

# **The future of marketing: How brands can increase the purchase intention towards their NFTs**

Laurens Aalders (S3061523)  
Master Thesis  
1<sup>st</sup> supervisor: Dr. Alvino  
2<sup>nd</sup> supervisor: Dr. Carminati  
Wordcount: 10184

## **Abstract**

Brand Non-fungible Tokens (BNFTs) are a new blockchain technology that marketers can use to reach potential consumers. However, little is known about the factors that influence the buying behaviour towards BNFT, while it is of high importance for marketing managers to play into this trend or they might lose their competitive advantage when NFTs become mainstream. Therefore, this research focusses on how companies can influence the purchase intention of consumers towards their BNFT. To investigate this, we used the Theory of Planned Behaviour (TPB) and extended the model by using product knowledge as a moderator. An online questionnaire was distributed, and 242 valid respondents were gathered. The data has been analysed with the use of a multiple regression analysis and multiple significant effects have been found. Showing significant positive relations between attitude, subjective norms and perceived behavioural control in relation to purchase intention towards BNFTs. Additionally, a significant moderating effect of product knowledge was observed on the relation between attitude and purchase intention, meaning that product knowledge strengthens this relationship. Using the results of the study multiple recommendations for both theory and practice were developed. For example, reinforcing the validity of the TPB model and countering previous studies. Another example, cultivate positive social influences or streamlining the purchase process can lead to an increase of purchase intention towards BNFTs.

**Keywords: BNFTs, Consumer Behaviour, Theory of Planned Behaviour, Product Knowledge**

## Table of Contents

Chapter 1: Introduction.....	4
Chapter 2: Theory and model development .....	7
2.1 Brand Non-Fungible Tokens .....	7
2.2 Theory of Planned Behaviour .....	9
2.3 Attitude.....	10
2.4 Subjective norms .....	11
2.5 Perceived Behavioural Control .....	11
2.6 Purchase Intention .....	12
2.7 Product Knowledge .....	12
2.8 Conceptual Model .....	14
Chapter 3: Methodology .....	15
3.1 Research Design .....	15
3.2 Sampling and Data Collection & Research instrument .....	16
3.3 Measurement .....	16
3.4 Data analysis.....	19
3.5 Assumptions .....	19
Chapter 4: Results .....	21
4.1 Demographics.....	21
4.2 Control Variables .....	22
4.3 Regression Results.....	23
Chapter 5: Discussion and Conclusion.....	28
5.1 Discussion .....	28
5.2 Theoretical Implications .....	31
5.3 Practical Implications.....	32
5.4 Limitations and future research direction.....	33
5.5 Conclusion .....	34
Appendixes .....	36
References.....	36
Questionnaire.....	41
SPSS output .....	43

## Chapter 1: Introduction

Blockchain technology has opened up innovative ways for marketers to engage with potential customers (Haynes & Hietanen, 2023). One emerging marketing tool, facilitated by blockchain, are non-fungible tokens (NFTs). NFTs are digital assets on the blockchain that represent ownership of a unique item or content (Colicev, 2023). Peres et al. (2023) define NFTs as: “*cryptographic assets on a blockchain that possess distinct identification codes and metadata, differentiating them from one another.*” (p. 3). These digital assets have emerged as a significant asset in Web3, offering unique opportunities for brands to enhance their digital presence and engage with customers in novel ways (Peres, Schreier, Schweidel, & Sorescu, 2023). NFTs have gained an increasing traction in the crypto market, with an organic trading volume of approximately 24.7 billion US dollars (Arcenegui, 2021). One the most expensive NFTs sold is from the artist Beeple his art piece “The First 5000 Days” sold for 69 million US dollars, emphasizing the opportunities for artists (Kastrenakes, 2021). Dowling (2021) highlights the growing popularity of NFT markets as a public success of blockchain technology, facilitating the trade of these blockchain-based rights to digital assets. The use case of NFTs is relatively broad, since they can be used as digital representations of tangible assets (Colicev, 2023), including digital paintings, collectibles, gaming avatars, and tokens (Mamidala & Kumari, 2023). Brands can utilize NFTs for offline use cases such as private parties, merchandise, and premium services to increase purchase intention towards the NFT (Colicev, 2023).

Creighton (2022) showed four key reasons why individuals would participate in NFTs: Supporting an artist avoiding the companies that are currently controlling creative industries, The collectability similar to other collectables like baseball cards, Investing since some NFT owners believe the price of that NFT will go up, and Being part of a community since many of the NFT projects turn into a small pact of NFT holders. There are more reasons why people would participate in NFTs, namely, securing digital ownership, gaming where players can earn NFTs and sell them in an open market, and achieving social status by buying expensive NFTs and showing that as their profile picture on different social media platforms (Amoros, 2023). Different reasons to participate in the NFT space are based on psychological theory of planned behaviour (TPB) of Ajzen (1991), these reasons are: the perception of people they believe in, the technical features, the established legal system, the impact of the market, and confidence in the technology (Albayati, Alistarbadi & Rho, 2023). These articles showcase that there are many different reasons why a consumer would participate in NFTs.

Multiple factors are important for consumers to buy an NFT: The transparency of transaction, the certificate of asset authenticity, digital ownership rights, cryptography and digital signatures, control of personal information, trust and history and transaction records (Amoros, 2023). FM Contributors (2023) explain that for the popularity of an NFT, the role of marketing is a driver for interest and excitement, combined with a sense of exclusivity and ownership creating the motivation to buy the NFT. Previous research also explains drivers for purchasing NFTs, including emotional value, monetary value as an investment tool, functional value, and social value in the form of being part of an NFT community (Yilmaz, Sagfossen & Velasco, 2023). This shows that there is a broad way to create a valuable NFT according to the consumers.

Brands can increase their brand awareness when implementing their own Brand NFTs (BNFTs) (Colicev, 2023). There are multiple ways how brands can utilize BNFTs to generate a positive brand attitude: scarcity, financial value, prestige, uniqueness, originality, and communication of BNFTs have a positive effect on the attitude towards the brand (Lee, Ho, and Xie, 2023). Emphasizing the many use cases for brands to implement NFTs as a marketing tool. We know that emotional value, monetary value, functional value, and social value are drivers for people to purchase NFTs (Albayati et al., 2023; Yilmaz et al., 2023). We also know that brands can utilize BNFTs to generate a positive brand attitude (Lee et al., 2023). Additionally, Cohan, and Paschen (2023) emphasize the importance of brands adjusting to and developing NFTs within their strategy.

However, while Albayati, Alistarbadi, and Rho's (2023) work is an exception since they used a modified version of Ajzen's (1991) Theory of Planned Behaviour (TPB) to study an individual participating in the NFT space, prior research overall lack an application of the TPB framework towards understanding the buying behaviour of BNFTs. Furthermore, studies around NFTs did not incorporate consumer product knowledge as a moderator which was proven as a moderator for the TPB variables (Chiou, 1998; Kim & Hwang, 2020) Product knowledge might especially be interesting, since the NFT space is a rapidly evolving space with novel concepts like blockchain technology (Peres et al., 2023). Managers right now are not having the necessary guidance to develop effective strategies around the purchase intention of their NFTs. This research bridges the gap in understanding the factors that drive consumers to purchase BNFTs and the role that product knowledge has on these factors. By investigating these relationships, we provide actionable insights for marketers. These insights can be used to increase the purchase intention towards their BNFTs and guiding their brand through the NFT space. Therefore, the following research question was developed:

*RQ: How can brands increase the purchase intention towards Brand NFTs?*

## **Academic and Managerial Relevance**

The study has academic relevance, since the study contributes significantly to understanding consumer behaviour within the dynamic landscape on the emerging and dynamic NFT market. This study aligns with the research of Colicev (2023) who proposed enhancing the purchase intention towards NFTs. Additionally, the study is an addition to Lee et al. (2023) who propose that brands can utilize NFTs for a positive brand attitude. The TPB framework of Ajzen (1991) is validated once more confirming the significant influence of attitudes, subjective norms, and perceived behavioural control on purchase intention towards BNFTs. Suggesting that the framework can be used for studying emerging digital technologies. The study of Sniehotta, Presseau, and Araújo-Soares (2014) suggest that the TPB framework on its own it not sufficient to explain human behavior. Therefore, we added the variable product knowledge as a moderator in the framework, similar to the work of Chiou (1998) who had found a significant moderating effect of product knowledge. The addition of the moderator resulted in outcomes that contradicted some of the existing findings. The theoretical relevance of this study lies in the improvement of our understanding on consumer behaviour in the context of emerging digital technologies.

This is a relevant subject for practice as Cohan and Paschen (2023) propose that marketing managers should implement NFTs in their strategy or they might lose their competitive advantage when NFTs become mainstream. The study highlights various strategies and approaches that managers can implement to effectively increase the purchase intention towards their BNFTs. Companies should foster positive attitudes towards their BNFT, leverage positive social influences, streamlining the purchasing process and educating consumers on BNFTs. The managerial relevance of this study lies in the guidance for companies that want of effectively increase the purchase intention towards their BNFTs.

## **Thesis Structure**

Chapter 2 describes the theories and model development. The methodology is further elaborated on in chapter 3, explaining the sample, instrument, and data analysis. Afterwards, the in chapter 4 analysed results are shown, starting with demographics, control variables, reliability analysis and the hypothesis results. Following, the results are discussed in chapter 5, multiple managerial and practical recommendations are given, the study is concluded, and limitations and future research recommendations are shown.

## Chapter 2: Theory and model development

In this chapter, we delve deeper into the core theories surrounding purchase intention and NFTs while developing the conceptual model to guide our study.

### 2.1 Brand Non-Fungible Tokens

Brands can utilize NFTs in many ways (Mamidala & Kumari, 2023), creating interesting digital collectables, giving consumers access to a private group with only NFT holders, skins for gaming, prove of ownership of expensive bottles of wine that will be held in a safe environment until you trade or hand in the token, and many more use cases. In this study NFTs have been categorized in the following four categories: Limited Edition Collectables, Digital Asset of Tangible Products, Gaming Object and Tokens. Limited edition of digital collectables are digital collectables that do not have another use then collecting and no tangible counterpart , Digital Assets of Tangible Products are a digital copy of an asset that someone receives when buying a tangible asset, Gaming Objects are digital assets that one can use in an in-game situation, and Tokens are digital tokens that someone can use to get access to certain things (Colicev, 2023; Tavares et al., 2023). In Table 1 the four categories are described with empirical evidence and real-world examples. Colicev (2023) proposes that NFTs have a use case to generate brand awareness in the pre-purchase stage and creating purchase intention in the purchasing stage. According to Cohan, and Paschen (2023) marketing managers should implement NFTs in their strategy or they might lose their competitive advantage when NFTs become mainstream.

**Table 1.** NFT categories

Type	Characteristics	Example	Source	URL
Limited edition collectable	Collectable, non-gaming, non-token, and non-tangible counterpart	Art collaboration, Cards, stamps.	(Colicev, 2023)	<a href="https://www.swoosh.nike/">https://www.swoosh.nike/</a> (Digital Nike shoe collectable, no tangible copy) <a href="https://www.gucci.com/us/en/stories/article/10ktf-gucci-grail">https://www.gucci.com/us/en/stories/article/10ktf-gucci-grail</a> (Digital collectables of Gucci) <a href="https://collectibles.mclaren.com/">https://collectibles.mclaren.com/</a> (McLaren f1 digital art per race track) <a href="https://themicrodrop.pepsi.com/programs-collections">https://themicrodrop.pepsi.com/programs-collections</a> (Pepsi art)
Digital asset of tangible product	Copy of tangible counterpart	Sneakers, fashion items, artwork.	(Colicev, 2023)	<a href="https://luckytrader.com/nft/clonexforging/news/nike-x-rtfkt-forging-event-has-started">https://luckytrader.com/nft/clonexforging/news/nike-x-rtfkt-forging-event-has-started</a> (Nike, example digital asset into tangible sneaker) <a href="https://www.endstate.io/">https://www.endstate.io/</a> (Digital sneaker when buying a sneaker) <a href="https://blockbar.com/marketplace?sort_by=recommended&amp;page=1">https://blockbar.com/marketplace?sort_by=recommended&amp;page=1</a> (NFTs linked to expensive liquor)



**Table 1 (continued)**

Gaming	In game objects		Outfits, Skins, Destinations , Loot boxes, characters.	(Tavare s et al., 2023)	<a href="https://www.coindesk.com/web3/2023/06/20/nike-brings-swoosh-to-fornites-240m-users-with-airphoria-virtual-experience/">https://www.coindesk.com/web3/2023/06/20/nike-brings-swoosh-to-fornites-240m-users-with-airphoria-virtual-experience/</a> (Nike Fortnite skins) <a href="https://godsunchained.com/">https://godsunchained.com/</a> (Card game where all cards are NFTs)
Virtual tokens		Token, access token	Loyalty programs, access to events or discounts.	(Colicev , 2023)	<a href="https://odyssey.starbucks.com/">https://odyssey.starbucks.com/</a> (Starbucks token loyalty program) <a href="https://nftplazas.com/grand-prix-nft-rewards/">https://nftplazas.com/grand-prix-nft-rewards/</a> (formula1 loyalty program)

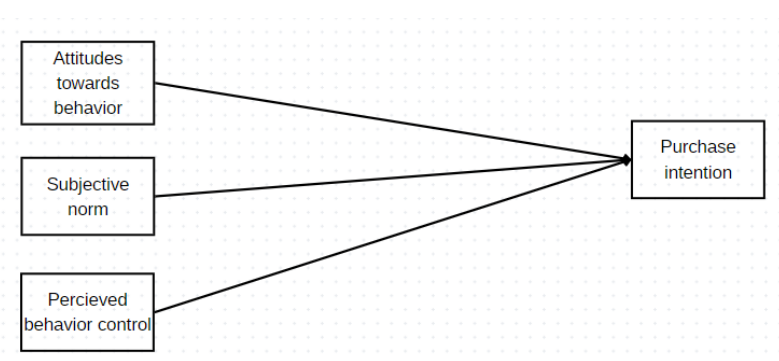
## 2.2 Theory of Planned Behaviour

This study draws upon the theory of planned behavior (TPB) of Ajzen (1991), TPB is an established theory, with a broad applicability and systematic approach. TPB is very flexible and many additional variables can be added to the framework (Simpson et al., 2022). TPB has been widely applied starting with a study in health behavior, now a lot of studies into marketing and environmental control behavior, which show the wide applicability of the framework (Chen and Deng, 2016; Si et al., 2019). The theory is also applied to create implications for changing certain behaviors (Fife-Schaw et al., 2007).

The TPB suggests that there are three main factors influencing an individual's behavioral intentions. The attitude towards behavior, this refers to an individual's personal evaluation or belief about performing a particular behavior. It involves assessing whether the person perceives the behavior as favorable or unfavorable. subjective norms, are social influences that affect an individual's intention to engage in a specific behavior. It considers the perceived social pressure and the importance a person places on meeting others' expectations. And perceived behavioral control, reflects an individual's belief in their ability to successfully perform the behavior. It considers the perceived ease or difficulty of performing the behavior and the individual's confidence in their own capabilities. TPB is a well-established theory used in many research areas, like mental and physical health, addiction, social psychology, and marketing. (Farid et al., 2023; Kagee & Freeman, 2017; Neighbors, Foster & Fossos, 2023; Şimşekoğlu, & Lajunen, 2008). While TPB is a well-established theory it does have its weaknesses, since according to this theory human behavior is only predicted by attitudes, subjective norms and perceived behavioral control (Sniehotta et al.,

2014) Since TPB does not take into account emotions and situational factors therefore many researchers nowadays are extending the model (Sniehotta et al., 2014). This is showing that the researchers do not believe the model on its own is sufficient to predict human behavior (Sniehotta et al., 2014), the theory. This is one of the reasons why, in this study, we extend our model by adding product knowledge as a moderator.

**Figure 1.** Theory of Planned Behavior



2.3 Attitude

Attitudes refer to how an individual feels about the behavior and the assessment of the consequences and they can form a negative or positive attitude towards it (Ajzen, 1991) People's attitudes can strongly affect their actions, but these attitudes can also change based on outside factors. A person's attitude towards doing something is based on what they think will happen as a result and how much they value that action (Ajzen, & Fishbein, 1972). Some researchers have discovered that attitudes have a significant impact on what people intend to do, and there is a strong connection between attitudes and intentions (Warshaw, 1980) . The paper of Berki-Kiss, and Menrad (2022) find a significant positive relationship between attitude and the purchase intention of fairtrade roses. Smith & Palino (2010) find a significant positive relation between attitudes towards organic produce and the purchase intention towards organic produce. Farid et al. (2023) finds a significant positive relation between attitudes and the purchase intention towards dairy products. These are all different products than BNFTs, but explain that there is a significant effect of attitudes on purchase intention in different product categories. The paper of Perez et al. (2023) found that attitudes have a significant positive impact on consumer NFT participation. Moreover, the study of Albayati, Alistarbadi, and Rho (2023) found a significant positive relation between attitude towards the behavior and the intention towards NFT engagement. This does not show a significant relation between attitude and purchase intention however, it suggests that attitudes have a significant effect on behavior in the NFT space. Since, purchase intention is a certain behavior we developed the following hypothesis:

*H1: An individual's attitude towards BNFTs is positively associated with consumers' intention to purchase them.*

## 2.4 Subjective norms

Subjective norms refer to an individual's perceived social pressure from external sources which can encourage or discourage them from participating in a certain behaviour (Ajzen, 1991). Lam, Pine, and Baum (2003) explain that subjective norms suggest that a person is more inclined to intend to carry out a particular action if they sense influence from the individuals who matter most to them regarding that behaviour. They encompass two essential elements: normative beliefs and motivation to comply. Normative beliefs involve a person's judgment of what the people they hold in high regard think about whether they should perform the behaviour in question. The motivation to comply represents the individual's willingness to follow these perceived beliefs (Lam et al., 2003). The paper of Perez et al. (2023) did not find a significant effect of subjective norms on NFT participation, explaining that consumers did not feel confident in trust others' suggestions. However, subjective norms have been proven to have a significant effect on the purchase intention towards other products like, organic roses in the study of Berki-Kiss, and Menrad (2022). Additionally proven in the research of Smith, and Paulino (2010) the stronger the subjective norms the more likely a person will purchase organic food. Albayati, Alistarbadi, and Rho (2023) also find a significant impact of subjective norms towards engaging in NFTs. Therefore, we propose the following hypothesis:

*H2: Subjective norms are positively associated with consumers' intention to purchase brand NFTs.*

## 2.5 Perceived Behavioural Control

Perceived behavioural control is based on what individuals believe about their ability to perform a specific behaviour (Ajzen, 1991). These beliefs are linked to factors that can make the behaviour easier or harder to do, since the more resources and opportunities an individual's beliefs they have the less they are afraid for obstacles when participating in a behaviour (Ajzen, 1991). These resources include the skills and knowledge required, the availability of time and resources and, support from others (Ajzen, 2020). The study of Farid et al., (2023) find that perceived behavioral control does not significantly impact a consumers' purchase intention. However, perceived behaviour control has been proven to

have an influence on a consumers purchase intention in many other studies. For example, In the study of Moon (2022) the researcher finds a significant positive relationship with perceived behavioural control and the purchase towards electric vehicles. Additionally in the paper of Lim, and An (2021), the authors found a significant positive relationship between perceived behavioural control and the purchase intention towards Yak-Sun, a medicine food. The study of Perez et al. (2023) identifies a significant and positive impact of perceived behavioural control on NFT participation. Likewise, Albayati, Alistarbadi, and Rho (2023) found a significant impact of perceived behavioral control on NFT engagement. Suggesting there is a significant effect of attitude towards behaviour in the NFT space.

We propose the following hypothesis:

*H3: Perceived behavioural control positively impact consumers' intention to purchase brand NFTs.*

## 2.6 Purchase Intention

Ajzen and Fishbein (1980) explain that a person's intention is a strong predictor of whether a person will perform the behavior. In the context of consumer behavior, purchase intentions serve as a determinant of the actions an individual takes to acquire certain products or services. Extensive empirical research, as evidenced in studies by Farid et al. (2023), Smith and Palino (2010), and Suryvanashi, Bhatt, and Singh (2023), consistently highlights the significance of the TPB variables in shaping purchase intention. Farid et al. (2023) focused on the dairy sector in India, finding positive relations of the TPB variables and the consumers' intentions to purchase dairy products. Meanwhile, Smith and Palino (2010) delved in the organic food sector, finding significant relationships between the TPB construct and consumers' intention to adopt organic food products. Similarly, Suryvanashi et al. (2023) contributed to this body of knowledge by investigating TPB variables within the context of the organic food sector also finding significant relationships between the TPB variables and purchase intention towards organic food. These varied studies collectively show the robustness of the TPB framework in predicting consumers behavior on different product sectors. Therefore, we expected that we could predict the purchase intention towards Brand NFTs with the TPB variables.

## 2.7 Product Knowledge

Product knowledge, as defined by Kim and Hwang (2020), relates to an individual's familiarity with a specific product. Product knowledge has been studied as one of the main factors influencing the evaluation and adoption of a new product (Kim & Hwang, 2020). Individuals

with extensive product knowledge demonstrate an ability to make informed decisions based on criteria stored in their memory about the product, a concept established by Bettman and Park (1980). On the other hand, individuals with limited product knowledge often lack confidence in their consumption decisions, leading them to rely on simplified decision-making rules, as observed by Chiou (1998). Chiou's study further delved into the relative impact of factors rooted in the Theory of Planned Behavior (TPB) on purchase intention, considering various levels of product knowledge, and confirmed the moderating effect of product knowledge on the relation between attitudes, subjective norms, perceived behavioral control on purchase intention.

### **2.7.1 Attitude**

Suggested in the study of Chiou (1998) there is a significant moderating effect of product knowledge on the relation between attitude and purchase intention. Another study of Berger, Ratchford, and Haines (1994) show the relation between attitude and purchase intention to be significantly stronger when the consumption is perceived to be based on more products knowledge. Additionally Kim and Hwang (2020) explained that product knowledge significantly strengthened the relation between attitude and behavioral intention in another novel technology namely drone based food delivery. The study of Nautiyal and Lal (2022) also found a significant effect of knowledge on the relation between attitude and the purchase intention towards organic products. The studies that are mentioned above all suggest that the relation between attitude and purchase intention to be significantly strengthened by an increase of product knowledge. Therefore, the following hypothesis was created:

*H4: The effect of an individual's positive attitude towards BNFTs on the consumers' intention to purchase them becomes more positive when product knowledge increases.*

### **2.7.2 Subjective Norms**

According to Chiou (1998) product knowledge has a significant effect on the relation between subjective norms and purchase intention. Contradicting this the study of Nautiyal and Lal (2022) was unable to find support for a moderating effect of knowledge on the relation between subjective norms and purchase intention towards organic products. However, there are multiple studies that find support for this effect. For example the significant findings of Chen and Liang (2016) consumers with a higher product knowledge will be less effected by their surrounding and their intention to purchase a product will be based on their own values. The research of Chen and Deng (2016) investigated green purchase intention from the perspective of product knowledge and found that the relation between subjective norms and

purchase intention is more positive when the consumer has a high product knowledge. The study of Kim and Hwang (2020) about drone food delivery systems also suggested that product knowledge significantly strengthened the relation between subjective norms and behavioral intent. Therefore we suggest that product knowledge also strengthens the relationship between subjective norms and purchase intention towards BNFTs and the following hypothesis was developed:

*H5: The effect of subjective norms on consumers' intention to purchase brand NFTs is more positive when product knowledge increases.*

### **2.7.3 Perceived Behavioral Control**

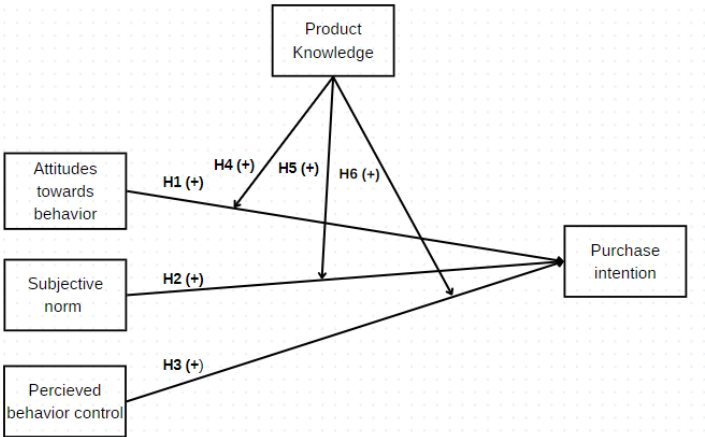
Chiou (1998) found that there is a significant effect of product knowledge on the relation between perceived behavioral control and purchase intention of a computer printer, which was a novel product during the time of this study. Chiou (1998) suggest that especially for products that require confidence or knowledge this relation is a must to add to the framework. The study of Chen and Deng (2016) explains that an individual with a lower product knowledge would think of significantly more negative effects when facing low perceived behavioral control when purchasing a product, they might feel like they are wasting time. However, an individual with a high product knowledge significantly cares less about the perceived behavioral control (Cheng & Deng, 2016). This means that product knowledge significantly strengthens the relation between perceived behavioral control and purchase intention. As a result of the study of Cheng and Deng (2016) we propose that product knowledge strengthens the relation between perceived behavioral control and the intention to purchase a BNFT. Therefore, we present the following hypothesis:

*H6: The effect of perceived behavioural control on consumers' intention to purchase brand NFTs is more positive when product knowledge increases*

## **2.8 Conceptual Model**

With the hypotheses the model in figure 1 was developed. This model shows the effect of attitudes, subjective norm and perceived on purchase intention towards BNFTs (H1, H2, H3), and the moderating effect of product knowledge on attitudes subjective norm and perceived behavior control towards purchase intention (H4, H5, H6).

**Figure 2.** Conceptual model



### Chapter 3: Methodology

In this chapter, the authors outline the research methodology, including the research design, data collection instrument, target population, sample size, sampling method, data collection procedure, data analysis approach, and assumptions.

#### 3.1 Research Design

This study can be seen as descriptive quantitative research, since we provide an explanation to brands and theory concerning what influences consumers purchase intention towards BNFTs with the use of quantitative data (Babbie, 2014). A quantitative study is considered as the best approach to answer our research question, since the data we collected was used to find relationships between variables and generate findings that are representative for the whole population (Saunders, Lewis & Thornhill, 2009). We answer how brands can influence the purchase intention towards their BNFTs, and believe this can be done by testing what variables have a relation with the purchase intention of BNFTs. To test whether the relation between the variables was significant, we created hypotheses that are supported or not supported in the result section (Saunders, Lewis, Thornhill & 2009). To test the hypotheses, the data was collected with a cross-sectional survey using structured questionnaires, thus the data is collected in one point in time (Babbie, 2014; Wang et al., 2023). Hox, and Boeije (2005) propose that a survey allows researchers to collect data from a larger sample and a larger sample means that we can create statistical inference about the population.

### 3.2 Sampling and Data Collection & Research instrument

The study focusses on a broad demographic, including people of various ages, backgrounds, as NFTs have gained popularity across diverse consumer groups (Colicev, 2023). The study uses random sampling, since the questionnaire was distributed among different social media platforms like, WhatsApp, LinkedIn, Facebook, Discord and Twitter to reach a widespread group of respondents (Galloway, 2005). The sample size of the study was 299 of which 242 fully completed the survey, the uncompleted answers were removed from the dataset. The survey was designed to utilize existing scales to increase the reliability and validity of the variable (Saunders et al., 2009). To maximize the validity and reliability of the data, it is essential to encourage honest and thoughtful responses. In the introduction of the survey, the time of the survey (2-5 minutes), that the survey is voluntary, and they could withdraw at any time, was mentioned. Afterwards, the survey had some general demographic questions like, age, level of education and gender. Then, some general control questions regarding BNFTs (People that answered that they had not heard about BNFTs got a small text that explaining the concept in lee words, so they could participate.) These control questions are also used to increase the interpretability of the results showing the previous exposure and engagement with BNFTs of the respondents. Lastly, questions regarding the different variables in this study.

### 3.3 Measurement

In the questionnaire the questions to measure the constructs were all adapted from previous studies, which validated these scales. To assess reliability using Cronbach's Alpha, a minimum threshold of .6 was employed with a preference of .7 or higher, as recommended by Nunnally (1978). The Cronbach's alpha presented have been calculated after the removal of items due to factor analysis. The validity and results of the studies were key criteria when selecting the scales. An overview of the instrument can be found in Table 2.

**Attitude** was measured with four items (e.g., "It is wise to buy Brand NFTs" and "I hold a supportive attitude towards buying Brand NFTs"), this scale has been adopted from the research of Sun, and Wang (2019) and Hasheem et al., (2022). The studies measured a Cronbach's Alpha of .85 and used a 5-point Likert scale.

**Subjective norms** will be measured with four items (e.g., "Most of my family members support me to purchase Brand NFTs" and "People important to me support buying Brand NFTs"), a scale that was used in the research of Giampietri, Verneau, Del Giudice, Carfora,



and Finco (2018) and Ding, Liu, Yang, and Ma (2022). The researchers measured a Cronbach's Alpha .91 and used a 7-point Likert scale.

**Perceived behavioural control** has been adopted from (Ajzen 1991; Kim & Han, 2010) this is measured with 3 items (e.g., "Buying a Brand NFT is completely up to me." and "I am confident that if I want, I can buy a Brand NFT."). The research of Kim, and Han (2010) measured a Cronbach's Alpha of .86, the researchers used a 7-point Likert scale.

**Purchase intention** is based on the scale used in the study of Hu, Wang, Zhou, Gao, and Zhu, (2023) where they use 3 items (e.g. "I plan to purchase a Brand NFT in the near future." And "I look forward to purchasing a Brand NFT in the near future."). The researchers measured a Cronbach's Alpha of .85, the study made use of a 7-point Likert scale.

**Product knowledge** has been adopted from the study of Kim, and Hwang (2020) Where the researchers used 3 items (e.g. "I feel quite knowledgeable about Brand NFTs" and I know pretty much about Brand NFTs."). The scale in the study of Kim, and Hwang (2020) had a Cronbach's Alpha of .88, a 7-point Likert scale was implemented.

All of scales for the constructs have been modified so they would fit the context of BNFTs. The response scale for all the items is a 7-point Likert scale from (1) "Strongly disagree" to (7) "Strongly agree".

**Table 2.** Instrument for research

<i>Construct</i>	<i>Scale</i>
<b><u>Attitude</u></b>	<p>(Sun &amp; Wang, 2019; Hasheem et al., 2022)</p> <p>AT1: It is wise to buy Brand NFTs</p> <p>AT2: It is a good idea to buy Brand NFTs</p> <p>AT3: I support buying Brand NFTs</p> <p>AT4: I hold a supportive attitude towards buying Brand NFTs</p>
<b><u>Subjective norms</u></b>	<p>(Giampietri et al., 2018; Ding et al., 2022)</p> <p>SN1: Most of my family members support me to purchase Brand NFTs</p> <p>SN2: Most of my friends support me to purchase Brand NFTs</p> <p>SN3: The media (Tv, radio, Internet) are in favor of purchasing Brand NFTs</p> <p>SN4: People important to me support buying Brand NFTs</p>
<b><u>Perceived behavioral control</u></b>	<p>(Ajzen, 1999; Kim &amp; Han, 2010)</p> <p>PBC1: Buying a Brand NFT is completely up to me.</p> <p>PBC2: I have resources, time, and money to buy Brand NFTs.</p> <p>PBC3: I am confident that if I want, I can buy a Brand NFT.</p>
<b><u>Product knowledge</u></b>	<p>(Kim &amp; Hwang, 2020)</p> <p>PK1: I feel quite knowledgeable about Brand NFTs.</p> <p>PK2: When compared to other people, I know a lot about Brand NFTs.</p> <p>PK3: I know pretty much about Brand NFTs.</p>
<b><u>Purchase intention</u></b>	<p>(Hu et al., 2023)</p> <p>PI1: I plan to purchase a Brand NFT in the near future.</p> <p>PI2: I would like to purchase a Brand NFT in the near future.</p> <p>PI3: I look forward to purchasing a Brand NFT in the near future.</p>

### 3.4 Data analysis

The data collected from the survey was analysed using the Statistical Package for Social Sciences (SPSS) software, as described by Babbie (2014). For hypothesis 1-3 to analyse the effect of attitude, subjective norms and perceived behavioural control on the purchase intention towards BNFTs, we employed multiple regression analysis, guided by the book of Saunders et al. (2009). Multiple regression analysis allows us to examine the strength and direction of the relationships between multiple independent variables and a single dependent variable. This analysis technique helps us determine which independent variables significantly predict changes in the dependent variable, purchase intention towards BNFTs. For hypotheses 4-6, we employed moderated regression analysis utilizing the PROCESS modelling tool developed by Hayes (2022). This analysis technique allows us to explore whether the relationship between the independent variables (e.g., attitude, subjective norms, perceived behavioural control) and the dependent variable (purchase intention towards BNFTs) is influenced by a moderator variable, product knowledge. The PROCESS modelling tool provides estimates of the slopes of the relationship under different levels of the moderator variable (low, average, high). Significance tests of these slopes help us assess whether the moderating effect of Product Knowledge is statistically significant. We evaluated the significance of the relationships and interaction effects using *p*-values. A *p*-value less than 0.05 (<.005) indicates statistical significance, providing evidence to support or reject the hypotheses regarding the relationships and moderation effects.

### 3.5 Assumptions

To assess the internal consistency of the measured variables, Cronbach's Alpha was tested, with .6 considered as an indicator of acceptable reliability and .7 as a preferred reliability (Nunnally, 1978). As shown in Table 3 all the variables have a Cronbach's alpha above .7 supporting internal consistency of measured variable, providing confidence in the reliability of the data.

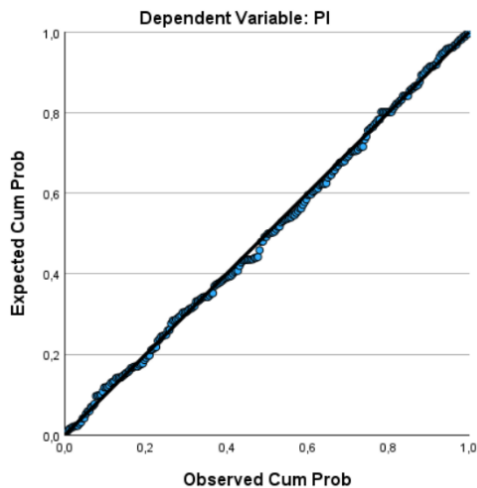
**Table 3.** Reliability of variables

	Cronbach's Alpha	N of Items
AT	.953	4
SN	.842	4
PBC	.750	3
PK	.936	3
PI	.971	3

Note: AT: Attitude, SN: Subjective Norms, PBC: Perceived Behavioral Control, PK: Product Knowledge PI: Purchase Intention

According to Saunders et al. (2009), to apply the regression method, there are a few assumptions that need to be met. Firstly, we checked if there was linearity between the independent and dependent variables, there was linearity, so we did not have to check for outliers and exclude these from the data see Figure 3.

**Figure 3.** P-P plot



Secondly, we made sure the independent variables are uncorrelated by testing it with the VIF test, a threshold of  $< 5$  was considered, since with a VIF above 5 will be a concern of a collinearity problem (Johnston, Jones & Manley, 2018). In Table 4 we show that all of the variables have a VIF under 5. Supporting the reliability of the regression model.

**Table 4** Multicollinearity test

	VIF
AT	1.498
SN	1.516
PBC	1.075
PK_AT	1.654
PK_SN	1.463
PK_PBC	1.238

Note. AT: Attitude, SN: Subjective Norms, PBC: Perceived Behavioral Control, PK: Product Knowledge PI: Purchase Intention

Lastly, we checked for normally distributed data for the dependent and independent variables. In Table 5 the results of the Shapiro-Wilk test show a  $p\text{-value} > .05$ , therefore we can assume that the residuals are normally distributed (Ghasemi & Zahediasl, 2011).

**Table 5.** Test of normality

Hypothesis	Statistics	Shapiro-Wilk	
		df	Sig.
Unstandardized Residuals	.995	242	.683
Standardized Residuals	.995	242	.683

## Chapter 4: Results

In this section the results of the questionnaire are shown. The demographics of the respondents, the control variables, and testing of the hypothesis.

### 4.1 Demographics

To gain an understanding of the respondent profile, the demographic characteristics are shown, these include gender, age, country of residence and education level. Table 6 shows the frequency of the demographics. Firstly, as seen in the table 58.7% of the respondents is female, 39.2% are male and 2.1% Other. Secondly, the frequency of age shows that 59.1% more than half of the respondents is between the age of 18 and 24. The next biggest group 27.7% is between the age of 25-34. And the rest of the groups are all <5%. Thirdly, most of the respondents are from the Netherlands (66.5%), then the United States of America with (8.26%) and after that the UK with (6.61%). The variable "Other countries" is a group with the sum of the countries that only had one or two respondents.

Lastly the table shows the different education levels of the respondents. With the biggest group of 49.6% that have bachelor's degree, followed by 19% with a master's degree, and 12% that has some college degree and then 10.7% that have no diploma.

**Table 6.** Frequency table demographics

Variable	<i>n</i>	Percentage
<b>Gender</b>		
Female	142	58.7
Male	95	39.2
Other	5	2.1
<b>Age</b>		
18-24	143	59.1
25-34	67	27.7
35-44	11	4.5
45-54	12	5.0
55-64	3	1.2
65+	6	2.5
<b>Country</b>		
Netherlands	161	66.5
United States of America	20	8.26
United Kingdom	16	6.61
Germany	9	3.72
Belgium	8	3.31
Other Countries	27	11.2
<b>Education</b>		
Associate degree	11	4.5
Bachelor's degree	120	49.6
Doctorate degree	2	0.8
Master's degree	46	19
No diploma	26	10.7
Professional degree	8	3.3
Some college degree	29	12

#### 4.2 Control Variables

Shown in Table 7, the control variable Heard of BNFT (HBNFT) out of the total sample, 186 respondents (76.9%) reported having heard of BNFTs prior to participating in the questionnaire. On the other hand, 56 respondents (23.1%) indicated that they had never heard of BNFTs before. This variable was used to test whether our respondents had previous experience with BNFTs and the respondents that had not heard of BNFTs got a small text explaining BNFTs so they would be able to participate in the study.

**Table 7.** Frequency table Heard of BNFT

	Frequency	Percent
No	56	23.1
Yes	186	76.9
Total	242	100

As seen in Table 8, an overview of purchased BNFT (PBNFT) among the 242 participants, only 31 respondents (12.8%) reported having ever purchased a BNFT. In contrast, a majority of 211 respondents (87.2%) indicated that they had not made any purchases of BNFTs. This variable was added, since we were interested in the previous purchase experience with BNFTs of our respondents.

**Table 8.** Frequency table Purchased BNFT

	Frequency	Percent
No	211	87.2
Yes	31	12.8
Total	242	100

4.3 Regression Results

The study seeks to investigate what influences an individual’s purchase intention towards brand NFTs. To test the hypothesis a regression analysis was conducted, showing us the strength and direction of the relationship between the independent and dependent variables.

Shown in Table 9, attitude, subjective norms and perceived behavioural control together significantly predict purchase intention towards BNFTs,  $F(3, 238) = 87, p < .001$ . Moreover, the  $R^2 = .455$  of attitude shows that attitude explains 45.5% of the variance of purchase intention. Adding subjective norms generated  $R^2 = .497$  showing that attitude with subjective norms explain 49.7% of the variance of the dependent variable a change of + 4.4%. When adding perceived behavioural control to the regression the  $R^2 = .523$  shows that the overall model explains 52.3% of the variance in purchase intention a change of 2.6%.

Additionally, the data shown in Table 9, regression coefficient (B), t-value (t) and p-value were further assessed to explain the influence of each of the independent variables on the dependent variable (purchase intention).

H1 explores whether attitude has a significant positive effect on purchase intention towards BNFTs. The results show that there is a positive significant impact on purchase intention. ( $B = .606, t = 10.332, p = < .001$ ) Therefore, H1 was supported. Thus, suggesting that a consumer’s positive attitudes towards BNFTs have a significant positive effect on purchase intention towards these BNFTs.

H2 evaluates subjective norms have a positive effect on the purchase intention towards brand NFTs. The results show a significant positive impact of subjective norms on purchase intention towards BNFTs ( $B = .269, t = 3.880, p = < .001$ ) Hence, H2 was supported, indicating that an individual’s subjective norms have a significant positive effect on the purchase intention towards BNFTs.

H3 investigates whether perceived behavioural control has a positive significant effect on purchase intention. The results show a significant positive impact of perceived behavioural control on purchase intention toward BNFTs ( $B = .167, t = 3.658, p = <.001$ ) Showing that H3 is supported. As a result of H3 being supported we can suggest that an individual's own perceived behavioural control has a significant positive influence on the purchase intention towards BNFTs.

**Table 9.** Attitudes, subjective norms and perceived behavioural control's effect on purchase intention towards BNFTs

Regression Weights	B	t	p-value
AT → PI	.606	10.332	<.001*
SN → PI	.269	3.880	<.001*
PBC → PI	.179	3.658	<.001*
R	.523		
F (3, 238)	87.155		

Note. \* $p < 0.05$ . AT: Attitude, SN: Subjective Norms, PBC: Perceived Behavioral Control, PI: Purchase Intention

A moderating analysis was performed, using centered variables. The PROCESS SPSS macro was used to analyze the data (Hayes, 2022). This study assessed the moderating role of product knowledge on relationship between attitude, subjective norms and perceived control on the purchase intention towards BNFTs. Without product knowledge as a moderator the  $R^2$  of the relation between attitude and purchase intention was .455, showing that 45.5% of the variance of purchase intention is explained by attitude. When the moderator was added, the  $R^2$  is .6156, showing an increase of variance of 16.6%.

Further, significance of moderating effect was analysed, the results are shown in Table 10 and, reveal a significant positive moderating impact of product knowledge on the relationship between attitude and purchase intention ( $b = .1033, t = 4.1561, p = <.001$ ), supporting H4. This shows with an increase of product knowledge the relationship between attitude and purchase intention is strengthened.

In addition, the figures of the slopes (figure 3, 4 and 5) were created with use of the output of Hayes (2022) Process tool. The Process output gave an overview of low, average and high product knowledge.



**Table 10.** Moderation Estimates

	B	t	p-value	95% CI	
				Low	Up
AT	.3493	3.7751	.002*	.1670	.5315
PK	-.0116	-.1156	.9080	-.2094	.1862
AT*PK	.1033	4.1561	<.001*	.0544	.1523
R <sup>2</sup>	.6156				
F (3,239)	87.155				

Note. \* $p < 0.05$ . AT: Attitude, PK: Product Knowledge

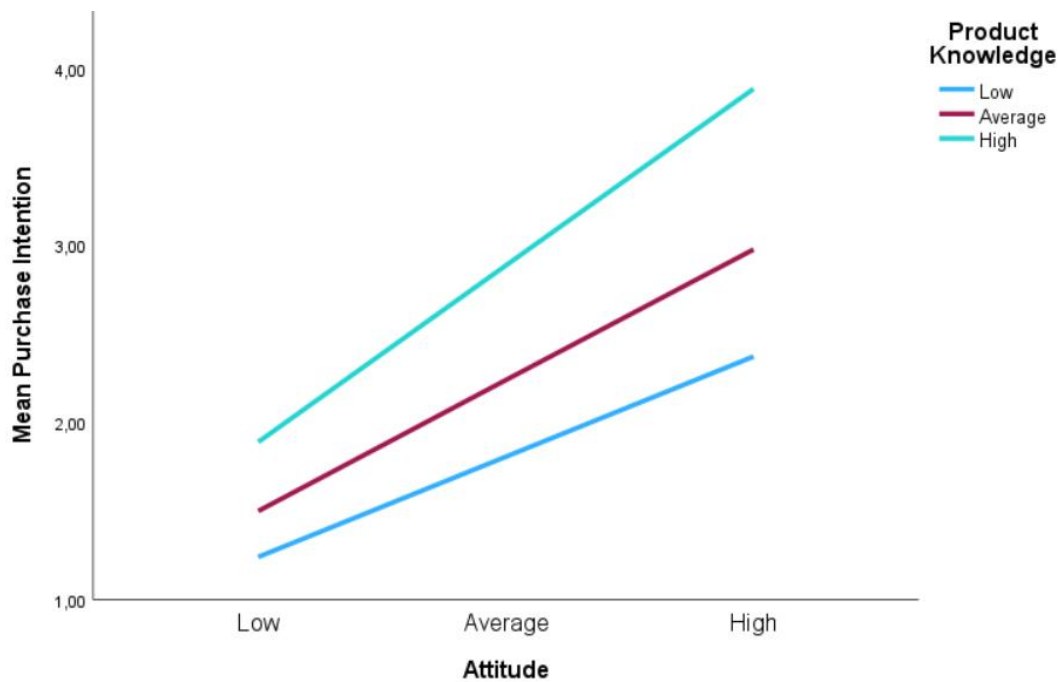
Additionally, the slope analysis is presented to better understand the nature of the moderating effect. As shown in Table 11 and Figure 4, all levels of product knowledge have a significant positive effect on the relationship between attitude and purchase intention. Low product knowledge (Effect = .4526,  $t = 6.2987$ ,  $p = <.001$ ), Average product knowledge (Effect = 0.5904,  $t = 11.6717$ ,  $p = <.001$ ) and High product knowledge (Effect 0.7970,  $t = 15.1367$ ,  $p = <.001$ ) showing that the higher the product knowledge the higher the positive effect. The slopes of attitude are also shown in a graph in figure 4.

**Table 11.** Conditional effect of Attitude

	Effect	SE	t	p-value	95% CI	
					Low	Up
-1 SD	.4526	.0719	6.2987	<.001*	.1670	.5315
Mean	.5904	.0506	11.6717	<.001*	-.2094	.1862
+ 1 SD	.7970	.0527	15.1367	<.001*	.0544	.1523

Note. \* $p < 0.05$ .

**Figure 4.** Slopes of Attitude



In Table 12 the moderating estimates of subjective norms are shown. Without the moderator the  $R^2$  of subjective norms and purchase intention was .282 showing that 28.2% of the variance of purchase intention is explained by subjective norms. While adding the moderator the  $R^2$  is .4235 showing is an increase of variance explained of 14.15%.

Further, significance of moderating effect was analysed, the results reveal a non-significant moderating impact of product knowledge on the relationship between subjective norms and purchase intention ( $b = 0.0520$ ,  $t = 1.5314$ ,  $p = .1270$ ), rejecting H5. This non-significant effect can be seen in Figure 5 where all the relations show relatively similar strengths. This means that the effect of subjective norms on purchase intention towards BNFTs is not significantly impacted by consumer product knowledge.

**Table 12.** Moderation Estimates

	B	t	p-value	95% CI	
				Low	Up
SN	.4247	3.3644	<.001*	.1760	.6734
PK	.2199	1.9308	.0547	-.0045	.4443
SN*PK	.0520	1.5314	.1270	-.0419	.1188
$R^2$	.4235				
F (3,239)	58.27				

Note. \* $p < 0.05$ . SN: Subjective Norms, PK: Product Knowledge

In Table 13 the moderating estimates of perceived behavioral control are shown. Without the moderator the R<sup>2</sup> of perceived behavioural control and purchase intention was .072 showing that 7.2% of the variance of purchase intention is explained by perceived behavioural control. While adding the moderator the R<sup>2</sup> is .2401 showing is an increase of variance explained of 16.8%.

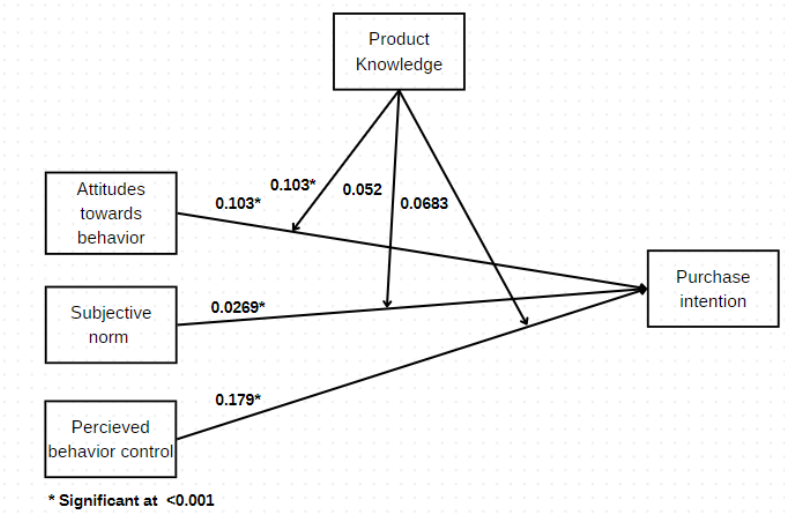
Further, significance of moderating effect was analysed, the results reveal a non-significant positive moderating impact of product knowledge on the relationship between perceived behavioural control and purchase intention (b= 0.0683, t = .0368, p = .0647), not supporting H6. This shows with an increase of product knowledge the relationship between perceived behavioural control and purchase intention is not significantly impacted.

**Table 13.** Moderation Estimates

	B	t	p-value	95% CI	
				Low	Up
PBC	-.0483	.1143	.6730	-.2734	.1768
PK	.0975	.1867	.6018	-.2702	.4652
PBC*PK	.0683	.0368	.0647	-.0042	.1409
R <sup>2</sup>	.2401				
F (3,239)	25.0709				

Note. \*p <0.05. PBC: Perceived Behavioral Control, PK: Product Knowledge

**Figure 5.** Tested Conceptual model



When analyzing the results, we found support for multiple hypothesis as demonstrated in Figure 5. We found a positive and significant relation between attitude, subjective norms and perceived behavioral control on the purchase intention towards BNFTs. Thus, confirming hypotheses H1, H2 and H3. Additionally, we found a significant moderating effect of consumers product knowledge on the relation between attitude and purchase intention towards BNFTs. Thus, H4 is supported. However, we did not find a significant moderating effect of consumers product knowledge on the relation between subjective norms and perceived behavioral control on purchase intention towards BNFTs. As a result, both H5 and H6 are not supported.

## Chapter 5: Discussion and Conclusion

This chapter focuses on interpreting and contextualizing the results obtained from the regression analyses. The findings are compared to existing literature, the theoretical framework, and relevant empirical studies. This chapter will also address the implications of the results for theory, practice.

### 5.1 Discussion

#### 5.1.1 Control variables

The inclusion of both control variables Heard of BNFT and Purchased BNFT underscores the novelty of the evolving landscape of BNFTs. Approximately 25% of the respondents had never heard of NFTs before this study, showing that that a significant portion of the sample was unfamiliar with the emerging technology. This finding underlines the dynamic nature of consumer awareness within the BNFT market. This is in line with the study of Colicev (2023) who emphasizes for the need of educational efforts to familiarize consumers with BNFTs. Furthermore, only 15% of participants had ever purchased an NFT, suggesting that the stage of consumer adoption within the BNFT market is relatively low. These low levels of past purchase activities are in line with previous research noting the exploratory nature of consumer behaviour in the NFT space (Arcenegui, 2021). The proportion of participants who were either unaware of or had limited experience with BNFTs underscores the complexity faced by marketeers and policy makers in navigating this ever evolving NFT space, as suggested by Dowling (2021).

### **5.1.2 Attitude**

The positive and significant relationship between attitude and purchase intention towards BNFTs aligns with existing literature and theoretical expectations. Consumers who hold favourable attitudes towards BNFTs are more likely to express an intention to purchase them. The support of hypothesis 1, can potentially be explained as followed, consumers with a more positive attitude towards BNFTs, believe they can get more value out of purchasing a BNFT. Since, an attitude is rooted in the perception of the outcome of a particular outcome (Ajzen & Fishbein, 1972). Attitude has a significant effect on consumer intentions (Warshaw, 1980). Therefore, the observed significant impact of attitudes on purchase intention aligns with these theories.

Additionally, the result are aligned with previous empirical studies that emphasizing the impact of positive attitudes on purchase intention across various context (Berki-Kiss & Menrad, 2022) and (Smith & Palino, 2010). Additionally, the findings suggest that attitude does not only have a significant effect on NFT engagement as studied in the empirical studies of Alistarbadi, and Rho (2023) and Perez et al. (2023), but also on the purchasing behavior.

### **5.1.3 Subjective norms**

The positive and significant relationship between subjective norms and purchase intention is consistent with existing literature and theoretical expectations. Consumers are positively influenced by societal expectations and perceptions of what others think they should do, affecting their purchase intentions towards BNFTs. Hypothesis 2 being supported can be explained, by individuals receiving positive messages regarding BNFTs of people close to them or people they respect, leading them intending to purchase BNFTs. This is aligned with previous theory that explains that individuals perceiving social pressure from outside sources encourages them to participate in a certain behaviour (Ajzen, 1991). In addition, previous studies suggest that individuals are influenced by people they hold in high regard and are willing to follow these perceived beliefs (Lam et al., 2023).

Additionally, the significant effect of subjective norms on purchase intention contradicts the empirical study of Perez et al. (2023) who were unable to find a significant effect of subjective norms on NFT participation.

However, the significant effect aligns with multiple empirical studies, Albayati, Alistarbadi, and Rho (2023), Berki-Kiss and Menrad, (2022), and Smith and Palino (2010), which also emphasize the role of subjective norms shaping consumer behaviour. while Smith and Palino (2010) focussed on a different product category, their study also highlighted the importance of positive social influences in driving purchase intentions. In Berki-Kiss and Menrad (2022),

similar findings were reported regarding the relationship subjective norms on purchase intention in the context of emerging technologies. Albayati, Alistarbadi, and Rho (2023), found a significant effect of subjective norms on NFT engagement. Our study aligns with these studies.

#### **5.1.4 Perceived behavioural control**

The positive and significant relationship between perceived behavioural control is consistent with existing literature and theoretical expectations. The positive and significant relationship between perceived behavioural control and purchase intention suggest that consumers are more likely to express the intention to purchase BNFTs when they perceive greater control over their behaviour. The support for hypothesis 3 can most likely be explained by, that individuals that feel like they have the skills, resources, time and money to buy BNFTs feel like they have more control on this behaviour and therefore have an increased intention to purchase BNFTs. This is in line with the theory of Ajzen (1991) who explains that the more resources and opportunities individuals believe they have, the less affected they are by potential barriers that come with the behaviour.

This findings of the study are contradicting previous empirical studies, who failed to find a significant effect of perceived behavioural control on purchase intention (Farid et al., 2023). However, our results are in line with studies by Moon (2022) and, Lim and An (2021), which explored the relationship between perceived behavioural control and purchase intention in different contexts. Additionally, the findings are aligned with previous studies who found a significant effect of perceived behavioural control on NFT engagement (Perez et al., 2023) and (Albayati, Alistarbadi & Rho, 2023). We found that apart from engaging in NFTs perceived behavioural control also has an impact on purchasing BNFTs.

#### **5.1.5 Product Knowledge**

This study expanded the theoretical framework of Ajzen (1991) by observing a moderating variable of product knowledge. As observed by the study of Chiou (1998), we expected that there was a significant moderation effect of product knowledge on the TPB variables. The significant interaction effect between attitude and product knowledge on purchase intention supports Hypothesis H4. This indicates that the impact of attitude on purchase Intention is significantly strengthened by consumers product knowledge of BNFTs. This moderator effect is aligned with previous studies that found a significant moderation effect of product knowledge on this relation (Berger et al., 1994). This means that an individual with higher product knowledge is more likely to purchase a product when they have a positive attitude towards that product. The non-significant interaction effect between subjective norms and

product knowledge on purchase intention leads to the rejection of Hypothesis H5. Contradicting the studies who explain that a person with higher product knowledge is less effected by their surroundings (Chen & Liang, 2016). A potential reason for this non-significant relationship, could be that in Web3 online communities and influencers play a significant role in shaping perceptions of individuals. Therefore, a person with a higher product knowledge might still be influenced equally to people with a lower product knowledge. Another potential reason could be that there is a lack of established social norms since these might still be established and evolve around NFTs. As a results of this individuals with a higher level of product knowledge might rely more on their own gut feeling to guide their purchase actions instead of being influenced by their environment. The non-significant effect of product knowledge on the relation between perceived behavioural control and purchase intention led to the rejection of H6. This suggest that an individual's knowledge of a product does not significantly strengthen the relation of how much control they perceive on their purchase intention. Contradicting the study of Chen and Deng (2016) who explain that individuals with a low product knowledge think of the more negative effects when facing low perceived behavioural control and high product knowledge care less about the perceived behavioural control. However, when looking at the slopes of the analysis, for individuals with a high product knowledge the relation of perceived behavioural control and purchase intention is significantly strengthened. This means a person with a higher product knowledge feels more in control over their purchase leading into a higher purchase intention. The non-significant effect of low and average knowledge can potentially be explained with the study of Ajzen (1991) that explains that people with a limit understanding of the product, might feel more constraints and obstacles resulting in less control. For an individual with a high product knowledge, it most likely the case that the individual knows how to adapt to potential constraints and overcome obstacles creating a feeling of more control over their purchase, resulting in an increase of their purchase intention.

## 5.2 Theoretical Implications

This study has multiple implications for theory, understanding consumer behaviour towards BNFTs. The study found that many participant were either unaware or had little experience with purchasing BNFTs, emphasizing the novelty of this emerging technology. The study confirms and extends the Theory of Planned Behaviour (TPB) proposed by Ajzen (1991). By finding support that attitude, subjective norms, and perceived behavioural control indeed influence purchase intention towards BNFTs, the research reinforces the validity of TPB in the context of emerging digital technologies like BNFTs. This study extended the TPB framework by adding product knowledge as a moderator as one of the first studies on NFTs. However, the proposed model did not fully fit the data, contradicting the results of Chiou

(1998) and Kim and Hwang (2020) since, there was no significant moderating effect on the relation between subjective norms, perceived behavioural control and purchase intention. However, product knowledge fully moderated the relation between attitudes and purchase purchase intention. Suggesting that product knowledge can be added to the TPB framework as a moderator for attitude in the context of emerging digital technologies . As a results of the data contradicting previous studies, shows the significance of studying other moderating variables on the relationship between subjective norms, perceived behavioural control and purchase intention.

### 5.3 Practical Implications

The NFT space is an everchanging and relatively new technology that marketers can use to increase Brand awareness. With the results of the study multiple implications for managers can be developed to increase the amount of BNFTs sales.

Firstly, since the findings suggest that a positive attitude has a significant effect on a consumer purchasing a BNFT, managers can focus on creating positive attitudes towards their BNFTs. Possible ways to do this can be by giving specific benefits to NFT holders, like access to events or certain discounts on other products. These benefits can be explained with promotional campaigns that for example use story telling. With story telling brands can crafting interesting narratives, explaining the unique value propositions of the BNFT, and spark the interest of the potential consumers.

Secondly, the results suggest that consumers are influenced by their surroundings, managers can strategically generate positive social influences. For example, they can use promotional campaigns with celebrity support, they can promote positive user testimonials and can engage with the communities. As a results, trying to get the potential consumer surrounded by positive social influences, since this might increase the intention of a consumer to purchase a BNFT.

Thirdly, this study suggest that consumers are influenced by the amount of control they have over the purchasing process and the more control will increase their willingness to buy a product. As a result of that, managers can streamline their purchasing process, by ensuring a user-friendly interface, transparent information, easy navigation and providing guidance and support. These things can increase the consumers perception of control, and as this study suggest will lead to an increase of a consumer purchasing a BNFT.

Lastly, many potential consumers are unaware of or have limited experience with BNFTs while, the findings suggests that the knowledge of individuals intensifies the relation between the attitude they have towards BNFTs and the likeliness they will purchase it. Individuals with



a high product knowledge are also less influenced by the amount of control they have on the purchase process. As a result of that managers could focus on educating their potential customers about the product. Educating can be done via multiple ways, like organising workshops and webinars in partnership with industry experts.

#### 5.4 Limitations and future research directions

While this study has answered the research questions and has multiple implications for both theory and practice there are also limitations.

Firstly, since the questionnaire was distributed on social media channels, and the author has many Dutch followers, 66.5% of the respondents was Dutch, this is a limitation to the overall generalizability of the study. Future studies could try to investigate a broader sample than mostly Dutch people, since this will improve the generalizability of the study, potentially also looking into the differences between the cultures.

Secondly, NFTs are a relatively new area of research creating a lack of well-established theoretical framework, future studies should try and create a well-established theoretical framework.

Thirdly, the NFT space is a quickly evolving space (Colicev, 2023) making it difficult for the study to stay relevant. Therefore, it will be interesting to investigate a longitudinal study and find out if the studies results change.

Fourthly, since the theory of planned behaviour is often expanded to create more theoretical relevance (Sniehotta, Presseau & Araújo-Soares, 2014), and this study only found one significant moderating effect. Future studies could try and expand the model of this study or use other moderators.

Fifth, the study is a cross-sectional study meaning that we only got data from one point in time, while the NFT space is a vastly changing space (Colicev, 2023). Future research could do a longitudinal study and see if there is a difference in different point in time (Babbie, 2014).

Sixth, there could be a potential self-reported bias, since we used a questionnaire to collect the data (Babbie, 2014). Meaning that people might have filled in what we wanted to hear. A potential future research direction could be to investigate this subject with other instruments like interviews to also see the behavior of the respondents.

Lastly, 23.1% of our respondents had never heard of an NFT and only 12.8% had purchased an NFT, while looking at purchase intention it might be interesting to look at repurchase intention and only study respondents that have bought an NFT before.

## 5.5 Conclusion

The purpose of this study was to find out how brand can influence the purchase intention towards BNFTs and create actionable implications. We studied this with the following research question: *How can brands influence the purchase intention towards Brand NFTs?* To answer this question multiple hypothesis were created. The hypothesis were developed on the theory of planned behaviour (TPB) of Ajzen (1991) and a moderator was added to the model based on the study of Chiou, (1998), a questionnaire based on validated constructs was created and distributed, resulting in 242 valid responses, the data of the questionnaire was analysed and used to test the hypothesis via regression, these results were compared with theory and multiple implications for both theory and practice are given.

The hypothesis testing resulted in a significant positive relation between the TPB and purchase intention towards BNFTs. These findings align with existing literature, emphasizing the importance of positive attitude, social influences, and perceived control in shaping consumer purchase intention.

The study extended the theoretical framework by introducing product knowledge as a moderation effect on product knowledge on the relationship between attitude and purchase intention. Indicating that individuals with a higher product knowledge are more influenced by positive attitudes resulting in a stronger purchase intention. However, high product knowledge did not have a significant positive effect on the relation between perceived behavioural control and purchase intention. The non-significant effect of product knowledge on the relation between subjective norms, perceived behavioural control and purchase intention, and the partially moderated effect of product knowledge on the relation between perceived behavioural control and purchase intention, contradicted some existing literature but contribute valuable insights into the complex factors influencing consumer behaviour in the context of BNFTs.

The study has multiple theoretical implications, confirming and extending the TPB framework of Ajzen (1991). Demonstrating that attitude, subjective norms, and perceived behavioural control influence the purchase intention towards BNFTs, increasing the validity of the TPB framework in the context of emerging digital technologies. The extension of the framework with product knowledge increases the understanding of individual characteristics that shape purchase intention.

Practical implications developed from the findings provide actionable insights for brands aiming to enhance the purchase intention for their NFTs. Fostering positive attitudes, support of social influences, simplifying the purchase process, and strategically educating consumers about BNFTs are identified as key strategies.

In conclusion, this study advances our understanding of the factors influencing consumer behaviour in the emerging field of BNFTs. The theoretical and practical implications contribute to the existing body of knowledge in marketing and consumer behaviour. As the NFT space continues to evolve, future research can build upon these findings and explore additional factors influencing consumer decisions in this dynamic and innovative market.

## Appendixes

### References

- Ajzen, I., & Fishbein, M. (1972). Attitudes and normative beliefs as factors influencing behavioral intentions. *Journal of Personality and Social Psychology*, 21(1), 1.
- Ajzen, I., & Fishbein, M. (1980). Reasoned Attitudes and Actions: Attitudes and the Attitude–Behavior Relation: Reasoned and Automatic Processes. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology*. John Wiley & Sons.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Albayati, H., Alistarbadi, N., & Rho, J. J. (2023). Assessing engagement decisions in NFT Metaverse based on the Theory of Planned Behavior (TPB). *Telematics and Informatics Reports*, 10, 100045. <https://doi.org/10.1016/j.teler.2023.100045>
- Amoros, J. L. (2023). Why Do People Buy NFTs. *Krasamo*. <https://www.krasamo.com/why-do-people-buy-nfts/>
- Arcenegui, J. (2021). Secure Combination of IoT and Blockchain by Physically Binding IoT Devices to Smart Non-Fungible Tokens Using PUFs. *Sensors*, 21(9), 9. <https://doi.org/10.3390/S21093119>
- Babbie, E. (2014). *The Practice of Social Research* (14th ed.). Cengage Learning.
- Berger, J. E., Ratchford, B. T., & Haines Jr., G. H. (1994). Subjective product knowledge as a moderator of the relationship between attitudes and purchase intentions for a durable product. *Journal of Economic Psychology*, 15(2), 301-314.
- Berki-Kiss, D., & Menrad, K. (2022). The role emotions play in consumer intentions to make pro-social purchases in Germany – An augmented theory of planned behavior model. *Sustainable Production and Consumption*, 29, 79-89.
- Bettman, J.R., & Park, C.W. (1980). Effects of prior knowledge and experience and phase of the choice process on consumer decision processes: A protocol analysis. *Journal of Consumer Research*, 7(3), 234-248.
- Chen, K., & Liang, H. K. (2016). Factors affecting consumers' green commuting. *European Journal of Mathematics, Science & Technology Education*, 12, 527–538.
- Chiou, J.S. (1998). The effects of attitude, subjective norm, and perceived behavioral control on consumers' purchase intentions: The moderating effects of product knowledge and attention to social comparison information. *Proceedings of the National Science Council, Republic of China, Part C*, 9(2), 298-308.
- Chohan, R., & Paschen, J. (2023). NFT marketing: How marketers can use nonfungible tokens in their campaigns. *Business Horizons*, 66(1), 43-50. <https://doi.org/10.1016/j.bushor.2021.12.004>

- Colicev, A. (2023). How can non-fungible tokens bring value to brands. *International Journal of Research in Marketing*, 40(1), 30-37. <https://doi.org/10.1016/j.ijresmar.2022.07.003>
- Creighton, J. (2022, May 13). The Top Four Reasons to Buy an NFT. *NFT Now*. <https://nftnow.com/guides/should-you-buy-an-nft-should-anyone/>
- Ding, L., Liu, M., Yang, Y., & Ma, W. (2022). Understanding Chinese consumers' purchase intention towards traceable seafood using an extended Theory of Planned Behavior model. *Marine Policy*, 137, 104973.
- Farid, M. S., Cavicchi, A., Rahman, M. M., Barua, S., Ethen, D. Z., Happy, F. A., Rasheduzzaman, M., Sharma, D., & Alam, M. J. (2023, May 30). Assessment of marketing mix associated with consumer's purchase intention of dairy products in Bangladesh: Application of an extended theory of planned behavior. *Heliyon*, 9(6), e16657. <https://doi.org/10.1016/j.heliyon.2023.e16657>
- Fife-Schaw, C., Sheeran, P., & Norman, P. (2007, 2007/03/01). Simulating behaviour change interventions based on the theory of planned behaviour: Impacts on intention and action. *British Journal of Social Psychology*, 46(1), 43-68. <https://doi.org/https://doi.org/10.1348/014466605X85906>
- FM Contributors. (2023, March 14). The Psychology of NFT Collecting: The Appeal of Ownership and Exclusivity. *Finance Magnates*. <https://www.financemagnates.com/cryptocurrency/education-centre/the-psychology-of-nft-collecting-the-appeal-of-ownership-and-exclusivity/>
- Galloway, A. (2005). Non-Probability Sampling. In K. Kempf-Leonard (Ed.), *Encyclopedia of Social Measurement* (pp. 859-864). Elsevier. <https://doi.org/10.1016/B0-12-369398-5/00382-0>.
- Giampietri, E., Verneau, F., Del Giudice, T., Carfora, V., & Finco, A. (2018). A Theory of Planned Behavior perspective for investigating the role of trust in consumer purchasing decisions related to short food supply chains. *Food Quality and Preference*, 64, 160-166.
- Ghasemi, A., & Zahediasl, S. (2011). Normality Tests for Statistical Analysis: A Guide for Non-Statisticians. *International Journal of Endocrinology and Metabolism*, 10(2), 486-489. <https://doi.org/10.5812/ijem.3505>
- Hasheem, M. J., Wang, S., Ye, N., Farooq, M. Z., & Shahid, H. M. (2022). Factors influencing purchase intention of solar photovoltaic technology: An extended perspective of technology readiness index and theory of planned behaviour. *Cleaner and Responsible Consumption*, 7, 100079.
- Hayes, A. F., & Rockwood, N. J. (2017). Regression-based statistical mediation and moderation analysis in clinical research: Observations, recommendations, and implementation. *Behaviour Research and Therapy*, 98, 39-57.
- Hox, J. J., & Boeije, H. R. (2005). Data collection, primary versus secondary. In K. Kempf-Leonard (Ed.), *Encyclopedia of Social Measurement* (Vol. 1, pp. 593-599). Elsevier.
- Hu, X., Wang, S., Zhou, R., Gao, L., & Zhu, Z. (2023). Policy driven or consumer trait driven? Unpacking the EVs purchase intention of consumers from the policy and consumer trait perspective. *Energy Policy*, 177, 113559.

- Johnston, R., Jones, K., & Manley, D. (2018). Confounding and collinearity in regression analysis: A cautionary tale and an alternative procedure, illustrated by studies of British voting behavior. *Qualitative and Quantitative*, 52(4), 1957-1976. <https://doi.org/10.1007/s11135-017-0584-6>
- Kagee, A., & Freeman, M. (2017). Mental Health and Physical Health (Including HIV/AIDS). In S. R. Quah (Ed.), *International Encyclopedia of Public Health* (Second Edition) (pp. 35-44). Academic Press. <https://doi.org/10.1016/B978-0-12-803678-5.00282-4>
- Kastrenakes, J. (2021, March 11). Beeple sold an NFT for \$69 million: Through a first-of-its-kind auction at Christie's. *The Verge*. <https://www.theverge.com/2021/3/11/22325054/beeple-christies-nft-sale-cost-everydays-69-million>
- Kim, J. J., & Hwang, J. (2020). Merging the norm activation model and the theory of planned behavior in the context of drone food delivery services: Does the level of product knowledge really matter? *Journal of Hospitality and Tourism Management*, 42, 1-11. <https://doi.org/https://doi.org/10.1016/j.jhtm.2019.11.002>
- Kim, Y., & Han, H. (2010). Intention to pay conventional-hotel prices at a green hotel – a modification of the theory of planned behavior. *Journal of Sustainable Tourism*, 18(8), 997-1014. <https://doi.org/10.1080/09669582.2010.490300>
- Lam, T., Pine, R., & Baum, T. (2003). Subjective norms: Effects on job satisfaction. *Annals of Tourism Research*, 30(1), 160-177. doi:10.1016/S0160-7383(02)00047-6
- Lee, C., Ho, T. Y., & Xie, H.-H. (2023, February 28). Building brand engagement in metaverse commerce: The role of branded non-fungible tokens (BNFTs). *Electronic Commerce Research and Applications*, 58, 101248. <https://doi.org/10.1016/j.elerap.2023.101248>
- Lim, H.-R., & An, S. (2021). Intention to purchase wellbeing food among Korean consumers: An application of the Theory of Planned Behavior. *Food Quality and Preference*, 88, 104101.
- Lin, C., Wu, Y.-S., & Chen, J. V. (2013). Electronic Word-of-Mouth: The Moderating Roles of Product Involvement and Brand Image. Retrieved from <https://api.semanticscholar.org/CorpusID:13226218>
- Mamidala, V., & Kumari, P. (2023). Investigating herding severity in different NFT categories. *Finance Research Letters*, 58(PB). <https://doi.org/10.1016/j.frl.2023.104428>
- Moon, S.-J. (2022). Effect of consumer environmental propensity and innovative propensity on intention to purchase electric vehicles: Applying an extended theory of planned behavior. *International Journal of Sustainable Transportation*, 16(11), 1032-1046. <https://doi.org/10.1080/15568318.2021.1961950>
- Nautiyal, S., & Lal, C. (2022). Product knowledge as a facilitator of organic purchase intention in emerging markets: Empirical evidence from India. *Journal of Cleaner Production*, 372, 133782. <https://doi.org/10.1016/j.jclepro.2022.133782>
- Neighbors, C., Foster, D. W., & Fossos, N. (2013). Chapter 33 - Peer Influences on Addiction. In P. M. Miller (Ed.), *Principles of Addiction* (pp. 323-331). Academic Press. <https://doi.org/https://doi.org/10.1016/B978-0-12-398336-7.00033-4>
- Nunnally, J. C. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw-Hill.
- Parker, C., Scott, S., & Geddes, A. (2019). Snowball sampling. Sage. <https://doi.org/10.4135>

- Peres, R., Schreier, M., Schweidel, D. A., & Sorescu, A. (2023). Blockchain meets marketing: Opportunities, threats, and avenues for future research. *International Journal of Research in Marketing*, 40(1), 1-11. <https://doi.org/10.1016/j.ijresmar.2022.08.001>
- Perez, W. D. D., Prasetyo, Y. T., Cahigas, M. M. L., Persada, S. F., Young, M. N., & Nadlifatin, R.. (2023). Factors Influencing Non-Fungible Tokens (NFT) Game Engagement during the COVID-19 pandemic: The Theory of Planned Behavior (TPB) and Hedonic Motivation System Adoption Model (HMSAM) Approach. *Heliyon*, 9(9), e19847. <https://doi.org/10.1016/j.heliyon.2023.e19847>
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson education.
- Giles, M. (2022, 2022/02/11). Employing the theory of planned behaviour to design an e-cigarette education resource for use in secondary schools. *BMC Public Health*, 22(1), 276. <https://doi.org/10.1186/s12889-022-12674-3>
- Şimşekoğlu, Ö., & Lajunen, T. (2008). Social psychology of seat belt use: A comparison of theory of planned behavior and health belief model. *Transportation Research Part F: Traffic Psychology and Behaviour*, 11(3), 181-191.
- Smith, S., & Paladino, A. (2010). Eating clean and green? Investigating consumer motivations towards the purchase of organic food. *Australasian Marketing Journal*, 18(2), 93-104. <https://doi.org/10.1016/j.ausmj.2010.01.001>
- Sniehotta, F. F., Presseau, J., & Araújo-Soares, V. (2014). Time to retire the theory of planned behaviour. *Health Psychology Review*, 8(1), 1-7. DOI: 10.1080/17437199.2013.869710
- Sun, Y., & Wang, S. (2019). Understanding consumers' intentions to purchase green products in the social media marketing context. *Asia Pacific Journal of Marketing and Logistics*, 32(4), 860-878.
- K S Suryavanshi, A., Bhatt, P., & Singh, S. (2023). Predicting the buying intention of organic food with the association of theory of planned behaviour. *Materials Today: Proceedings*. <https://doi.org/https://doi.org/10.1016/j.matpr.2023.03.359>
- Taber, K. S.. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education*, 48(6), 1273–1296. <https://doi.org/10.1007/s11165-016-9602-2>
- Tavares, R., de Sousa, J. P., Maganinho, B., & Gomes, J. P. (2023). Gamers' Reaction to the Use of NFT in AAA Video Games. In (Vol. 219, pp. 606-613). <https://doi.org/10.1016/j.procs.2023.01.329>
- Vishnu, V. P., Murthy, M. D. P., Joseph, J., & Adhikari, A. (2023). What decides my purchase of non-fungible tokens? *Journal of Consumer Behaviour*, n/a(n/a). <https://doi.org/https://doi.org/10.1002/cb.2221>
- Wang, X., Zhang, Z., Huang, D., & Zhiyong, L. (2023). Consumer resistance to service robots at the hotel front desk: A mixed-methods research. *Tourism Management Perspectives*, 46, 101074. <https://doi.org/10.1016/j.tmp.2023.101074>
- Warshaw, P. R. (1980). Buying a Gift: Product Price Moderation of Social Normative Influences on Gift Purchase Intentions. *Personality and Social Psychology Bulletin*, 6(1), 143-147. <https://doi.org/10.1177/014616728061022>

- Wei, J., Zhao, X., liu, Y., & Yang, X. (2021). Measuring purchase intention towards green power certificate in a developing nation: Applying and extending the theory of planned behavior. *Resources, Conservation and Recycling*, 168, 105363.  
<https://doi.org/10.1016/j.resconrec.2020.105363>
- Yilmaz, T., Sagfossen, S., & Velasco, C. (2023). What makes NFTs valuable to consumers? Perceived value drivers associated with NFTs liking, purchasing, and holding. *Journal of Business Research*, 165, 114056.  
<https://doi.org/https://doi.org/10.1016/j.jbusres.2023.114056>



## Questionnaire

Dear Participant,

Thank you very much for dedicating a few minutes of your time to participate in my survey.

I am Laurens Aalders, a master's student studying Business Administration at the University of Twente. I am currently working on my master's thesis, which delves into the world of Brand NFTs. I'm investigating how brands can enhance purchase intention towards Brand NFTs.

Your willingness to share your insights in this survey is of high value in this study. It is important to note that by participating, you agree that the information you provide will be used solely for the purpose of this research. The response will remain completely anonymous. Participation in this survey is entirely voluntary, and you are able to stop your participation at any point if you choose so. The survey will take 2-5 minutes.

The information you provide will be carefully analysed using various statistical and analytical techniques to extract meaningful insights and patterns related to the research question. The results will solely be used for my thesis.

Your contributions through this survey will greatly assist us in the research, and we sincerely appreciate your involvement. Should you have any questions or need to contact us regarding our research or the survey, please feel free to reach out to me via email at:

[L.a.g.aalders@student.utwente.nl](mailto:L.a.g.aalders@student.utwente.nl)

Once again, thank you for being part of the study.

Kind regards,

Laurens Aalders

### **Control questions:**

Have you every heard of NFTs?  
Yes/No

### **IF No:**

NFT stands for Non-Fungible Token. It is a type of digital asset that represents ownership or proof of authenticity of a unique item or piece of content using blockchain technology.

Have you ever purchased an NFT?  
Yes/No

### **Demographics questions:**

1. In which country do you currently reside? (Open question)
2. How old are you? (Under 18 years old, 18-24 years old, 25-34 years old, 35-44 years old, 55-64 years old, 65+ years old)
3. How do you identify in terms of gender? (Male, Female, other, Prefer not to say)
3. What is your highest level of education completed? (Choose one: No diploma, bachelor's degree, Professional degree, Some college degree, associate degree, master's degree, Doctorate degree)

### **Attitude**

- AT1: It is wise to buy Brand NFTs
- AT2: It is a good idea to buy Brand NFTs
- AT3: I support buying Brand NFTs
- AT4: I hold a supportive attitude towards buying Brand NFTs

### **Subjective norms**

- SN1: Most of my family members support me to purchase Brand NFTs
- SN2: Most of my friends support me to purchase Brand NFTs
- SN3: The media (Tv, radio, Internet) are in favor of purchasing Brand NFTs
- SN4: People important to me support buying Brand NFTs

### **Perceived behavioural control.**

- PBC1: Buying a Brand NFT is completely up to me.
- PBC2: I have resources, time and money to buy Brand NFTs.
- PBC3: I am confident that if I want, I can buy a Brand NFT.

### **Product knowledge**

- PK1: I feel quite knowledgeable about Brand NFTs.
- PK2: When compared to other people, I know a lot about Brand NFTs.
- PK3: I know pretty much about Brand NFTs.

### **Purchase intention**

PI1: I plan to purchase a Brand NFT in the near future.

PI2: I would like to purchase a Brand NFT in the near future.

PI3: I look forward to purchasing a Brand NFT in the near future.

#### SPSS output

*Model summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.724a	.523	.517	1.051

a. Predictors: (Constant), PBC, AT, SN

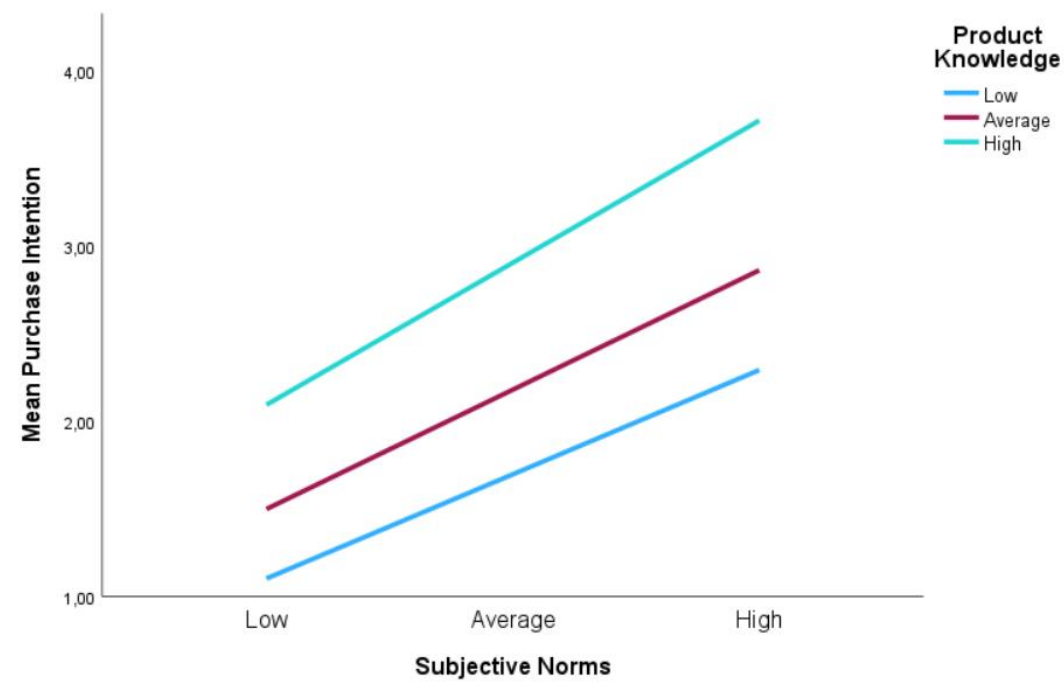
*ANOVA*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	289.062	3	96.354	87.155	<.001
	Residual	263.119	238	1.106		
	Total	552.180	241			

a. Dependent Variable: PI

b. Predictors: (Constant), PBC, AT, SN

**Figure 6.** Slopes of subjective norms



The slope analysis is presented to better understand the nature of the moderating effect. As shown in Table 14 and Figure 7 a low product knowledge (Effect = .0201,  $t = .2318$ ,  $p = .8169$ ) and an average product knowledge (Effect = .1112,  $t = 1.700$ ,  $p = .0904$ ) show a non-significant moderating effect  $p\text{-value} = >.05$  showing that low and average product knowledge does not significantly moderate the relation between perceived behavioural control and purchase intention towards BNFTs.

The table also shows that high level of product knowledge has a significant positive effect on the relationship between perceived behavioural control and purchase intention. High product knowledge (Effect = 0.2479,  $t = 2.6876$ ,  $p = <.001$ ) showing that the higher the product knowledge the higher the positive effect on the relation between perceived behavioural control and the purchase intention towards BNFTs. Resulting not fully rejecting hypothesis 6, since there is a positive moderating effect of product knowledge on the relation between perceived behavioural control and product knowledge when the knowledge is high.

**Table 14.** Conditional effect of Perceived Behavioural Control

	Effect	SE	t	p-value	95% CI	
					Low	Up
-1 SD	.0201	.0865	.2318	.8169	-.1504	.1905
Mean	.1112	.0654	1.7000	.0904	-.0177	.2400
+ 1 SD	.2479	.0922	2.6876	<.001*	.0662	.4295

Note. \* $p < 0.05$ .

**Figure 7.** Slopes of perceived behavioural control

