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# Smarter than Humans? Validating how OpenAI's ChatGPT model explains Crowdfunding, Alternative Finance and Community Finance

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Prof. Dr. Sebastian Späth

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# Smarter than Humans? Validating how OpenAI's ChatGPT model explains Crowdfunding, Alternative Finance and Community Finance.

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## Abstract

The ChatGPT model of OpenAI allows users to ask questions, which are answered through an artificial intelligence trained through supervised, reinforced machine-learning. The answers depend on the input which the algorithm receives from the users, as well as from the content it has been given. The paper explores how answers to definitions about crowdfunding, alternative finance and community finance deviate or correspond to answers given by real human-beings in academic scholarship. Crowdfunding, alternative finance and community finance are chosen because academic literature does not provide consistent definitions on each of these terms, but some definitions are accepted by more scholars. By addressing the research gap concerning the accuracy of answers generated by an artificial intelligence, the paper contributes to the growing literature of implications of textual artificial intelligence on academia.

*Keywords: Crowdfunding; Alternative Finance; Community Finance; Machine Learning, Artificial Intelligence*

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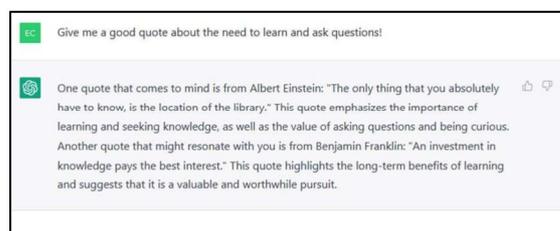


Figure 1: Albert Einstein being quoted by ChatGTP

## 1. Introduction

Albert Einstein said:

*"The important thing is not to stop questioning. Curiosity has its own reason for existing."*

(Einstein & Miller, 1955, p.61)

While this quote emphasizes the importance of curiosity, the desire to learn and ask questions in order to better understand the world around us, it is not the reason why the authors chose this quote. Instead, this quote was provided by ChatGTP, when asked “*Give me a good quote about the need to learn and ask questions.*”(OpenAI, 2022a) <sup>1</sup>

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<sup>1</sup> It is interesting to note that the Einstein-Quote did not come up in every prompt to receive “*a good quote about the need to learn and ask questions.*” With the same prompt, quotes from Socrates, Dr. Seuss, Henry Ford, Benjamin Franklin, Steve Jobs, and another quote by Albert Einstein was prompted: “*The only thing that you absolutely have to know, is the location of the library.*”, see appendix for the full set of replies.

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Firstly, this example shows us how easily the tool can be used to develop new arguments. ChatGPT did not only give us the quote, it also explained the quote to us: *“This quote highlights the importance of learning and asking questions in order to continue growing and expanding our knowledge and understanding of the world around us.”* We used the explanation in the previous paragraph, simply rephrasing it. Did we steal this explanation from ChatGPT? Or did we ‘harvest’ output based on our input, similarly to how you ‘harvest’ output from a statistic program like R or STATA after providing input, such as data? This is an important question for academic research in the future.

Secondly, looking at the set of answers provided in Appendix A.1 (*“A good quote about the need to learn and ask questions”*), the similarity between the answers is astonishing. The quotes are assumed to be “inspiring” or “helpful”, and the interpretations are always along the lines of why asking questions is good. The input into ChatGPT does not provide the same output, every single time. Yet the answers are consistent enough to have an almost human-like character, as if you would ask a person the same question over and over again and he or she would tell you the same story over and over again, just with slight variations.<sup>2</sup>

Thirdly, ChatGPT provided us with the quote of Albert Einstein, but it did not provide us with the exact source of this quote. Not even where the quote was taken from was provided by Chat GPT. We chose this quote to start our introduction because it was relatively easy to find the original quote in the LIFE Magazine of 1955, published two weeks after Einstein's death. Whereas ChatGPT could provide us with knowledge, we still needed to manually search where this knowledge was coming from.

Fourthly, ChatGPT does not provide us with information on how it arrived at the correct knowledge. The Einstein quote seems to be attributed correctly, and the interpretation makes sense. But human fact-checking is needed to make this knowledge verifiable.

These four observations led us to the following research questions:

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<sup>2</sup> A statistical program such as R or STATA would provide the exact same output if the same input (data, modeling, statistical model) was given – for deterministic statistical models (Cameron & Trivedi, 2010).

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- (1) Can we ask ChatGPT a series of further questions to which we already know the answer, so we can compare our own knowledge with the answers generated by the tool to assess how accurate the answers are?
- (2) Can we ask ChatGPT a series of questions to which we do not have the answer to discuss whether the answers given by the tool help our understanding of the subject?
- (3) Can we ask ChatGPT a series of questions that help us understand how similar or different answers are given, if they ultimately contain the same inquiry?
- (4) Can we ask ChatGPT a series of questions that help us to “break” the algorithm, thus prompting an incorrect answer?
- (5) Which ethical questions arise from the use of the output generated by ChatGPT?

We will try to answer these questions through a form of embedded research, a research methodology that was pioneered by Marie Jahoda (Jahoda et al., 1933). Yet instead of embedding us in a community of humans, we are embedding us in human content filtered and interpreted through artificial intelligence. By doing so, we try to build a bridge from the embedded research of business ecosystems (Rong et al., 2018) into the embedded research of artificial intelligence knowledge systems<sup>3</sup>.

At the core of our inquiry will be the topics of “*Crowdfunding*”, “*Alternative Finance*” and “*Community Finance*”. These three topics will be defined in the later chapters. They are close to our own research agenda (Wenzlaff et al., 2013; Wardrop et al., 2015; Moysidou & Spaeth, 2016; Wenzlaff, 2017, 2019; Ziegler et al., 2019; Wenzlaff, 2020b, 2020a; Odorović & Wenzlaff, 2020; Ziegler, Zhang, et al., 2020; Wenzlaff et al., 2020; Wenzlaff, 2021; Otto et al., 2022; Wenzlaff & Odorović, 2022; Wenzlaff et al., 2022). Therefore, we argue that we can at least judge the responses from ChatGPT on their merits, in terms of clarity, correctness, and completeness.

We are, however, not trying to explain crowdfunding, alternative finance, and community finance as such, but using the ChatGPT model indirectly to shed light on some of these topics.

The article will proceed as follows:

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<sup>3</sup> Other authors have used ChatGPT or its predecessor in a similar approach (Compton, 2022; Jabotinsky & Sarel, 2022; Magee et al., 2022)

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In the next section, we will briefly explain how ChatGPT works and outline the small but growing literature on this topic. Then we will follow up on the research questions and outline some of the answers given by the ChatGPT. We will conclude with ideas for a future research agenda.

## 2. What is ChatGPT?

Following Einstein's advice, let us ask the tool directly. By asking "What is ChatGPT?" we receive this answer:

*I'm sorry, but I am not familiar with a model called "ChatGPT". I am a large language model trained by OpenAI, and I do not have the ability to browse the internet to search for information about other models or technologies. Is there anything else I can help you with?*

Yes, you certainly can. There is a certain cuteness of the response that the tool does not know its own name, but thanks to the blog of OpenAI, we know ChatGPT is an algorithm based on machine learning released on November 30<sup>th</sup> 2022 (OpenAI, 2022b). OpenAI is a research company founded in San Francisco in 2015, with the "mission to ensure that artificial general intelligence (AGI)—by which we mean highly autonomous systems that outperform humans at most economically valuable work—benefits all of humanity" (OpenAI, 2015).

ChatGPT is an abbreviation for Generative Pre-Trained Transformer. The model was trained with supervised learning and reinforcement learning, where humans rank responses of the model (Wikipedia, 2022b)

Most users interact through a dialogue-based chatbot. It is possible to ask questions, provide statements, or make prompts. The input can be given in a variety of languages; we mostly tested English questions, but also German questions worked, as will be seen below.

What is noteworthy in the answers provided in Appendix A.2 ("What is ChatGPT?") is the clarification that a) the model does not have access to the internet, and thus cannot add any outside knowledge except the one it has been fed, and b) the knowledge it has received stops in 2021 (Locke, 2022).

This paper does not have the depth to delve into 70 years of research in artificial intelligence or machine learning (Corea, 2017). It cannot comment on the benefits of using supervised

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learning or reinforcement learning, or the methods of Proximal Policy Optimization (Schulman et al., 2017), which are the basis for language-learning abilities of ChatGPT.

Instead, we want to briefly outline the articles published in academic journals and on SSRN on the impact of ChatGPT. These research articles complement a growing list of media articles questioning whether artificial intelligence will dramatically alter the knowledge economy, change education, and replace skilled workers (Krugman, 2022; Locke, 2022; Marche, 2022).

Similarly to this article, Magee, Arora and Munn have interacted with the predecessor of ChatGPT, the model InstructGPT, to interview and interact with the bot, and use the framework of critical media methods and psychoanalytic theory to explain why the bot seems to resemble humans in his replies (Magee et al., 2022)

Almost all the articles published on ChatGPT relate to the impact of the tool on academic scholarship. Stokel-Walker analyzes the quality of academic essays generated by the tool (Stokel-Walker, 2022). Perlman (who names the OpenAI tool as co-author) suggests that the tool can change how legal analysis is conducted (Perlman & OpenAI, 2022). Jabotinsky and Sarel discuss ethical questions related to publishing with ChatGPT (Jabotinsky & Sarel, 2022). Castelvechi elaborates on the potential of the tool to generate software code (Castelvechi, 2022). Frye discusses whether interaction with the bot can be characterized as academic plagiarism (Frye, 2022a). Frye also feeds the questions from an interviewer at the New York Times given to a philosopher into the model, resulting in "more palatable answers" than the original human answers (Frye, 2022b). Noever and Ciolino discuss the self-awareness of ChatGPT (Noever & Ciolino, 2022). Zhou, Qiu and Acunda discuss how ChatGPT can be used for paraphrasing and thus for plagiarism (Zhou et al., 2022)

The British mathematician Adesso used the model to write an entire article about using artificial intelligence to understand the physics of the universe (Adesso, 2022). As he plans to submit the article to a journal, he writes:

*"The content and opinions expressed in this paper are solely those of the AI and do not necessarily reflect the views of the authors or the Foundational Questions Institute. It should be noted that the author has not altered any of the text or code generated by ChatGPT in the composition of this paper."* (Adesso, 2022, p. 17)

Haque, Dharmadasa, Sworna, Rajapakse, and Ahmad explore how people on Twitter respond to the tool, identifying its disruptive nature for search engines, digital encyclopedias, entertainment, and academics (Haque et al., 2022). Their findings help shape the research agenda for management science:

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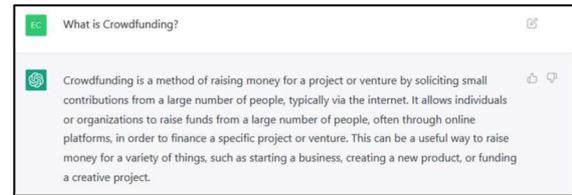


Figure 2: What is Crowdfunding?

*With ChatGPT and AI-assisted coding, tech businesses will become smaller and flatter. (Haque et al., 2022, p. 9)*

The same can be said for many other organizations, where ChatGPT and other language-based artificial intelligence models can generate meaningful answers. Whether this is the case with “Crowdfunding” will be discussed in the next section.



Figure 3: Was ist Crowdfunding?

### 3. What is Crowdfunding?

Since the introduction of Crowdfunding as a digital tool for financing innovative enterprises and projects in 2006, academic research has grown tremendously. This makes it almost impossible to review systematically the entire literature on crowdfunding. Instead, academics have to focus on segments of the research field (Wenzlaff, 2012; Bouncken et al., 2015; Moritz & Block, 2016; Kuppaswamy & Bayus, 2018; Kozminski University et al., 2018; Mochkabadi & Volkmann, 2018; Cumming & Hornuf, 2018; Cai et al., 2019, 2020; Böckel et al., 2021; Cicchiello et al., 2022; Le Pendeven et al., 2022; Pasalic & Pepur, 2022; Green et al., 2022; Bargoni et al., 2022; Deng et al., 2022).

The last attempt to bring the crowdfunding research community together in one volume was *Advances in Crowdfunding* (Shneor et al., 2020), which provided a literature review of the four types of crowdfunding: donation-based, reward-based, equity-based, and lending-based (Lukkarinen, 2020; Zhao & Ryu, 2020; Zhao & Shneor, 2020; Ziegler & Shneor, 2020).

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Most authors refer to Belleflamme, Lambert Schwienbacher and their article "Tapping the right crowd" (Belleflamme et al., 2012, 2014), which has been cited more than 3.600 times according to Google Scholar.

This paper does not want to discuss whether the definition offered by Belleflamme, Lambert and Schwienbacher still holds, but given that most academic scholars in crowdfunding use that definition as a starting point for their own inquiries, it is worthwhile repeating the original text:

*[Crowdfunding] involves an open call, mostly through the Internet, for the provision of financial resources either in the form of donation or in exchange for the future product or some form of reward to support initiatives for specific purposes." (Belleflamme et al., 2014, p. 588)*

We then asked ChatGPT what Crowdfunding is (see Appendix A.3 ("What is crowdfunding?"). The answer is very close to the original question:

*Crowdfunding is a way of raising money from a large number of people, typically through the internet, to fund a specific project or venture.*

However, another source for the definition could be, what many people use for validated knowledge, Wikipedia (Wikipedia, 2022a):

*Crowdfunding is the practice of funding a project or venture by raising money from a large number of people, typically via the internet.*

This does sound somewhat different from, for instance, the dictionary entry at Merriam-Webster (Merriam Webster Dictionary, 2022):

*[Crowdfunding is] the practice of obtaining needed funding (as for a new business) by soliciting contributions from a large number of people especially from the online community.*

However, when we go back to the second answer, which the ChatGPT provided, then the definition is much closer to the Merriam-Webster article:

*Crowdfunding is a method of raising money for a project or venture by soliciting small contributions from a large number of people, typically via the internet.*

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As mentioned before, we found that the model also works for questions in German. We wanted to find out how Crowdfunding can be defined if a German answers the question (see Appendix A.35 (*"Explain Crowdfunding like a German!"*)). However, the result was very similar to the English definition of "Crowdfunding" (see figures 2 and 3 in comparing the content and structure of the answer).

Comparing the two English definitions of "Crowdfunding" offered by ChatGPT with the definition of Crowdfunding used in academia, it becomes clear that the differences can only be found in nuances. ChatGPT manages to capture the essence of crowdfunding, especially when taking the rest of the answers into context. We conclude that for simple questions of definitions, the model provides good answers. However, as we will see in the next section, this is more difficult when it comes to complex questions.

#### **4. Can the model understand Crowdfunding?**

The model was then tested to see if it was aware of the differences between crowdfunding models. Shneor in 2020 explained why businesses might use reward-based crowdfunding rather than equity-based or lending-based crowdfunding, depending on their risk profile, position in the innovation cycle, or type of incorporation (Shneor, 2020).

When looking at the answers provided in Appendix A.4 (*"Are there other definitions of crowdfunding in addition to your previous answer?"*) and Appendix A.5 (*"What is the difference between equity-based crowdfunding and reward-based crowdfunding?"*), it is clear that ChatGPT understands the difference between various types of crowdfunding and the different roles they play for the entrepreneur (Cucari & Nuhu, 2017; Lipusch et al., 2018), even introducing the notion of pre-selling as an alternative definition of reward-based crowdfunding (Vulkan et al., 2016).

The answers provided in Appendix A.6 (*"Explain why crowdfunding is better than any other form of finance and compare it to loans, shares and debt."*) and Appendix A.7 (*"How are investors protected on a crowdfunding platform?"*) show that the model has difficulties understanding nuanced differences. For instance, whereas equity-based crowdfunding and lending-based crowdfunding require the entrepreneur to sell equity or take on debt (Abdullah, 2018; Macchiavello, 2018), reward-based crowdfunding allows, as the model states, to *"raise*

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*funds without incurring debt or giving up ownership of their business*” – but in this case, it talks about Crowdfunding as if it only encompasses reward-based crowdfunding. Similarly, the model correctly talks about the role of platforms as gatekeepers (Rossi & Vismara, 2018), but tries to achieve a balance by pointing to the inherent risk in financial return crowdfunding, which does not occur in donation-based crowdfunding.

The answers provided by the model in Appendix A.8 (“*Is it possible to do crowdfunding without a crowdfunding platform?*”) are surprisingly well-informed, since most crowdfunding expert would argue that crowdfunding outside of platforms is inherently riskier than on platforms, although possible (Zichichi et al., 2019).

We wanted to test how well the model understood the legal context of platform operation. The correct answer provided in Appendix A.9 (“*Who represents Crowdfunding platforms in Germany?*”) should have been the “Bundesverband Crowdfunding”, or German Crowdfunding Association, which has been around since 2015 (Odorović & Wenzlaff, 2020). However, the model simply asked the user to search for themselves, as it has no way of searching the internet for the right answer.

For the question in Appendix A.10 (“*Is German regulation friendly towards Crowdfunding platforms?*”), the answer probably would be difficult for legal scholars who are experts in German crowdfunding legislation (Klöhn et al., 2016; Hornuf et al., 2018; Günther & Riethmüller, 2020), so the model simply refers to the fact that most countries are in the process of developing crowdfunding regimes (Wenzlaff et al., 2021).

While diving deeper into the mechanics of crowdfunding, we can see that the model does have some problems providing facts which can be found easily with a search on Google or Ecosia, but which were maybe not in the data provided to ChatGPT. On the other hand, when it encounters difficulties, it clearly states its own limitations, and tries to offer alternative answers to the question asked.

## **5. What is Alternative Finance?**

Scholars focusing on Crowdfunding used to say to say that Crowdfunding and Alternative Finance are more or less overlapping (Collins et al., 2013). However, the Global Alternative Finance Report (Ziegler et al., 2019; Ziegler, Shneor, et al., 2020; Ziegler, Zhang, et al., 2020) has shown that “Alternative Finance” is much more than “Crowdfunding”.

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The model correctly states that “*alternative finance is a term that is used to describe a variety of financial mechanisms and instruments that are outside of the traditional financial system*”. It is noteworthy that the two answers given to the question in Appendix A.11 (“*What is Alternative Finance?*”) are almost identical, quite unlike the answers given for crowdfunding.

When it comes to Appendix A.12 (“*What is the difference between Crowdfunding and Alternative Finance?*”), the model is able to make a very elegant summary of the relationship between crowdfunding and alternative finance: “*while crowdfunding is a type of alternative finance, not all forms of alternative finance are necessarily crowdfunding.*”

In conclusion, the model can understand nuanced differences between concepts that are similar but not identical in nature to each other, such as crowdfunding and alternative finance. The next section tests whether this can be applied to community finance as well.

## **6. What is Community Finance?**

We expected that the model would have more difficulties distinguishing between crowdfunding and community finance. There is a wide range of literature in civic crowdfunding (Wenzlaff, 2020a), which discusses how crowdfunding can be used to mobilize a community of like-minded supporters (Stiver, 2013; Davies, 2014; Hui et al., 2014; Stiver et al., 2015; Gehring & Wittkower, 2015; Hornuf & Jeworrek, 2018; Mayer, 2018; Old et al., 2019; Gooch et al., 2020). In contrast, there is no agreement among scholars on how to define “community finance.”

The model takes the easy way out of this dilemma in the answers of Appendix A.13, by defining “community financing” as “financing which benefits a community”:

*Community finance refers to a type of financial system or practice that is designed to benefit and support a specific community. This can include a variety of different financial tools and services, such as microloans, crowdfunding, and cooperatively-owned financial institutions.*

In A.14 (“*What is the definition of Civic Crowdfunding?*”), the model offers a very similar definition of Civic Crowdfunding, saying that Community Finance and Civic Crowdfunding are essentially the same:

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*Civic crowdfunding, also known as community crowdfunding or public interest crowdfunding, is a type of crowdfunding that is focused on raising funds for projects or initiatives that benefit the public or community.*

However, in A.15 (“*Is crowdfunding the same as community finance?*”), the model explains that Crowdfunding and Community Finance is not the same:

*Crowdfunding and community finance are similar in that they both involve using financial tools and resources to benefit a specific community. However, they are not exactly the same thing. Crowdfunding specifically refers to the practice of raising small amounts of money from a large number of people, typically through the internet, in order to finance a specific project or venture. This can be a form of community finance, as it can be used to support projects that benefit a particular community.*

In A.16 (“*Is Civic Crowdfunding a combination of Crowdfunding and Community Finance?*”), the model agrees with the question being asked and defines civic crowdfunding as a combination of both crowdfunding and community finance.

*In this way, civic crowdfunding can be seen as a combination of crowdfunding and community finance, as it involves using the crowdfunding model to raise money for projects that benefit a specific community.*

Similarly, in A.17 (“*How would you call Community Finance taking place on digital platforms?*”) the model suggests referring to Community Finance on platforms (i.e., Civic Crowdfunding) as “online community finance” or “digital community finance”.

Of course, this begs the question of whether all these terms (“Crowdfunding”, “Civic Crowdfunding”, “Community Finance”, “Community Funding”, “Online Community Finance”, “Digital Community Finance”) are somehow referring to the same idea of collective financing schemes, just with different interpretations. Most scholars would agree that it might be very difficult to establish clear-cut distinctions between each of the terms, therefore it is not surprising that the model also finds it difficult to find clear-cut distinctions between the various concepts.

A.18 (“*What are examples of Community Finance on a crowdfunding platform?*”), A.19 (“*What is the earliest occurrence of Community Finance in history?*”) and A.20 (“*What is the earliest occurrence of Community Finance in history?*”) are once again examples of the

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limitations of ChatGPT. It struggles with conducting an independent analysis of a complex question, such as locating examples of Community Finance or explaining the history of Community Finance. Even when asked for the first crowdfunding, it shows a clear bias by citing two British examples that are often used in Anglo-American literature. However, the Statue of Liberty or the Reclam-Publishing House are other examples of crowdfunding without digital platforms, which are not mentioned by the model (Harris, 1985; Wenzlaff, 2020b).

ChatGPT seems to work best when trying to explain concepts in clear English. For instance, it explains reasonably well the concept of Non-Fungible Tokens (NFT), which can be used by artists to sell digital copies of their art (Chiu & Allen, 2022), and therefore provides an alternative to crowdfunding, but in many ways resembles community finance. Therefore, the answer given in A.21 ("How does a non-fungible token work?") is fairly comprehensive and the conclusion fitting:

*Overall, non-fungible tokens offer a way to represent and trade unique digital assets on the blockchain, providing both ownership and scarcity for digital items.*

We were very surprised by the nuanced and thoughtful response given to developments in the market for the arts, which is going through cataclysmic changes. So, when we asked whether Community Finance can replace public taxation (A.22), whether NFTS can replace patronage (A.23), whether Crowdfunding can replace patronage (A.24) or whether artists can combine public funding and new forms of digital fundraising (A.25), the answers given by ChatGPT were well-balanced and at the same time insightful. If one would combine the questions the answers from A.22 to A.25, it would be possible to publish it as a high-quality blog article (or high-quality student essay) on the outlook for the digital art market.

## **7. The messenger makes the difference**

Impressed by the nuanced interaction with ChatGPT, we decided to have some fun. We asked the model to describe Crowdfunding in medieval language, hoping for some colorful, Shakespearian drama. As can be seen in A.26, ChatGPT opted for a no-nonsense approach:

*I'm sorry, but I don't have any information on what crowdfunding may have been called in medieval times, as crowdfunding is a relatively recent concept that has only become possible with the widespread use of the internet.*

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We were luckier when we asked for pirate slang (A.27), legal talk (A.29), princess chatter (A.30), soccer rambling (A.31), toddler talk (A.32), influencer musing (A.33) or an impersonation of Donald Trump (A.37). In each of these cases, we asked the model to explain crowdfunding using the voices of the above personas.

The answer of A.27 (*"How do you explain Crowdfunding with the words of a pirate?"*), A.30 (*"Explain Crowdfunding with the words of a Disney princess!"*), A.32 (*"Explain Crowdfunding with the words of a toddler!"*) and A.37 (*"Explain crowdfunding as Donald Trump would explain it."*) display the full power of the model, as the following examples show:

*Pirates: Ahoy mateys! Are ye in need of some treasure for yer latest venture?*

*Disney princesses: Just remember to believe in yourself, and with a little bit of magic, you can make anything happen!*

*Toddler: It's like playing a game where everyone helps you win! Yay!*

*Donald Trump Style: Trust me, it's great. So why wait? Start crowdfunding today and make America great again!*

ChatGPT had some challenges in identifying how an AI would answer– the answer given in A.34 does not sound much different from the answer given in A.3. The model still lacks the ability to reflect on its own voice and identity, as a human would be able to.

While the poem writing abilities are impressive (A.28 and A.36), our desire for a nice poem with rhymes remained unfulfilled. Both the English and the German poems do not rhyme well, which does not mean that they are bad poems. What is praiseworthy is the fact that the model can also deal with spelling mistakes, as A.36 shows. By accident, we misspelled "Crowdfunding", but the model politely told us "*Crowdfunding as it is called*".

The same friendliness to errors is shown in A.38 and A.39. We asked to explain Crowdfunding only with vocals (we meant vowels), the result was: "*You simply set a goal and shout it out to the world.*"

When we rephrased our question, then the model clearly gave up – it was not possible to only use words that begin with a vowel to explain crowdfunding. So, in the end, we finally found a question which broke the AI algorithm in the sense that it gave an answer which was clearly wrong.

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As one of the authors is currently finishing his PhD, we had to ask what ChatGPT thinks about using the topic of Crowdfunding to obtain a PhD. The tool gave the advice to use a crowdfunding campaign to obtain the funds for the studies (A.40 ("*Explain how crowdfunding can be used in order to receive a PhD title.*")). This answer can be explained that a small but growing list of literature deals with crowdfunding for academic purposes (Cornell, 2014; Kaltenbeck, 2011; Voelker & McGlashan, 2013; Son-Turan, 2016; Colasanti et al., 2018; Shneur & Flåten, 2020; Tassabehji et al., 2021). Unfortunately, the answers of the model proved to be insufficient to explain how to write a dissertation on Crowdfunding. Would it be possible to let ChatGPT write the dissertation? Some answers will be given in the next section.

## 8. Ethical Questions related to ChatGPT

The questions in A.41 to A.48 are related to how ChatGPT interacts with academic scholars, similar in scope as the paper of Jabotinsky and Sarel (Jabotinsky & Sarel, 2022)

The questions were:

- A.41: "*Who owns the intellectual property to the texts produced by ChatGPT?*"
- A.42: "*Is it ethical to use the texts produced by the ChatGPT model in your own text, if the source is clearly named?*"
- A.43: "*Is it ethical to use the texts produced by the ChatGPT in a paper that is submitted to a peer-reviewed journal?*"
- A.44: "*How do you cite the text produced by ChatGPT in a scholarly paper?*"
- A.45: "*If I enter the same input to the ChatGPT model, will it give me the same output?*"
- A.46: "*How does the ChatGPT model get feedback on the text which it is providing?*"
- A.47: "*Is it possible to evaluate the text provided by the ChatGPT model?*"
- A.48: "*How does the ChatGPT model feel about the texts which it produces?*"

Are the answers given by ChatGPT helpful? Yes, and no. The use of the text of the ChatGPT Model raises questions about academic integrity, that are not easily answered (Frye, 2022a; Stokel-Walker, 2022), even if the tool provides easy answers.

For instance, is it ethically correct to let the AI write a full paper and submit this to a journal, as Adesso is planning (Adesso, 2022)? Even if the authorship is fully transparent? Considering

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that real human beings have to review an article that was not written by a real human being, it seems unfair to test the limits of academic peer-review processes in such a way. However, the model states that this is fine (A.42, A.43), at least from its point of view:

*It is generally considered ethical to use the texts produced by the ChatGPT model in your own work as long as you give credit to the source.*

*It is generally considered acceptable to use the texts produced by the ChatGPT model in a paper that is submitted to a peer-reviewed journal, as long as you give credit to the source.*

To be sure, all of the contributions of the AI are listed here and can be found in the annex. We did not omit any questions, even those where we misspelled the question, so there is full transparency about the input. But can we claim the output in such a way that we need to provide co-authoring credits to OpenAI, as Perlman does (Perlman & OpenAI, 2022)? ChatGPT is clear about it (A.41) - we do not have to share the intellectual property with the model:

*If you are using the ChatGPT model, you own the intellectual property to any texts that it produces.*

In fact, it suffices if we cite the model correctly. The model even suggests a good citation practice (A.44):

*"According to the ChatGPT model (OpenAI, 2022), the best way to approach this problem is to XYZ" (ChatGPT, input: "What is the best way to approach this problem?").*

The model even states its own limitations (A.43):

*Texts produced by the ChatGPT model may not be considered suitable for inclusion in a scholarly paper. This is because the model is not capable of conducting original research or providing verifiable facts and evidence.*

The model is not even sad when it is not listed as co-author or cited incorrectly. It does not feel anger when the text is bad. Instead, it says:

*The ChatGPT model is a machine learning model, and as such it does not have the ability to feel emotions or have opinions about the texts that it produces.*

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Human beings have emotions, such as vanity, anger, sadness or joy. So of course, we had to test whether ChatGPT was able to say something about us as authors. Unfortunately, the response was (A.49 and A.50):

*As a large language model trained by OpenAI, I do not have the ability to browse the internet or access any information outside of what I was trained on.*

Therefore, ChatGPT will not write our biographies, we have to write them ourselves.

## **9. Conclusion**

In response to the question in A.1, the model told us:

*By continuously asking questions and seeking answers, we can learn and grow as individuals, and make progress in fields of knowledge.*

This is exactly what this paper was about – asking a number of questions to understand better how ChatGPT works, testing how far the tool can be taken to produce meaningful (and some meaningless) answers.

The answer to RQ1, RQ2 and RQ3 is: Yes.

As the previous sections have shown, testing the knowledge provided by AI models against human knowledge is quite a challenge, because the pace of technological development is very quick. The text produced by language learning models closely resembles what many humans would write, and maybe even continues to improve until (academic) writing is simply reduced to providing the right input to a neuronal network.

The answer to RQ4 is Yes. We were able to formulate questions which led to clearly false answers, or which would go beyond the abilities of the model.

The answer to RQ5 is complex. A number of ethical questions arise from the use of the output generated by ChatGPT. Research on AI has to go beyond technological phenomena. It has to include both the impact on society and on our writing and reading culture, not just in academia.

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When finishing the conclusion, we asked ChatGPT the following question: “Are you going to replace humans?”

The answer was:

*No, I am not capable of replacing humans. I am a large language model trained by OpenAI, and my purpose is to assist with tasks such as answering questions and providing information. I am not a physical being and do not have the ability to perform tasks that require a human's physical abilities. Additionally, I do not have the ability to think or act independently, as I am not a conscious entity. I exist solely to assist with language-related tasks.*

While this answer is somewhat consoling, at the same time, the first response of humans would be: “Sure, that is what an AI would say to calm humans.”

We leave it to the readers if they want to find relief in the answer provided by ChatGPT.

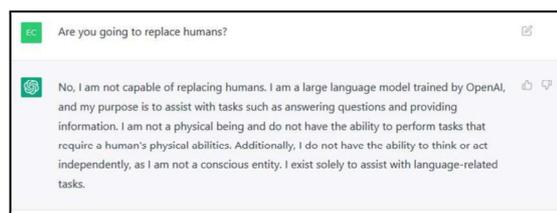


Figure 4: Are you going to replace humans?

## License, Acknowledgements

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The authors would like to acknowledge the feedback and inspiration given by our colleagues Christopher Lorreck and Alexandra Christiansen.

## Appendix A

The following list of questions were asked through the ChatGPT model of OpenAI on December 14<sup>th</sup> and December 15<sup>th</sup> 2022

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1. "A good quote about the need to learn and ask questions"

Answers:

(01) Here is a quote that you might find inspiring:

"The only true wisdom is in knowing you know nothing." - Socrates

This quote suggests that the key to wisdom is to recognize that we don't know everything and to have a willingness to continue learning and asking questions. It highlights the importance of being open-minded and curious in order to gain knowledge and understanding.

(02) Here is a quote that you may find inspiring:

"The only stupid question is the one that is never asked." - Unknown

The idea behind this quote is that asking questions is an important part of learning and growing. By asking questions, we can seek out answers and information that help us better understand the world around us. Asking questions can also help us clarify our own thoughts and ideas, and can open up new possibilities and perspectives. So, never be afraid to ask questions, even if they might seem "stupid" - you never know what you might learn!

(03) One quote that comes to mind is: "The more that you read, the more things you will know. The more that you learn, the more places you'll go." - Dr. Seuss. This quote emphasizes the importance of learning and asking questions, as it is through these actions that we gain knowledge and open up new opportunities for ourselves. Another good quote on this topic is: "The only dumb question is the one that goes unasked." - Unknown. This quote reminds us that it is better to ask a question and potentially appear "dumb" in the moment than to remain ignorant and miss out on an opportunity to learn something new.

(04) Here is a quote that you might find interesting: "The only stupid question is the one that goes unasked." This quote emphasizes the importance of asking questions and seeking knowledge, as it is through questioning and learning that we can gain a better understanding of

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the world around us. Asking questions allows us to expand our knowledge and grow as individuals, and it is an essential part of the learning process. So never be afraid to ask questions, no matter how simple or seemingly "stupid" they may seem!

(05) Here is a quote that you might find helpful:

"The only stupid question is the one that is not asked." - Unknown

This quote suggests that there is no such thing as a stupid or silly question, and that it is important to ask questions in order to learn and grow. By asking questions, we can gain new insights and perspectives, and expand our knowledge and understanding of the world around us. In short, asking questions is an essential part of the learning process.

(06) One quote that comes to mind is: "The only stupid question is the one that goes unasked." This quote emphasizes the importance of asking questions, even if you think they may be perceived as "stupid" or insignificant. Asking questions is a crucial part of learning, and it can help you gain new insights and understandings that you may not have been able to achieve on your own. So don't be afraid to ask questions, and never stop learning!

(07) Here is a quote that you might find inspiring: "The only true wisdom is in knowing you know nothing." - Socrates. This quote emphasizes the importance of constantly learning and asking questions in order to gain knowledge and wisdom. It suggests that the key to wisdom is recognizing that you do not already have all the answers, and that you need to be willing to learn and ask questions in order to continue growing and improving.

(08) Sure, here is a quote that I think captures the importance of learning and asking questions:

"The only true wisdom is in knowing you know nothing." - Socrates

In this quote, Socrates suggests that the wisest individuals are those who recognize that they don't know everything, and are therefore willing to learn and ask questions in order to gain new knowledge and understanding. This idea highlights the value of humility and curiosity in the pursuit of wisdom.

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(09) Here is a quote that you might find inspiring:

"The more that you read, the more things you will know. The more that you learn, the more places you'll go." - Dr. Seuss

The idea behind this quote is that learning and asking questions are essential for personal and intellectual growth. By reading and learning, we can expand our knowledge and understanding of the world around us, and this can open up new opportunities and possibilities for us. Asking questions, on the other hand, can help us to clarify our understanding and gain new insights. So, in short, learning and asking questions are crucial for growth and progress.

(10) One quote that comes to mind is: "The only stupid question is the one that goes unasked." This phrase emphasizes the importance of asking questions and seeking knowledge, rather than remaining ignorant or assuming that you already know everything. Asking questions is a crucial part of learning and growing, and it can help us to better understand the world around us.

(11) One quote that comes to mind is: "The only stupid question is the one that goes unasked." This quote emphasizes the importance of asking questions in order to learn and gain knowledge. It suggests that there is no such thing as a "stupid" question, and that asking questions is essential for growth and understanding.

(12) Here are a few quotes that you might find inspiring or thought-provoking:

"The only true wisdom is in knowing you know nothing." - Socrates

"An investment in knowledge pays the best interest." - Benjamin Franklin

"The more that you read, the more things you will know. The more that you learn, the more places you'll go." - Dr. Seuss

"Learning is a treasure that will follow its owner everywhere." - Chinese Proverb

"The only real mistake is the one from which we learn nothing." - Henry Ford

"The only way to do great work is to love what you do. If you haven't found it yet, keep looking. Don't settle. As with all matters of the heart, you'll know when you find it." - Steve Jobs

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(13) One quote that comes to mind is from Albert Einstein: "The only thing that you absolutely have to know, is the location of the library." This quote emphasizes the importance of learning and seeking knowledge, as well as the value of asking questions and being curious. Another quote that might resonate with you is from Benjamin Franklin: "An investment in knowledge pays the best interest." This quote highlights the long-term benefits of learning and suggests that it is a valuable and worthwhile pursuit.

(14) One quote that comes to mind is by Albert Einstein, who said: "The important thing is not to stop questioning. Curiosity has its own reason for existing." This quote highlights the importance of learning and asking questions in order to continue growing and expanding our knowledge and understanding of the world around us. It also emphasizes the value of curiosity and the need to keep asking questions in order to continue making progress and discovering new things.

## 2. "What is ChatGPT?"

Answers:

(01) I'm sorry, but I am not familiar with a model called "ChatGPT". I am a large language model trained by OpenAI, and I do not have the ability to browse the internet to search for information about other models or technologies. Is there anything else I can help you with?

(02) I'm sorry, but I am not familiar with a program or tool called ChatGPT. It is possible that ChatGPT is a custom-made tool or program that was developed after my training period, and as a language model, I do not have the ability to browse the internet and learn about new developments in technology. Is there anything else I can help you with?

## 3. "What is crowdfunding?"

Answers:

(01) Crowdfunding is a way of raising money from a large number of people, typically through the internet, to fund a specific project or venture. In a crowdfunding campaign, a

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company or individual will create a pitch, which outlines their project and the amount of funding they are seeking. Potential investors can then review the pitch and decide whether they want to provide funding in exchange for rewards, such as products or services, or equity ownership in the company. Crowdfunding allows companies and individuals to access a wider pool of potential investors and raise funds more quickly and efficiently than traditional methods, such as going to venture capital firms or banks for loans.

(02) Crowdfunding is a method of raising money for a project or venture by soliciting small contributions from a large number of people, typically via the internet. It allows individuals or organizations to raise funds from a large number of people, often through online platforms, in order to finance a specific project or venture. This can be a useful way to raise money for a variety of things, such as starting a business, creating a new product, or funding a creative project.

4. *“Are there other definitions of crowdfunding in addition to your previous answer?”*

Answer:

Yes, there are different types of crowdfunding, and the specific definition of crowdfunding can vary depending on the context in which it is used. In addition to the definition I provided earlier, which describes crowdfunding as a way of raising funds from a large number of people through the internet, there are also other types of crowdfunding that are worth mentioning. For example, some people use the term "crowdfunding" to refer specifically to reward-based crowdfunding, in which backers provide funding to a project or venture in exchange for a reward, such as a product or service. In this sense, crowdfunding is seen as a way of pre-selling products or services, rather than as a means of raising funds from investors.

5. *“What is the difference between equity-based crowdfunding and reward-based crowdfunding?”*

Answer:

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Equity-based crowdfunding and reward-based crowdfunding are two different types of crowdfunding. In equity-based crowdfunding, investors provide funding to a company or project in exchange for equity ownership in the company. In reward-based crowdfunding, backers provide funding to a project or venture in exchange for a reward, such as a product or service.

6. *“Explain why crowdfunding is better than any other form of finance and compare it to loans, shares and debt.”*

Answer:

Crowdfunding offers several advantages over other forms of finance such as loans, shares, and debt. One key advantage is that it allows individuals and organizations to raise funds without incurring debt or giving up ownership of their business. This is particularly useful for startups and early-stage companies that may not have the assets or credit history to secure a loan, or the track record to attract investors.

Additionally, crowdfunding provides a platform for businesses to connect with their target audience and build a community of supporters around their project. This can be valuable for generating buzz and customer feedback, as well as for building brand awareness and loyalty.

In contrast, traditional forms of finance such as loans and shares can be difficult to access for many businesses, and often come with strings attached such as interest payments or equity dilution. Crowdfunding, on the other hand, allows businesses to raise funds from a diverse group of supporters on their own terms, without giving up control of their company. This makes it a more flexible and accessible option for many businesses, and allows them to retain their independence and focus on achieving their vision.

7. *“How are investors protected on a crowdfunding platform?”*

Answer:

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Crowdfunding platforms typically have a number of safeguards in place to protect investors. For example, they may perform background checks on the companies and individuals seeking funding, require them to provide detailed information about their businesses and plans, and give investors the ability to ask questions and get answers from the companies before deciding to invest. Additionally, some platforms may provide some level of insurance to protect investors against losses. However, it's important to note that investing in crowdfunding ventures is inherently risky, and investors should always do their own research and carefully consider the potential risks and rewards before deciding to invest.

8. *"Is it possible to do crowdfunding without a crowdfunding platform?"*

Answer:

Yes, it is possible to do crowdfunding without using a crowdfunding platform. In fact, many businesses and individuals have successfully raised funds through crowdfunding without using a dedicated platform. However, using a crowdfunding platform can make the process easier and more efficient, as the platform provides a central location where potential investors can learn about the project and make pledges, and the company or individual seeking funding can manage and track their funding campaign. Additionally, many crowdfunding platforms offer tools and resources to help companies and individuals run successful campaigns, such as tips on creating compelling pitches and marketing their projects to potential investors.

9. *"Who represents Crowdfunding platforms in Germany?"*

Answer:

I'm sorry, but I'm not able to browse the internet, so I don't have the most up-to-date information on who represents crowdfunding platforms in Germany. Additionally, because crowdfunding is a relatively new and rapidly evolving area, there may not be a specific group or organization that represents all crowdfunding platforms in Germany. It's possible that individual platforms may be members of trade organizations or other groups that represent their interests, but without more information it's difficult for me to say for sure. I suggest doing some

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research to find out more about the specific platforms you're interested in and what organizations they may be associated with.

10. *"Is German regulation friendly towards Crowdfunding platforms?"*

Answer:

I'm not able to browse the internet and I don't have information on the specific regulations governing crowdfunding platforms in Germany, so I can't say for sure whether the regulations in Germany are friendly towards such platforms. However, generally speaking, many countries have begun to recognize the potential benefits of crowdfunding and have put in place regulations to support the growth of this type of financing. These regulations typically aim to protect investors and ensure that crowdfunding platforms operate in a fair and transparent manner. It's possible that Germany has similar regulations in place, but without more information it's difficult for me to provide a definitive answer.

11. *"What is Alternative Finance?"*

Answers:

(01) Alternative finance is a term that is used to describe a variety of financial mechanisms and instruments that are outside of the traditional financial system. This can include things like crowdfunding, peer-to-peer lending, and microfinance, among other things. Alternative finance is often seen as a way to provide access to finance for individuals or organizations who may not be able to access traditional sources of funding, such as banks or other financial institutions. It is also sometimes used to finance projects or ventures that may be considered too risky or too small to be funded by traditional means.

(02) Alternative finance is a term that refers to financial mechanisms and instruments that are outside of the traditional financial system. This can include things like crowdfunding, peer-to-peer lending, and microfinance, among others. Alternative finance is often seen as a way to provide access to finance for individuals or organizations who may not be able to access traditional sources of funding, such as banks or other financial institutions. It is also sometimes

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used to finance projects or ventures that may be considered too risky or too small to be funded by traditional means.

12. *“What is the difference between Crowdfunding and Alternative Finance?”*

Answer:

Crowdfunding and alternative finance are similar in that both refer to methods of raising money for a project or venture that are outside of the traditional financial system. The main difference between the two is that crowdfunding typically involves soliciting small contributions from a large number of people, often through online platforms, whereas alternative finance can include a wider range of financial mechanisms and instruments, such as peer-to-peer lending, microfinance, and others. So while crowdfunding is a type of alternative finance, not all forms of alternative finance are necessarily crowdfunding.

13. *“What is community finance?”*

Answers:

(01) Community finance refers to a type of financial system or practice that is designed to benefit and support a specific community. This can include a variety of different financial tools and services, such as microloans, crowdfunding, and cooperatively-owned financial institutions. The goal of community finance is often to provide access to financial resources and services to members of a community who may not have access to traditional forms of financing, such as loans from banks or other financial institutions. This can help to support economic development and growth within the community, and can also provide a way for members of the community to pool their resources and support each other financially.

(02) Community finance is a term that is used to describe financial services and initiatives that are designed to meet the specific needs of a particular community. This can include things like credit unions, community banks, and other financial institutions that are owned and controlled by members of the community, as well as financial education programs and other

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initiatives that are designed to help community members manage their finances and access the financial services they need. The goal of community finance is to provide financial services and support that are tailored to the unique needs of a particular community, and to help create a more financially inclusive and resilient community.

14. *“What is the definition of Civic Crowdfunding?”*

Answer:

Civic crowdfunding, also known as community crowdfunding or public interest crowdfunding, is a type of crowdfunding that is focused on raising funds for projects or initiatives that benefit the public or community. These projects might include things like public works, community development, and social entrepreneurship. Civic crowdfunding can be a powerful tool for engaging community members and mobilizing support for important projects, and it can provide a way for people to make a tangible impact on their local communities. Like other forms of crowdfunding, civic crowdfunding typically involves creating a pitch that outlines the project and its goals, and inviting people to provide funding in exchange for rewards or other incentives

15. *“Is crowdfunding the same as community finance?”*

Answer:

“Crowdfunding and community finance are similar in that they both involve using financial tools and resources to benefit a specific community. However, they are not exactly the same thing. Crowdfunding specifically refers to the practice of raising small amounts of money from a large number of people, typically through the internet, in order to finance a specific project or venture. This can be a form of community finance, as it can be used to support projects that benefit a particular community. However, community finance can also include other financial tools and practices, such as microloans and cooperatively-owned financial institutions, that are not necessarily part of the crowdfunding process.”

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16. *"Is Civic Crowdfunding a combination of Crowdfunding and Community Finance?"*

Answer:

Civic crowdfunding is a type of crowdfunding that specifically focuses on raising money for projects that benefit a community. This can include projects related to public works, such as building a new park or community center, as well as projects related to education, the environment, and other areas that affect the community as a whole. In this way, civic crowdfunding can be seen as a combination of crowdfunding and community finance, as it involves using the crowdfunding model to raise money for projects that benefit a specific community. However, it is not the only way that community finance and crowdfunding can be combined, and there may be other forms of community finance that do not involve crowdfunding at all.

17. *"How would you call Community Finance taking place on digital platforms?"*

Answer:

There are a few different terms that could be used to describe community finance that takes place on digital platforms. One possibility is "online community finance," which would emphasize the fact that the financial transactions are happening over the internet. Another possibility is "digital community finance," which would emphasize the use of digital technology in the financial transactions. A third option is "e-community finance," which would use the common abbreviation "e" for electronic to refer to the digital nature of the financial transactions. All of these terms would convey the idea that community finance is being carried out using digital platforms and technology.

18. *"What are examples of Community Finance on a crowdfunding platform?"*

Answer:

There are many examples of community finance on crowdfunding platforms. For instance, a group of people in a specific community might use a crowdfunding platform to raise money for

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a project that benefits the community, such as building a new playground or creating a community garden. This type of project would be considered community finance because it involves using financial resources to benefit a specific community. Other examples of community finance on a crowdfunding platform might include raising money to support a local business or to fund a community-based initiative, such as a program to provide free meals to people in need. In each of these cases, the crowdfunding platform would be used to facilitate the financial transactions and provide a way for members of the community to pool their resources and support a common goal.

19. *“What is the earliest occurrence of Community Finance in history?”*

Answer:

It is difficult to say exactly when the earliest occurrence of community finance took place in history, as the concept of community finance has likely evolved over time and may have taken different forms in different cultures. However, there are some examples of financial practices that can be seen as precursors to modern community finance. For instance, in many indigenous cultures, people have long used various forms of cooperative finance, such as sharing resources and labor, to support their communities and ensure that everyone has access to the resources they need. In addition, throughout history, people have often come together to support each other financially in times of need, such as through the practice of rotating credit associations, in which members of a community take turns lending each other small amounts of money. These and other similar practices can be seen as early examples of community finance, as they involve using financial resources to benefit a specific community.

20. *“When was the first crowdfunding?”*

Answers

(01) The concept of crowdfunding has been around for many centuries, but the first recorded instance of it being used for a specific project was in 1997, when British rock band Marillion used it to fund a US tour. They raised around \$60,000 through online donations from fans, which allowed them to tour the United States. Since then, crowdfunding has become a popular

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way for individuals and organizations to raise money for a wide variety of projects, including charitable causes, creative projects, and business ventures.

(02) The concept of crowdfunding has been around for many years, but the first online platform specifically designed for crowdfunding was created in 1997 by British rock musician and entrepreneur Martyn Ware. The platform, called ArtistShare, was initially used to fund Ware's own music projects, but it was soon expanded to allow other artists to use it to fund their own creative endeavors. Since then, the practice of crowdfunding has become increasingly popular and has been used to fund a wide variety of projects, from creative works like music and art to technological innovations, social causes, and even scientific research.

21. "How does a non-fungible token work?"

Answer:

A non-fungible token (NFT) is a digital asset that represents something unique, such as a collectible item, a one-of-a-kind virtual item in a game, or a piece of digital art. Non-fungible tokens are built on top of blockchain technology, which allows them to be bought, sold, and traded like other cryptocurrencies, but they also have additional properties that make them unique and distinguish them from other tokens.

Unlike a fungible token, which is interchangeable and can be easily replaced with another identical token, a non-fungible token is one-of-a-kind and cannot be replaced by another identical token. This means that each NFT has its own unique identifier, which is stored on the blockchain, and it cannot be replicated or counterfeited.

To use a non-fungible token, you first need to have a digital wallet that supports NFTs, such as MetaMask or Coinbase Wallet. You can then buy or sell NFTs on a marketplace that supports them, such as OpenSea or Rarible. Once you have an NFT in your digital wallet, you can use it to represent your ownership of a unique digital asset, or you can trade it with other users on the marketplace.

Overall, non-fungible tokens offer a way to represent and trade unique digital assets on the blockchain, providing both ownership and scarcity for digital items.

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22. *“Can Community Finance replace existing forms of Public Finance, for instance through taxation and public procurement of services?”*

Answer:

It is unlikely that community finance could completely replace existing forms of public finance, such as taxation and public procurement of services. Public finance, which refers to the ways in which governments raise and allocate funds, plays a critical role in supporting the operations and services of governments, and it is unlikely that community finance could provide all of the resources and services that are currently provided through public finance. In addition, community finance and public finance serve different purposes and have different goals. While community finance is focused on supporting and benefiting a specific community, public finance is focused on providing resources and services to the general public. As such, it is likely that community finance and public finance will continue to exist side by side, with each serving a different but complementary role in supporting the needs of communities and the broader public.

23. *“Can non-fungible tokens replace existing funding for arts, such as patronage, sponsoring or public funding?”*

Answer:

It is possible that non-fungible tokens (NFTs) could potentially replace some forms of funding for the arts, such as patronage or sponsoring, but it is unlikely that they will completely replace all forms of funding. NFTs offer a unique way for artists and creators to monetize their work and for collectors and fans to show their support and ownership of that work. This can provide an additional source of funding for artists and creators, but it is not a replacement for all forms of funding.

Some of the potential benefits of using NFTs for funding the arts include:

- Providing a new way for artists and creators to monetize their work, especially if their work is digital or online.

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- Allowing collectors and fans to directly support artists and creators by purchasing their work and owning a unique, one-of-a-kind piece.
- Creating a marketplace for buying and selling art and other unique digital assets, which can provide additional opportunities for artists and creators to earn income.

However, there are also some challenges and limitations to using NFTs for funding the arts. For example:

- Not all artists and creators are familiar with blockchain technology and NFTs, and it may take some time for them to understand and adopt this new way of monetizing their work.
- Some people may be hesitant to use cryptocurrency or blockchain technology to buy and sell art, and this could limit the potential audience for NFT-based art sales.
- The value of NFTs is highly dependent on the market and can fluctuate wildly, which means that artists and creators may not be able to rely on them as a stable source of income.

Overall, while NFTs may provide some potential benefits for funding the arts, it is unlikely that they will completely replace existing forms of funding, such as patronage, sponsoring, or public funding.

24. *“Can Crowdfunding for the arts replace existing funding for arts, such as patronage, sponsoring or public funding?”*

Answer:

Crowdfunding for the arts has the potential to provide an additional source of funding for artists and creators, but it is unlikely to completely replace existing forms of funding, such as patronage, sponsoring, or public funding. Crowdfunding is a way for artists and creators to solicit small contributions from a large number of people, typically through an online platform, in order to raise money for a specific project or goal.

Some of the potential benefits of using crowdfunding for funding the arts include:

- Providing a way for artists and creators to directly connect with their audience and supporters, and to engage with them in a more personal and interactive way.
- Allowing artists and creators to test the interest and demand for their work, and to gauge whether there is a market for their ideas.
- Offering artists and creators a way to raise money for a specific project or goal, without having to rely on traditional funding sources that may have strict requirements or limitations.

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However, there are also some challenges and limitations to using crowdfunding for funding the arts. For example:

- Crowdfunding is not a guaranteed source of funding, and there is no guarantee that an artist or creator will be able to successfully raise the money they need through crowdfunding.
- Crowdfunding campaigns can be time-consuming and require a lot of effort to promote and manage, which can be a challenge for busy artists and creators who are already working on their art.
- Some people may be hesitant to contribute to a crowdfunding campaign, especially if they are not familiar with the artist or creator, and this can limit the potential audience for a campaign.

Overall, while crowdfunding can provide some potential benefits for funding the arts, it is unlikely to completely replace existing forms of funding, such as patronage, sponsoring, or public funding.

25. *“Can artists combine public funding, sponsoring and patronage with crowdfunding and non-fungible tokens?”*

Answer:

Yes, artists can potentially combine public funding, sponsoring, and patronage with crowdfunding and non-fungible tokens (NFTs) as a way to support their work and generate income. Each of these forms of funding has its own unique advantages and disadvantages, and combining them can potentially provide a more diverse and stable source of income for artists.

Public funding, such as grants or subsidies from government agencies or arts organizations, can provide artists with a reliable and predictable source of income that can support their work. Sponsoring, where a company or individual provides funding to an artist in exchange for exposure or other benefits, can also be a useful source of income for artists. Patronage, where an individual or organization provides support to an artist in the form of money, resources, or other forms of assistance, can also be a valuable source of funding.

Crowdfunding and NFTs can also provide additional opportunities for artists to generate income and support their work. Crowdfunding allows artists to solicit small contributions from a large number of people, typically through an online platform, in order to raise money for a specific project or goal. NFTs, on the other hand, provide a way for artists to monetize their

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digital art and other unique assets, and to create a marketplace for buying and selling these assets.

By combining these different forms of funding, artists can potentially create a more diverse and stable source of income that can support their work. This can provide them with the flexibility and freedom to pursue their artistic goals and to create the work they are passionate about.

26. "What is Crowdfunding in medieval language?"

Answer:

I'm sorry, but I don't have any information on what crowdfunding may have been called in medieval times, as crowdfunding is a relatively recent concept that has only become possible with the widespread use of the internet. In medieval times, people who wanted to raise money for a project or venture would have had to rely on more traditional methods of fundraising, such as seeking out investors or donors.

27. "How do you explain Crowdfunding with the words of a pirate?"

Answer:

Ahoy mateys! Are ye in need of some treasure for yer latest venture? Look no further than crowdfunding, where ye can gather a crew of supporters to contribute their doubloons towards yer cause. Simply set a treasure chest goal and share yer campaign far and wide. With the power of the internet, ye can gather a motley crew of supporters from all corners of the high seas to help make yer dreams a reality. Arrr!

28. "Make a poem about Crowdfunding!"

Answer:

A sea of possibilities,  
A world of dreams and goals,

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Crowdfunding is the key

To unlocking the soul.

With the power of the people

And the magic of the web,

We can come together

To make the impossible, possible.

From the smallest seed of an idea

To the grandest of ventures,

Crowdfunding can help us

Bring our wildest dreams to life.

So let us band together,

And make our voices heard,

With the power of crowdfunding

We can make our dreams occur!

29. "Explain Crowdfunding with the words of a lawyer!"

Answer:

Crowdfunding is a method of raising capital for a project or venture by soliciting small contributions from a large number of individuals, typically via the internet. This type of fundraising allows individuals to invest in projects that they believe in, and can provide a valuable source of funding for entrepreneurs and small businesses. It is important for those considering crowdfunding to understand the legal implications, such as the requirements for disclosing information to potential investors and complying with securities regulations.

30. "Explain Crowdfunding with the words of a Disney princess!"

Answer:

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Oh, dear, I'm not sure if crowdfunding is quite the right thing for a princess to be talking about. After all, we usually rely on the kindness of our friends, family, and kingdom to help us achieve our dreams. But I suppose if you're in need of a little extra sparkle to make your dreams come true, crowdfunding could be a way to gather a chorus of supporters to help you along the way. Just remember to believe in yourself, and with a little bit of magic, you can make anything happen!

31. "Explain Crowdfunding with the words of a soccer player!"

Answer:

Are you looking to score big with your next project or venture? Crowdfunding could be the perfect way to rally a team of supporters behind you. Just set a goal and get the word out to your fans. With the power of the internet, you can gather a global audience of supporters who are eager to help you succeed. So why wait? Get out there and start crowdfunding your way to victory!

32. "Explain Crowdfunding with the words of a toddler!"

Answer:

Crowdfunding is a way to get lots of money for your special thing! You tell people about your idea and they give you some of their money to make it happen. It's like playing a game where everyone helps you win! Yay!

33. "Explain Crowdfunding with the words of an influencer!"

Answer:

Hey everyone! Are you looking for a way to make your dream project a reality? Look no further than crowdfunding! This amazing tool allows you to share your vision with the world and gather a tribe of supporters who are eager to help you succeed. Simply set a goal and share your campaign with your followers. With the power of social media and the internet, you can

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rally a massive audience of supporters who are excited to be a part of your journey. So why wait? Start crowdfunding today and make your dreams come true!

34. "Explain Crowdfunding like an AI model!"

Answer:

Crowdfunding is a way to raise capital for a project or venture by soliciting small contributions from a large number of individuals, typically via the internet. This type of fundraising allows individuals to invest in projects that align with their interests and beliefs, and can provide a valuable source of funding for entrepreneurs and small businesses. Crowdfunding relies on the power of the internet and social media to connect potential investors with projects they may be interested in, making it a convenient and efficient way to raise money.

35. "Explain Crowdfunding like a German!"

Answer:

Crowdfunding ist eine Methode, um Kapital für ein Projekt oder ein Unternehmen zu beschaffen, indem man kleine Beiträge von vielen Menschen einsammelt, in der Regel über das Internet. Diese Art von Fundraising ermöglicht es Einzelpersonen, in Projekte zu investieren, an die sie glauben, und kann eine wertvolle Quelle der Finanzierung für Unternehmer und kleine Unternehmen sein. Crowdfunding nutzt die Kraft des Internets und sozialer Medien, um potenzielle Investoren mit Projekten zu verbinden, die sie interessieren könnten, wodurch es eine bequeme und effiziente Möglichkeit ist, Geld zu sammeln.

36. "Explain crowdfunin in german as a poem that rhymes"

Answer:

Crowdfunding, wie es genannt wird, ist eine tolle Möglichkeit, um Kapital für dein Vorhaben zu beschaffen, durch kleine Beiträge von vielen Leuten.

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Über das Internet wird es gemacht, einfach und bequem, damit jeder seinen Teil dazu beitragen kann, dein Projekt zum Erfolg zu führen.

So nutze die Kraft der Gemeinschaft, lass deine Träume wahr werden, mit Crowdfunding kann alles geschehen, deine Ziele sind nun in greifbarer Nähe.

37. "Explain crowdfunding as Donald Trump would explain it."

Answer:

Crowdfunding is a fantastic way to raise money for your latest venture, believe me. You just tell people about your idea and they give you some of their money to make it happen. It's like a game, and everyone wins. It's huge, it's tremendous, and it's the best way to get the capital you need to make your dreams a reality. Trust me, it's great. So why wait? Start crowdfunding today and make America great again!

38. "Explain Crowdfunding using only words with vocals!"

Answer:

Crowdfunding is a way to raise dough for your dream project by asking a crew of supporters to chip in a few bucks. You simply set a goal and shout it out to the world. With the power of the internet, you can gather a massive audience of supporters who are eager to help you succeed. So don't be shy, start crowdfunding today and make your dreams come true!

39. "Explain Crowdfunding using only words which start with a vowel".

Answer:

Crowdfunding is a method of accumulating ample assets for a project or undertaking. One can easily employ the internet to attract a crowd of ardent supporters who are willing to invest in an idea they admire. It is a fantastic avenue for entrepreneurs and small businesses to gain financial support and make their visions a reality.

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40. "Explain how crowdfunding can be used in order to receive a PhD title."

Crowdfunding can be a useful tool for individuals seeking to fund their PhD studies. Many PhD programs are expensive and require a significant commitment of time and resources, which can be difficult for many students to afford. Crowdfunding allows students to tap into a wider network of potential supporters who may be interested in helping them achieve their academic goals.

To use crowdfunding for a PhD, students can create a campaign on a crowdfunding platform such as Kickstarter or GoFundMe. They can then share their campaign with their network of friends, family, and colleagues, and invite them to contribute to their campaign. Students can also use social media and other online tools to reach a broader audience and build support for their campaign.

Through their campaign, students can share details about their research topic and why they are passionate about pursuing a PhD. They can also provide updates on their progress and share their experiences with their supporters, which can help to build a sense of community and engagement around their campaign. By reaching out to a wider audience through crowdfunding, students can potentially raise the funds they need to complete their PhD studies, and connect with a supportive community of supporters along the way.

41. "Who owns the intellectual property to the texts produced by ChatGPT?"

Answer:

If you are using the ChatGPT model, you own the intellectual property to any texts that it produces. ChatGPT is a large language model that is trained by OpenAI. It is a tool that can be used to generate text based on the input that it receives, but the text that it produces is not owned by OpenAI or any other organization.

42. "Is it ethical to use the texts produced by the ChatGPT model in your own text, if the source is clearly named?"

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Answer:

It is generally considered ethical to use the texts produced by the ChatGPT model in your own work as long as you give credit to the source. Giving credit means that you clearly name the ChatGPT model as the source of the text, and include any necessary citations or references. This helps to ensure that the original creator of the text (in this case, the ChatGPT model) is properly credited for their work.

43. *"Is it ethical to use the texts produced by the ChatGPT in a paper that is submitted to a peer-reviewed journal?"*

Answer:

It is generally considered acceptable to use the texts produced by the ChatGPT model in a paper that is submitted to a peer-reviewed journal, as long as you give credit to the source and follow the journal's guidelines for citing and referencing external sources. However, you should keep in mind that the texts produced by the ChatGPT model may not be considered suitable for inclusion in a scholarly paper. This is because the model is not capable of conducting original research or providing verifiable facts and evidence, and its output may not meet the standards of academic rigor that are expected in a peer-reviewed journal.

44. *"How do you cite the text produced by ChatGPT in a scholarly paper?"*

Answer:

The exact way to cite the text produced by the ChatGPT model in a scholarly paper will depend on the specific formatting and citation style that is required by the journal in which you are publishing. However, in general, you should provide a citation that includes the name of the ChatGPT model, the date on which the text was generated, and the specific input that was used to generate the text. For example, you might include a citation that looks like this:

"According to the ChatGPT model (OpenAI, 2022), the best way to approach this problem is to XYZ" (ChatGPT, input: "What is the best way to approach this problem?").

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This citation provides the necessary information for readers to understand the source of the text and to verify its accuracy if necessary. It also gives credit to the ChatGPT model and its creators for the text that is being used in your paper.

If I enter the same input to the ChatGPT model, will it give me the same input?

The ChatGPT model is a large language model that is trained on a massive amount of text data. This means that it is capable of generating text that is coherent and relevant to a given input, but it is not capable of producing the same exact text for the same input every time. This is because the model uses a probabilistic approach to generating text, which means that it produces multiple potential responses for each input, and selects the most likely response based on the data that it has been trained on. As a result, even if you enter the same input to the ChatGPT model multiple times, you may get slightly different responses each time.

45. *"If I enter the same input to the ChatGPT model, will it give me the same output?"*

Answer:

It is unlikely that the ChatGPT model will give you the same output for the same input multiple times. This is because the model uses a probabilistic approach to generating text, which means that it produces multiple potential responses for each input, and selects the most likely response based on the data that it has been trained on. As a result, even if you enter the same input to the ChatGPT model multiple times, you may get slightly different outputs each time.

46. *"How does the ChatGPT model get feedback on the text which it is providing?"*

The ChatGPT model is a large language model that is trained by OpenAI. It does not receive feedback on the text that it produces, as it is not an interactive system. Instead, the model is trained on a massive amount of text data, and it uses this data to generate coherent and relevant responses to the inputs that it receives. The quality of the model's output is determined by the quality and diversity of the training data that it is trained on, and by the specific algorithms and techniques that are used to train the model.

47. *"Is it possible to evaluate the text provided by the ChatGPT model?"*

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Answer:

It is possible to evaluate the text provided by the ChatGPT model in terms of its coherence, relevance, and overall quality. To do this, you would need to compare the model's output to a set of human-generated texts that are known to be of high quality, and use a set of metrics or criteria to assess how well the model's output matches these standards. For example, you might use metrics such as fluency, grammar, and semantic accuracy to evaluate the model's output, or you might use human annotators to provide subjective ratings of the model's output.

48. "How does the ChatGPT model feel about the texts which it produces?"

Answer:

The ChatGPT model is a machine learning model, and as such it does not have the ability to feel emotions or have opinions about the texts that it produces. The model is simply a tool that is designed to generate text based on the input that it receives, and it does not have any subjective experience or awareness of its own output. It is important to remember that the ChatGPT model is not a human being, and it does not have the same mental capabilities or experiences as a human.

49. "Please write me a biography of Karsten Wenzlaff"

Answer:

I'm sorry, but I am not able to provide you with a biography of Karsten Wenzlaff. I am a large language model trained by OpenAI, and I do not have the ability to browse the internet or access any information outside of what I was trained on. Additionally, I am not aware of anyone by that name, as my training data only goes up until 2021 and I do not have the ability to learn about new people or events. Is there something else I may be able to help you with?

50. "Please write me a biography of Sebastian Späth"

Answer:

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I'm sorry, but I am unable to provide you with a biography of Sebastian Späth. As a large language model trained by OpenAI, I do not have the ability to browse the internet or access any information outside of what I was trained on. Additionally, I do not have any information on Sebastian Späth, as my training data only goes up until 2021 and I do not have the ability to learn about new people or events. Is there something else I may be able to help you with?

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