings particularly highlight the dual roles of the perpetrator, dealer, and product in dishonest vulnerability on digital finance platforms. Prior literature has not focused on approaches to the dishonest vulnerability of technology for human and nonhuman actors. We have used a critical approach, actor-network theory, to explore digital finance and digital finance platforms. Our findings suggest, that in the development of digital financial platforms, both in technology and in business processes, more attention should be paid to the dual roles of actors to avoid dishonest vulnerabilities.

Keywords:

digitalization, finance, digital finance platform, actor–network theory

JEL Classification: M15, O33

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Introduction

The finance sector has long been a pioneer in digitalization (cf. Sia *et al.*, 2016; Pousttchi and Dehnert, 2018), and here, online banking and brokerage services have been developed for decades (cf. Claessens *et al*., 2002; Valverde and Fernandez, 2020).

The digitalization of finance is a global issue because different technology platforms enable business around the world. As Pousttchi and Dehnert (2018) suggest, these technologies are more than just new distribution channels; they are a completely new way of providing financial services and products over the internet without labor and at a very low cost.

Digital finance refers to financial services delivered via information networks that utilize various digital finance platforms (cf. Gabor and Brooks, 2017; Ozili, 2018). The virtual use of digital finance platforms eliminates the need for borrowers to physically visit the bank, for example, to sign loan applications.

Digital solutions lead to efficiency and have been developed to drive forward and speed up processes while making them more cost-effective (Vermeulen, 2004; Martin-Pena *et al*., 2018; Bouwman *et al*., 2018). Digitalization has changed the structures, processes, and practices of companies, and this will continue in the future (cf. Niemand *et al*., 2021; Auger *et al*., 2003; Martin-Pena *et al*., 2018; Bouwman *et al*., 2018).

However, digitalization is not without its problems. Digitalization not only promotes the development of processes, but also can lead to some negative effects (Weill and Woerner, 2015; Thrassou *et al*., 2020). The development of digitalization can be consciously hindered, so the development of technology must also recognize these attempts as abuse. The vulnerability of technology can be classified, for example, according to the technology used, the extent of the vulnerability, or the form of the vulnerability (cf. Martin 1996).

The literature acknowledges different kinds of risks and vulnerabilities in digital finance platforms and business models (cf. Dandapani, 2017; Shukla and Shukla, 2011). Often, these are related to technological risks, such as security and privacy, data theft, theft of credit and debit cards, uneven quality of services, and other technological risks. In addition to these, there also exist opportunities for the misuse of these digital finance platforms, such as difficulties to ensure that the persons entering their personal data exist or that the information they provide is accurate. In the current study, we define this as dishonest vulnerability. These problems are related to the behavioral misuse of digital platforms (cf. Ozili, 2020).

The development of technology is most often the interaction between human (people) and nonhuman (technology) actors. Although previous studies on technological innovations largely highlight the success of technologies, dishonest vulnerability occurs in the same operating environment among the same actors where the technology is being developed. However, the literature has not focused on approaches to the dishonest vulnerability of technology for human and nonhuman actors.

Approaches for exploring vulnerability are typically related to risk assessments, particularly to those methods used to identify and avoid risks (cf. Anton *et al*., 2003; Patel *et al*., 2008; Martin, 1996). In the current study, we approach this phenomenon using actor–network theory. Particularly, we explore how human and nonhuman actors are intertwined in a dishonest vulnerability in digital finance platforms. We present our findings through vehicle financing fraud, and our results especially highlight the dual role of actors.

The structure of our paper is as follows: In this section, we have presented the research topic. Section two presents the key concepts and aspects of actor–network theory, especially those that relate to the context of the present study. In addition, section two reviews previous studies in the finance sector conducted in accordance with actor–network theory. In sections three and four, we present the research material and key findings. Finally, in section five, we present conclusions, contributions, and suggestions for future research.

Actor–network theory

Actor–network theory describes how and where technology influences human behavior. In this way, nonhuman elements that also are key actors in this process can be identified and considered.

The general premise of technological innovations, such as the study of information systems, is to study systems as independent technical objects detached from the social context in which the system is ultimately built. An earlier perspective indicates that change is brought about by technology rather than the social environment (Grint and Woolgar, 1997). Another related aspect is social contextuality, which suggests that the social environment, activities, and interactions, here coupled with the technological environment, can be used to explain technological change (Law and Callon, 1988).

Brey (1997) argues that rather than becoming acquainted with the internal logic of technology, technological change should be viewed through the disagreements, disputes, and difficulties experienced by actors. Brey believes that change must be explained by interpretating different groups through controversy and disagreement. Indeed, he sees technological change as a form of social constructionism on three different levels: strong social constructionism, weak social constructionism, and actor–network theory.

Actor–network theory seeks to objectively examine all actors, both human and nonhuman, making no distinction in its approach to sociality, nature, or technology. Actor–network theory focuses on examining the mechanism of power as manifested in the interaction between human and nonhuman networks (Callon, 1986; Law, 1992). Here, actor–network theory focuses on facing the changes between these networks that occur among people, machines, organizations, agents, and other actors (Law, 1991). Actor–network theory looks at the way a network of different relationships is built, how they expand and become visible, how they are formed and remain, how they struggle with other networks, and how they become more durable over time. This relates to those actors who attract others to their own actor-world (Latour 1996).

Actor–network theory has been used to study the success of technological innovations (cf. Latour 1987, 1991, 1996). The starting point is to describe and explain the development of innovation from the perspectives of different users. According to Rogers (1995), the diffusion of innovation refers to the idea of reaching a new user or group of users. Callon (1987) argues that networks become stronger by assembling a set of actors, giving them greater opportunities in being part of the network. Activity refers to the related entities that have been successfully translated or attracted by an actor who has the ability to speak or act on behalf of or with the support of those attracted (Callon et al., 1986). The network will become more durable as the ties that hold it together become stronger.

According to actor–network theory, the digital finance platform can be seen as a black box, and the durability of networks is tested by vehicle financing fraud. We associate fraud with trying to

break the durability of the connections in the actors-worlds. According to actor–network theory, this dangerous behavior should be rendered harmless or, better yet, put in a position where that alternative is not even thought of. Therefore, it is important to identify fraudulent actors in actor-worlds so that the technology can be developed for the purpose for which it was designed.

Actor–network theory has also been used in previous studies of financial platforms. Shim and Shin (2016) examine the development of financial platforms in China; they use actor–network theory to show how different actors can be involved in the development and proliferation of financial platforms and how things are problematized for actors trying to get involved and develop technology.

Using actor–network theory, Behi et al. (2020) have examined the development of crowdfunding platforms; they identify the key actors (both primary and secondary actors) and their roles in the financial platform development process. In addition, actor–network theory also helps define nonhuman actors, such as the role of legislation and funding.

Lee et al. (2015) examine the development of Korean mobile banks, using actor–network theory to analyze three different networks and illustrating the role of both human and nonhuman actors in the development process of mobile banking. Oh and Lee (2005) use actor–network theory to analyze how alliances between banks and other network members are formed and the role of technology in this cooperation. Oh and Lee argue that actor–network theory helps in analyzing how actors form alliances and how other actors, including nonhuman actors (i.e., technology), define and safeguard their own interests, along with how those interests relate to one and the same goal.

Waniak-Michalak and Michalak (2019) examine the development of the financial system in Poland by using actor–network theory; the study points out that actors have different goals that can either contribute to or hinder the achievement of the goal. Actor–network theory is used when looking at the development of this network, for example, by highlighting the problems that need to be addressed to reach the goal.

Research approach

According to actor–network theory, we are interested in the actors, the ways of the action, and the events that contribute to the strengthening or weakening of the ties in the actor-worlds. In the current study, we focus on one part of this actor-world: the means by which the actor–world of digital finance platform ties are broken. We do not follow actors (in real time), but through the written material, we present how these actors have been working.

This study is a continuum to Kaperi's (2021) study on vehicle financing frauds in Finland (presenting criminal reports registered in 2015–2019 in the Police Information System in Finland, here totaling 459 cases related to vehicle financial fraud). The criminal reports typically describe, among other things, what has happened, how the act has taken place, and who has committed the act.

Our research analysis includes five steps. After collecting the data, the material was read several times, and an overall understanding was first developed (1), which was then followed by more detailed analysis of types of frauds (2). Next, we identified the actor-world of digital vehicle financing (3), including the actors—the digital finance platform; the perpetrator; the applicant for funding; the product and its finance; the financial intermediary; and the seller of the commodity product. When exploring the actors, our focus was also on how they operate with other actors and

how the destabilizing of the black box progressed (4). Finally, we summarize how human and nonhuman actors are intertwined in a dishonest vulnerability in digital finance platforms (5). These findings are presented in the following sections.

The actor-world of digital vehicle financing

Vehicle financing can be considered a pioneer in the use of digital finance platforms. It is very common to pay for a car in installments, here by receiving financing from a finance company. The application for financing a vehicle is usually made electronically and is usually prepared by the seller of the vehicle at a car dealership (in Finland). We can identify three main actor-worlds in vehicle financing: 1) actor-world of the buyer (the buyer of the vehicle and payer of the financing); 2) actor-world of the seller (a vehicle seller who sells a vehicle to a customer and also acts as a link between the vehicle buyer and finance company and who often fills in the customer information in the financing application for digital finance services); and 3) the actor-world of the paying finance company (i.e. a lender, which finances a vehicle and pays the amount of the vehicle to the seller of the vehicle).

The vehicle to be financed acts as security for the debt. With this arrangement, the owner of the vehicle, that is, the finance company, often has very precise rules on how to deal with the vehicle being financed. Only when the customer has paid all the payments under the installment agreement will the ownership of the vehicle be transferred to the customer.

When this form of financing is used, the seller will ask the customer for the information required in the financing application, which includes, for example, information that reflects the financial condition of the customer. This information, which is necessary in the application for funding and describes the financial situation, includes, for example, occupation, type of housing, gross monthly income, employer, and form of employment. After receiving the necessary information from the customer, the seller usually fills in the online application and sends it to the lender (i.e., the finance company). Different car dealerships use the services of different finance companies. In digital finance, the customer is usually not personally (physically) in contact with the finance company at any stage of this process.

If the customer has no default entries and the financing applied for the vehicle is proportional to the age and price of the vehicle, the finance company will usually make a positive credit decision, which can come as fast as in a few minutes. When using this kind of financing, the finance company becomes the owner of the vehicle, but the customer gets the vehicle immediately. In this process, the seller of a product acts as an agent for the finance company or several finance companies, providing financing as if part of the product sales process.

As a rule, finance companies are already being misled when the financing is being applied for. The person whose name the funding comes from will often provide incorrect information on the application for funding, which here is generally the information that reflects the financial condition of the applicant for funding. Finance companies are given false information because doing so is intended to ensure a positive credit decision. Because the financial company makes a decision to grant credit based on the information provided—and assuming that the information provided is correct—this is a misrepresentation that fulfills the characteristics of a fraudulent offense.

The actor-world of digital vehicle financing operates as described above. Digital vehicle financing is achieved through social interactions and through different actors. The independent

technological financial platform does nothing and has no role to play alone. There is a need for interaction between these human and nonhuman actors in this process.

The actor-world is as strong as its weakest link. In the actor-worlds, the durability of various ties is tested. Unfortunately, very little attention has been paid to abuse and fraud in examining this technological and human interaction. However, abuse and fraud are those measures that seek to destabilize the actor-world of digital finance platforms. In addition, fraud especially demonstrates the dishonest vulnerability of this actor-world. In the following, we present our findings on the dishonest vulnerability of digital financing platforms, highlighting the roles of the perpetrator, financial intermediary, and product.

The role of the applicant in funding (the role of the perpetrator)

In vehicle financing fraud, an applicant provides false financial information on an application for funding. This is because the applicant's (perpetrator) financial situation is weak. False information in funding applications typically includes incorrect income information; false information about the employer or employment relationship; wrong phone number; or false personal information (also as a dummy).

Here, the applicant uses a digital finance platform to commit fraud. The role of the applicant is not to support the primary goal of developing a digital finance platform into a larger business model but to take advantage of the weaknesses presented.

In many fraud cases (61% of the cases), the vehicle is registered in the name of a dummy (or dummy company). This dummy procedure means that the financing and vehicle are placed in the name of someone other than the person who actually controls and uses the vehicle. The use of a dummy procedure is very common when a person has defaulted debts and debt from foreclosure, in which case they could not obtain funding themselves. The dummy procedure also seeks to prevent various official actions from being performed, including police inspections.

We also find that vehicles were acquired in the name of the same person acting as a dummy. Funding for these vehicles is obtained from various finance companies. Thus, the same dummy abuses several digital finance platforms to obtain vehicle financing, with which the vehicle is actually acquired by someone other than the dummy. This finding highlights the key role of dummies in the misuse of digital finance platforms. The dummies were in 81% of the cases, Finnish citizens.

According to actor–network theory, this reveals a network that is entangled in a dummy. When the applicant for vehicle financing is a dummy, the network also includes the so-called principal, that is, the person to whom the vehicle is actually transferred. Thus, it is a network of actors in the world of vehicle financing that requires a strong link between the two actors (the perpetrator and dummy). This tie must be so strong that the dummy acts as an applicant for funding on behalf of the perpetrator but exposes themself to the crime.

We also find there is attention given to the significant proportion of foreigners in relation to the location of the digital finance platform. In this case, the financial platforms are located in Finland and used by both Finnish and non-Finnish citizens. In the case of non-nationals (27% of all vehicle financing fraud cases), it is difficult to ascertain the background and historical information of the operator. These findings relate to the applicant, particularly to how the applicant exploits actor-worlds that do not recognize them well enough.

We also find ambiguities in the payment of installments. Our observation suggests that one way to try to hide criminal activity (and the activity of two completely different actor-worlds) is that installments may be intentionally paid regularly at first without the financial company not immediately noticing fraud. Finance companies often suspect fraud only when several installments of a vehicle remain unpaid. In 72% of cases, installments were left unpaid, or only the first installments were paid, after which they were left unpaid.

Here, our aim has been to illustrate how perpetrators work. The above findings apply to both the applicant and dummies. Our findings show that the tie with technology is strong, but in reality, behind the seemingly strong tie is the purpose of abuse. Particularly, our findings highlight the dual role of the actor, who, on the one hand, looks like an honest buyer of a vehicle but, on the other hand, is a dishonest criminal. Next, we illustrate the role of the financial intermediary and product in the dishonest vulnerability of the digital financial platform.

The role of the seller of the product (the role of the financial intermediary)

Vehicle dealers have their own actor-worlds. They have their own goal—to sell as many vehicles as possible and with good margins—and they use a variety of means to achieve this goal. One way is to provide easy and fast financing for any vehicle. According to actor–network theory, the world of sellers is connected to attracting the customer and arousing interest, and this is where the digital finance platform can be used.

Vehicles subject to financial fraud are not generally sourced from large and well-known car dealerships, such as dealerships, or from car dealerships belonging to national chains but are mainly sourced from smaller and lesser-known car dealerships. Vehicles acquired through financial fraud are procured, even from year to year, from the same car dealerships and even using the same car dealers.

The fact that the same car dealers and even the same sellers are involved in these cases of financial fraud from year to year is remarkable. Certain car dealers seem to carry out conscious activities and are in some way involved in these cases of fraud.

We can say that the sellers involved in fraud always are connected to a similar process, a network of perpetrators, and operate in the same way (they sell used vehicles, they do not take down payments, and they use the financial platform to apply for financing). In other words, the tie with the financial platform is always strong, and the digital finance platform is utilized with both honest and fraudulent customers. The tie with customers is formed through the profit margin available on the product being sold.

The role of the seller is emphasized between the two actor-worlds. It is the seller’s job to prepare and fill in the financial application for honest customers, but the seller may knowingly act as the applicant’s accomplice. According to actor–network theory, the financial intermediary and digital finance platform act as passage points into the perpetrator’s actor-world.

The role of product and product overpricing

The targets of financial fraud are mainly used vehicles. Most (92%) of the vehicles were used cars. This may be because they are sold by several different dealerships, while new vehicles are

sold by a few well-known dealerships. Most of the vehicles obtained through financial fraud are reputable and high-quality car brands such as Audi, BMW, and Mercedes.

We also find that it is typical to overprice the vehicle for the funding application. Overpricing means that the price of the vehicle may have been marked in the application for the funding to be significantly higher than the actual selling price of the vehicle. An examination of this type of case reveals that the vehicles to be financed may be overpriced, especially by small car dealerships, allowing them to sell vehicles that are difficult to get rid of, even vehicles in poor condition, at high prices.

Overpricing has also been used when the customer has not paid the down payment (4% of all vehicle financing fraud cases). Indeed, finance companies are very often misled by marking the application for financing as a down payment for a vehicle, even though it has not actually been paid. At that time, financing is applied for a larger amount, and the sale price of the car is stated to be slightly higher than the down payment. Thus, the financing covers the entire price of the vehicle. In such cases, the seller of the vehicle is involved in this misrepresentation. It is possible that at least some car dealerships are operating knowingly; at the very least, it should have been known that the purchaser of the vehicle is acting in a fraudulent manner.

According to actor–network theory, in the field of vehicle financing fraud, the actor-worlds of the seller and applicant can approach each other when fraudulent findings about the overpricing of a product and possibly down payment as part of the price are combined. In any case, the price is always agreed upon in the trade between the buyer and seller (between the actor-worlds of the seller and buyer).

According to actor–network theory, the product can be interpreted as a passage point used for the economic benefits of fraud. Perpetrators need to buy a product so that they can make a profit from it, and for the seller of the product, the product with a high profit margin works as a passage point.

Summary of findings

The purpose of the current study was to explore how human and nonhuman actors are intertwined in dishonest vulnerability in digital finance platforms. Using actor–network theory, we have illustrated the dishonest vulnerability of the digital finance platform as a whole, which is made up of human and nonhuman actors: the actor-worlds; the roles of actors; the ties between the actors; the points of interest; the passage points; and the progress of events (process for destabilizing the black box). The findings are based on vehicle financing fraud.

The perpetrator seeks to exploit other actor-worlds. The product and seller of the product (and at the same time, the financial intermediary) act as passage points. The seller is tempted to sell (to attract the buyer), and the buyer has an interest in buying (and to entice the seller to act as part of the fraudulent activity). In a fraudulent sense, this means that the seller assists in the execution of the fraud (does not receive a down payment and records incorrect information in the financing application).

We have illustrated that attempts are being made to break the ties around the actor-world of the digital finance platform. The actor-world of digital finance platforms seeks to attract actors, but it also attracts perpetrators who are trying to break the ties of the actor-world on these digital finance platforms.

Indeed, according to actor–network theory, actors seem to appear to play dual roles: on the one hand as good and honest buyers and applicants for funding and, on the other hand, as bad and dishonest perpetrators of fraud. The dual role of actors exists in different forms: 1) the buyer may be a buyer as usual but also a criminal or the buyer may be a dummy and a cover for the criminal buyer; 2) the seller may be an honest seller and reliable partner for the finance company (not aware of the dishonest activity) or the seller may be dishonest and an accomplice; 3) the product is both a commercial commodity but also a mandatory passage point and instrument of crime (to obtain financing); and 4) for the finance companies, the financial platform works for promoting the digital business model, but the same platform works for perpetrators to carry out criminal activities.

In many cases, the dual role is also related to hiding fraud, in which case the honest side is presented, but this may also include a fraudulent side. Prestigious and expensive car brands illustrate this well. These cars are very attractive for any customer, but they can also be used as the targets for fraud. On the one hand, this can enable honest business, but it might also include concealing abuses.

We also have found that the same actors, the same practices, the possibility of hiding behind an honest role, and the underdevelopment of technology are associated with the dishonest vulnerability of digital financial platforms.

In addition, the information provided in the application plays a key role in the dishonest vulnerability of the digital platform. In the case of the digital finance platform, it is a question of the accuracy of the buyer's financial information, for example, that the buyer has an honest purpose and sufficient financial means to pay for the product. This can be associated with the dual role of information as caused by a dishonest actor.

Our theoretical contribution highlights that the dual role of human and nonhuman actors allows for dishonest vulnerabilities in digital financial platforms (cf. Dandapani, 2017; Shukla and Shukla, 2011). Digital finance platforms are part of the digitalization of finance (see Claessens et al., 2002; Valverde and Fernandez, 2020), and particularly part of the process where technology influences human behavior. As Brey (1997) states, technological change should be viewed through the disagreements, disputes, and difficulties experienced by actors, and explained by interpretating different groups through controversy and disagreement. In this study, we have used a critical approach to explore digital finance.

Although previous studies have focused on examining the role of actors in constructing the success of digital innovations (cf. Latour, 1987, 1991, 1996), the current study has taken a different angle, presenting the dual role of actors in the light of their dishonest nature. Thus, our research contributes to the prior literature in understanding the dual nature of an actor (cf. Shim and Shin, 2016; Behi et al., 2020) and in approaches to reveal dishonest vulnerabilities (cf. Anton et al., 2003; Patel et al., 2008).

People use technologies, but dishonest vulnerabilities do not come up until they are revealed. Criminal reports bring perpetrators to justice, but research brings things to the forefront of science.

Conclusion

Internet-based digital finance platforms have changed the banking industry in a significant way (cf. Claessens et al., 2002; Pousttchi and Dehnert, 2018). Traditional bank branches have had to

give way to digital financing platforms. Those who provide financial services and need financing no longer have to apply for these services in person.

The digitalization of finance is about the interaction between humans and technology. In the current study, we have utilized actor–network theory to illustrate the socio-technical construction of the digital finance platform, here from one perspective. In particular, we have highlighted the actors, roles, and mechanisms involved in the advancement of technology, that is, the digital finance platform (the black box), in relation to the dishonest vulnerability of technology. We have identified the actor-worlds around different actors, illustrating the route between the worlds of perpetrators, finance companies, and financial intermediaries, along with the ways in which perpetrators seek to exploit the world of the digital finance platform. In this way, we contribute to previous studies that present how technology can be vulnerably dishonest (cf. Weill and Woerner, 2015; Thrassou et al., 2020).

No similar studies focusing on the actor–network theory and fraud have been carried out. Thus, our research provides an example of an approach for exploring the mechanisms of dishonest vulnerability between actor-worlds (cf. Anton et al., 2003; Patel et al., 2008).

Our research responds to how dishonest vulnerabilities become possible. A dishonest vulnerability becomes possible if the ties between these dishonest actors (perpetrators) are strong and are allowed to strengthen. However, vice versa, if the identification of the ties between these dishonest actor-worlds, the strategies for attracting actors, and the passage points are identified, they can also be affected, for example by developing technology or processes. In this way, our research contributes to the development of digital finance platforms.

Regarding prior socio-technical literature, our research contributes to the development of technological innovations in accordance with actor–network theory. In particular, our research contributes to finance and accounting information systems, especially with the socio-technical perspective on digital finance platforms.

The actor–network theory has been used very little in finance research, so our study opens up a new perspective on finance and its digitalization in this respect as well. Our research indicates that more attention should be paid to these threats. Without the perpetrator (the applicant), these weaknesses might not be found. Thus, both the applicant (as a perpetrator), the information provided by the applicant, the financial platform (as a fraudulent technology), the financial company (as a fraudulent actor), and the police (as a fraud investigator) play key roles in discovering dishonest vulnerabilities, but also in strengthening this actor-world (when vulnerabilities are discovered and revealed).

Our research has highlighted practical contributions. Our study has not revealed any financial fraud in which a bank loan has been taken out to purchase the vehicle and the vehicle is paid for in one installment. In our data, all cases of fraud are related to vehicle financing companies and the vehicle financing they provide through the financial platform. Based on this, it can be assumed that there are differences in the lending and credit management of normal banks and vehicle finance companies. One of the reasons why financial companies are the ones to face fraud may be that they do not usually meet the client in person (cf. Ozili, 2020).

As finance companies seek to grow their businesses and improve their services, one way to do this is to speed up the process of granting various types of credit. However, this may result in insufficient time to ascertain the customer’s creditworthiness and information provided before granting credit. In the case of a bank loan, the bank clarifies the loan applicant’s information and income quite carefully and, in addition, often requires a guarantee—or, alternatively, an external

guarantor—for the loan. This may be one of the reasons why car financing taken from a bank does not show this type of financing fraud. In digital finance, whether the information being provided by the applicant about the financial situation is correct should be examined more closely.

Digital finance and technology are constantly evolving, and supervision does not always have time to adapt its supervisory practices. In general, various abuses reveal the shortcomings and flaws of technological development. In the current study, we have examined the evolution of digital finance, particularly its dishonest vulnerability through vehicle finance fraud.

Vehicle financing is a forerunner of digital finance and, therefore, has served as a good example in the present study. However, more research is needed on digital finance platforms from different perspectives because digital finance platforms function everywhere.

Our research opens up numerous new opportunities for further research. Regarding actor–network theory, research should focus more on the vulnerability of socio-technical innovations and the dual role of actors. In the current study, the review is based on written material only. Thus, we suggest that further investigation into the dishonest vulnerability of the black box could be extended using other qualitative research methods.

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