Sandra Schneider,
Hungarian University of Agriculture and Life Sciences, Hungary
ORCID ID, 0000-0002-6021-2406
email: *sschneider.wiwi@gmail.com*

PURCHASE INTENTION OF FRUGAL HOUSEHOLD APPLIANCES AMONG GENERATION Y IN GERMANY – MODIFIED TAM APPROACH

Abstract. *Frugal innovations are characterized by a focus on the core product functions, high product quality, and the reduction of raw material and financial resources across the entire value chain. They were initially developed for people in emerging countries and focused on the unmet needs of people at the bottom of the pyramid (BOP). Different researches show that frugal innovations could also be interesting for people in industrialized countries. Existing literature indicates that customers in developed countries have different acceptance factors for frugal innovations than customers in emerging countries. The present study refers to this gap. For the first research, potential users of Generation Y from Germany are used. This generation comprised a large consumer group of more than 15 million people. They are characterized by their interest in sustainable products and social fairness. Household appliances such as washing machines, dishwashers, or coffee machines are used as a potential product group for frugal innovation in developed countries like Germany. They have been an integral part of daily life in industrialized countries for many years, but they are expensive and often highly sophisticated with many functions. The basis for the study is the Technology Acceptance Model (TAM) expanded based on the literature. A total of 12 hypotheses were derived and combined into a study model. The subject of the research was Generation Y in Germany. For model testing, a dataset of 463 participants was generated through an online survey from December 2020 to January 2021. A multi-equation structural model was created and evaluated with the variance-based procedure PLS-SEM to analyze the relationships. The results confirmed that even in the case of frugal household appliances, the opinion of third parties influences the usefulness and the purchase intention in Generation Y. Furthermore, there was an influence of environmental awareness on the attitude towards use. Despite the affinity for technological applications, the ease of use of a frugal household appliance was shown to influence the usefulness of frugal household appliances. Contrary to expectations, the performance expectations of household appliances and the possible price advantage did not influence usefulness within this consumer group. This study concluded with indications for future research approaches in this research area.*

Keywords: frugal innovation, technology acceptance model (TAM), household appliances, generation Y, purchase intention.

Introduction. The development of frugal innovations started in emerging markets. The scarcity of diverse resources in these countries leads to large unserved consumer groups with various unmet needs (Zeschky et al., 2011; Brem and Ivens, 2013). The field of frugal innovation emerged from these needs. However, various studies show that frugal products are also becoming more relevant in developed countries (Tiwari et al., 2017a.; Kroll et al., 2016; Bound and Thornton, 2012). In industrialized countries, household appliances have been an integral part of daily life for many years. The term household appliances here includes both major appliances such as refrigerators, dishwashers, and washing machines, characterized by replacement purchases and a higher price level, and small appliances such as hoovers, irons, and coffee machines for the majority of sales (Statista, 2021). Sales of major appliances and small appliances amounted to around €9,812 million in Germany in 2019 (Statista, n.d.). This market could be a potential market for frugal household appliances in an industrialized nation due to its size and the broadly spread demand across the consumer group.

It raises the question of what factors would influence the purchase intention of frugal household appliances in an industrialized environment like Germany. For a first study, Generation Y would be used here. Generation Y (1981-1999) (Bolton, 2013) comprises a large consumer group of 15.5 million people in Germany (Federal Statistical Office, 2020) with a sustainable interest (Deloitte, 2020; Karavasilis et al. 2015). For finding out which factors influence Generation Y, the central research question is formulated: Which factors influence the acceptance of frugal household appliances within Generation Y in Germany? Based on the corresponding findings, developing a target group-oriented product development and approach is possible considering the factors influencing acceptance in practice.

Literature Review. Tiwari et al. (2017b) described frugal innovations as «frugal innovations seek to create attractive value propositions for their targeted customer groups by focusing on core functionalities and thus minimizing the use of material and financial resources in the complete value chain. They substantially reduce the cost of usage and/or ownership while fulfilling or even exceeding prescribed quality standards». Bound and Thornton (2012) extended the target group with their argumentation. The authors wrote, «frugal innovations are not only lower in cost, but outperform the alternative, and could be made available at large scale». Michelini et al. (2018) elaborated that there are different generations of definitions. They distinguish between the product-oriented (1st generation), the market- and process-oriented (2nd generation), and the criteria-oriented definition (3rd generation). The 3rd generation «represents a breaking point» (Michelini et al., 2018), as it goes back to the origin of the concept. In recent years, the issue of frugal innovation has become more relevant also for developed countries. In addition to international competitiveness for companies located here, it is also becoming relevant as an area of innovation in the domestic market (Tiwari and Herstatt, 2013). It could be assumed that the factors leading to the acceptance of frugal products vary in a specific society or social context, both on the supply and demand side. However, it is not yet clear which factors play a decisive role in accepting frugal products in industrialized countries (Tiwari et al., 2017a).

Generation Y (the target group of this study) is relevant for companies who want to offer frugal household appliances because of their size. Moreover, it is characterized by its interest in sustainable products and social fairness (Deloitte, 2020; Karavasilis et al., 2015). Generation Y likes to try new products and brands (Xu, 2007). It stands to mention that their decisions are influenced by their friends, family, and network (Viswanathan and Jain, 2013). In general, Generation Y is described as technophiles (Prensky, 2001). When developing frugal household appliances, it is crucial to know which characteristics are relevant to the Generation Y target group. This information could be precious for companies and taken explicitly into account from product development to the later design of advertising messages.

Methodology and research methods. In the technological context, Davis' (1989) Technology Acceptance Model (TAM) is a well-known and respected model for analyzing the acceptance, adoption, and use of products or services. It was originally developed to explain the adoption of technologies in an organizational context. It shows that the perceived usefulness and ease of using a technology determine the attitude and intention to use it (Davis, 1989). Perceived usefulness represents the benefit expected by a person in terms of the task performance of a technology. Ease of use represents a person's perceived effort in using the technology. The perception of actual use and the associated acceptance is represented by the intention to use (Venkatesh and Davis, 2000; Prein, 2011). The TAM has been used in various studies. Besides, it has explained a considerable proportion of the variance (usually around 40%) in the attitude and intention to use (Venkatesh and Davis, 2000). It would also form the basis for this study.

However, using a single theory to explain the acceptance of frugal household appliances does not do justice to the complexity of the object of study. For the foundation of the own acceptance model and the hypotheses, the TAM model with perceived usefulness, perceived ease of use, attitude towards using, and behavior intention to use (here as purchase intention) is chosen as the initial theory supplemented by possible influencing factors. It is done based on literature analysis. The research model is expanded to

include performance expectation, financial advantage, perceived consumer effectiveness, subjective norm, initial trust, and environmental awareness. Thus technological, economic, and social factors are considered in the model to explain the intention to use. One factor that influences consumer acceptance is perceived product quality (Rakhmawati et al., 2020). It is a subjective and situation-dependent assessment by the consumer (Holm and Kildevang, 1996). From a business perspective, product quality is essential as it has been shown to influence adoption in terms of consumers' willingness to buy and use the product (Yan et al., 2019; Walsh et al., 2012; Wang, 2015). Perceived quality is presented as a multidimensional concept in various studies (Kenyon and Sen, 2012; Alonso et al., 2002). The dimensions of quality differ in this respect. For example, Garvin (1987) described eight quality dimensions (performance, feature, conformity, reliability, durability, usability, aesthetics, and perceived quality). Hazen et al. (2017) proposed durability, characteristics, performance, and fitness for remanufactured products. To test the relevance for the frugal household appliance, hypothesis H1 is formulated.

H1: The greater the performance expectation of the frugal household appliance, the greater the perceived usefulness of a frugal household appliance. Price sensitivity is the feeling of a consumer expected to pay a certain price for a product (Goldsmith and Newell, 1997). It describes the willingness to buy a product and the level of satisfaction with it. It is closely related to perceived value, representing the exchange between the purchase and the sacrifice that accompanies it (Sweeney and Soutar, 2001). For several decades, a «low-cost» phenomenon can be observed in many sectors, focusing on cost reduction along the value chain to pass on a lower price to consumers (Valls et al., 2012). In the process, the relationship of the often-used status consumption scale (SCS) of consumers changes. In the origin of the SCS, consumers seek to improve their social standing through conspicuous consumption of consumer goods. With lower prices demanded by consumers, SCS factors are mixed to achieve a certain value proposition (Valls et al., 2012). Based on the hypothesis H2 is formulated.

H2: The greater the financial advantages of a frugal household appliance, the greater the perceived usefulness of a frugal household appliance. Environmental concern does not always lead to purchasing more environmentally friendly products (Vermeir and Verbeke, 2008). This discrepancy has already been investigated in numerous studies (Butler and Francis, 1997; Vermeir and Verbeke, 2008; Roberts, 1996). Roberts (1996) found that perceived consumer effectiveness (PCE) is one of the most important factors in explaining environmentally conscious consumer behavior. PCE measures an individual consumer's perceived ability to influence environmental problems (Roberts, 1996). It shows that a high level of PCE is reflected in positive attitudes towards sustainable products and the actual purchase behavior of sustainable products (Vermeir and Verbeke, 2008). From this, hypothesis H3 could be derived for frugal household appliances.

H3: The greater the perceived consumer effectiveness of a consumer, the greater the perceived usefulness of a frugal household appliance. Trust is a complicated and multidimensional construct (Tan and Sutherland, 2004). Some studies from the field of e-sellers showed that consumers have high initial trust when they decide to make their first purchase from a previously unknown supplier (McKnight et al., 1998). This result is not in line with the traditional trust perspective, where trust takes longer to build (Kim, 2012). Initial trust is a status quo (McKnight et al., 2002). Notably, it is not based on experience with the relevant provider. Besides, initial trust is temporary and built within a brief period (Kim and Tadisina, 2007). Since frugal household products could also be unknown manufacturers as yet, hypothesis H4 is formulated.

H4: The greater the initial trust towards manufacturers of frugal household appliances, the more positive the attitude towards using frugal household appliances. Frugal products have a focus on resource-saving use. To assess the relevance for consumers, environmental awareness is included. That means the knowledge and concern about the impact of human actions on the climate and the environment (Schuitema et al., 2013). Various studies have shown that consumers with higher environmental

awareness are more likely to engage in environmentally friendly actions (Kahn, 2007; Chen and Hung, 2016). Based on this, hypothesis H5 is proposed.

H5: The higher the environmental awareness, the more positive the attitude towards using frugal household appliances. Consumers want their actions to meet the expectations of their environment and to be approved by others. That is represented by the construct subjective norm (Ajzen and Fishbein, 1980). It assumes that the expectations of third parties from the consumer's environment influence the consumer's perception of usefulness and behavior. In this study, the subjective norm would be used to map how the consumer's environment views frugal household appliances and whether the subjective norm influences perceived usefulness and purchase intention. Hypotheses H6 and H7 are formulated for this purpose.

H6: The greater the subjective norm concerning frugal household appliances, the more positive is the perceived usefulness of frugal household appliances.

H7: The greater the subjective norm concerning frugal household appliances, the greater the purchase intention of frugal household appliances. The previously mentioned hypotheses H1-H7 are based on various research studies. The following constructs come from the TAM model (Davis, 1989). The perceived usefulness, the perceived ease of use, and the attitude towards using are considered to be factors influencing the intention to use, which has been shown in past studies to be a good predictor of actual use. In this study, intention to use is represented in the form of purchase intention. In this model, perceived usefulness stands for the subjective probability of an increase in usefulness through the use of frugal household appliances (Davis, 1989). Past studies show that if a technology is perceived as useful by the consumer, this could trigger the motivation to use and purchase it (Gupta et al., 2008). As presented in the TAM, the influence on the attitude towards using and the intention to use in the form of the purchase intention is also to be tested in this model. Hypotheses H8 and H9 are formulated for this purpose.

H8: The greater the perceived usefulness of a frugal household appliance, the more positive is the attitude towards using frugal household appliances.

H9: The greater the perceived usefulness of a frugal household appliance, the greater the purchase intention towards frugal household appliances. The construct of perceived ease of use reflects the degree of ease in using technology (Venkatesh et al., 2003). Technology should be user-friendly. It is given when the technology is effortless, clear, simple, and understandable to use (Holden and Karsh, 2010). TAM assumes that there are both direct and indirect influences of perceived ease of use on perceived usefulness and attitude towards using (Venkatesh and Davis, 2000). Based on this, hypotheses H10 and H11 are formulated.

H10: The greater the perceived ease of using frugal household appliances, the greater the perceived usefulness of frugal household appliances.

H11: The greater the perceived ease of using frugal household appliances, the more positive the attitude towards using frugal household appliances. The attitude towards using represents the general intention to act (Ajzen and Fishbein, 1980). It thus reflects the attitude of acceptance. Suppose a consumer is faced with an acceptance decision for or against an object. In that case, a comparison usually takes place between this new attitude object and previous attitudes towards related and higher-level attitude objects (Mann and Prein, 2008). Consumers must have a positive usage attitude towards frugal household appliances for them to lead to an actual purchase. Therefore, it is reflected in the construct of purchase intention. To test this, hypothesis 12 was formulated.

H12: The more positive the attitude towards using frugal household appliances, the greater the purchase intention of frugal household appliances. The research model set up thus contains ten latent, reflective measured constructs: performance expectation (Kianpour et al., 2014), price advantages (Valls et al., 2012); perceived consumer effectiveness (Kang et al., 2013); initial trust (Kim, 2012), environmental awareness (Wang et al., 2020), subjective norm (Venkatesh et al., 2012; Manning, 2009), perceived

usefulness (Stragier et al., 2010; Venkatesh at el., 2000), perceived ease of use (Davis, 1989; Lu et al., 2019), attitude toward using (Liang et al., 2013; Ajzen, 1991), purchase intention (Liang et al., 2013; Ajzen, 1991). A total of twelve relationships between the constructs were formulated. Multi-equation structural models lend themselves to the analysis of these relationships. The variance-based procedure PLS (Partial Least Squares) is chosen as a suitable analysis procedure for investigating the causal relationships for this study. It does not place any requirements on the distribution form of the data. Moreover, it is applicable for small samples (Hair et al., 2016). PLS is used to analyze dependency structures between observable and latent variables (Boßow-Thies and Albers, 2009). A measurement model and a structural model are created. The structural model specifies the causal dependencies between the constructs. The measurement model goes into the relationships between the manifest indicators to measure the dependent (endogenous) and independent (exogenous) latent variables (Hair et al., 2016). The analysis was conducted using SmartPLS version 3.3.3.

A primary survey was conducted to test the research model. The quantitatively oriented method of the online survey was chosen. The reasons were the time, and location-independent answering of the questions, the credible assurance of anonymity, and the use of the media affinity of Generation Y. A seven-point Likert scale, from «1 = strongly disagree» to «7 = strongly agree», was used to measure all items. Only for the items of the construct attitude towards using was a seven-point bipolar scale used.

The data collection was planned as a cross-sectional survey and conducted online from 11.12.20 to 13.01.21. The questionnaire was opened with an introductory text on the purpose of the survey and a note on the anonymity of the answers. Furthermore, the term «frugal innovations» was briefly described for better understanding. The first two questions referred to the experience with frugal innovations. In the main part, 40 questions were asked regarding the operationalized constructs. The questionnaire concludes with information on the socio-demographics of the participants, such as gender, age, marital status, number of persons in the household, income, and employment status.

There were a total of 824 returns. However, these records had to be excluded due to more than 20% missing values (Weiber and Mühlhaus, 2014). Furthermore, those cases were eliminated that showed too fast a response behavior (Time RSI > 1.75, Leiner, 2013). Since the subject of the study refers to Generation Y, only participants born between 1981 and 1999 were considered. Thus, the sample comprises 463 data records. The gender query resulted in the following breakdowns: female - 270, male - 191, diverse - 2. The experience query shows that of the 463 participants, 78 have already heard of frugal innovations and 385 have not yet.

Results. The first analysis of the descriptives at the item level shows no significant anomalies. The expressions cover the whole range of scales from 1 to 7. Beyond that, the mean values and standard deviations, skewness, and kurtosis do not show any special characteristics. The exception is the five items of the performance expectation. Besides, two items cover the scale range 3 to 7 and another two the scale range 5 to 7. On the other hand, all five items have a median of 7. The data evaluation with PLS-SEM follows. First, the measurement model is analyzed. Then, the structural model is evaluated based on a valid measurement model. In addition to the model's explanatory power, the predictive power of the respective independent variables is also tested. First, the reliability of the items in the measurement model is tested for evaluation. The indicator reliability is given, as the item loadings show a value of >0.71 (Table 2) and are significant at $p \leq 0.001$ (Boßow-Thies and Panten, 2010).

The reliability and validity of the latent variables are analyzed next. The reliability, internal consistency, and convergent validity of the multi-item scales are tested using Cronbach's alpha, AVE (Average Variance Extracted), and IC (Internal Conciseness Value). The evaluation shows that all values for Cronbach's alpha exceed the required value of 0.6 for 3 items and 0.7 for 4 items and more (Ohlwein, 1999). The AVE and IC values also exceed the required values of 0.5 and 0.6 (Bagozzi and Yi, 1988) (Table 2). The next step is to test the discriminant validity, according to Fornell-Larcker. It tests whether the correlations

between the latent variables are smaller than the root of the average recorded variance of the variables (Fornell and Larcker, 1981). Table 1 gives the mentioned above. Furthermore, all HTMT values are < than 0.86. That also indicates an adequate level of discriminant validity (Franke and Sarstedt, 2019). In addition, the cross-loadings are evaluated and show that for all items, the loading on the own variable is higher than on the other variables (Boßow-Thies and Albers, 2010). In conclusion, the reflective constructs can all be described as one-dimensional, reliable, and valid, and the structural model analysis could take place in the second step.

Table 1. Fornell-Lacker-Criterion and construct correlation

Constuct	1	2	3	4	5	6	7	8	9	10
1 Performance expectation	0.80									
2 Price advantages	0.05	0.74								
3 Perceived Consumer effectiveness	0.28	0.03	0.81							
4 Initial trust	0.02	0.19	0.15	0.82						
5 Environmental awareness	0.22	0.02	0.72	0.08	0.82					
6 Subjective norm	0.09	0.07	0.32	0.26	0.38	0.92				
7 Perceived usefulness	0.13	0.16	0.32	0.24	0.32	0.48	0.84			
8 Perceived ease of use	0.27	0.19	0.23	0.15	0.26	0.17	0.35	0.90		
9 Attitude toward using	0.21	0.14	0.40	0.25	0.41	0.44	0.52	0.30	0.85	
10 Purchase intention	0.15	0.14	0.39	0.27	0.47	0.52	0.56	0.29	0.68	0.83

Note: diagonal elements are the roots from AVE, including the correlation of the latent constructs.
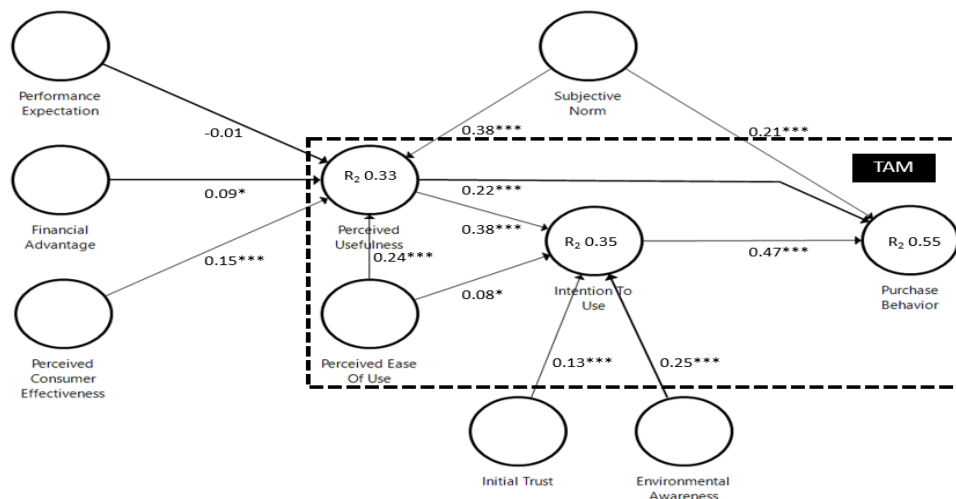Sources: developed by the author.

Table 2. Constructs and measurement items

Construct [Source]	Stand. Loadings	Cron. alpha	AVE	IC
Performance expectation [Kianpour et al., 2014]	0.768 – 0.831	0.87	0.90	0.65
Price advantages [Valls et al., 2012]	0.664 – 0.836	0.64	0.78	0.55
Perceived consumer effectiveness [Kang et al, 2013]	0.756 – 0.875	0.83	0.89	0.66
Initial trust [Kim, 2012]	0.762 – 0.887	0.84	0.89	0.67
Environmental awareness [Wang et al., 2020]	0.804 – 0.867	0.84	0.89	0.68
Subjective norm [Venkatesh et al. 2012; Manning, 2009]	0.890 – 0.940	0.91	0.94	0.84
Perceived usefulness [Stragier et al., 2010; Venkatesh at el., 2000]	0.758 – 0.872	0.87	0.91	0.71
Perceived ease of use [Davis, 1989; Lu et al., 2019]	0.878 – 0.930	0.92	0.95	0.81
Attitude toward using [Liang et al., 2013; Ajzen, 1991]	0.827 – 0.876	0.90	0.93	0.72
Purchase intention [Liang et al., 2013; Ajzen, 1991]	0.769 – 0.885	0.85	0.90	0.70

Sources: developed by the author.

The absence of multicollinearities is checked first. The internal VIF values determined are all smaller than 5. Thus, the problems due to multicollinearities are not to be assumed (Weiber and Mühlhaus, 2014).

R² reflects the explanatory power of the dependent variable. It is an important evaluation criterion in the structural model. The perceived usefulness and the attitude towards using have an R² of 0.33 (R²adj. 0.32) and 0.35 (R²adj. 0.35). The final dependent variable purchase intention shows an R² of 0.55 (R²adj. 0.55). Thus, the values are in the moderate range (Chin, 1998). The Stein-Geisser criterion (Q²) is used for predictive relevance. It shows that the endogenous variables have small to medium (perceived usefulness 0.19; attitude towards using 0.25; purchase intention 0.38) predictive relevance through the exogenous variables. For further analysis, the predictive power of the exogenous variables is evaluated by examining the standardized estimates of the path coefficients and their significance. In addition, the effect size (f²) of the latent exogenous variables is considered. Here the values show different characteristics from no to a medium influence (Chin, 1998). Figure 1 summarises the results of the evaluation of the structural model. Of the twelve hypotheses formulated, nine could be retained.

(*** p ≤ 0.001; ** p < 0.01; * p < 0.1; n.s. = not significant)
Figure 1. Path coefficients
Sources: developed by the author.

It is evident that the perceived usefulness is mainly influenced by the subjective norm (β = 0.38; p ≤ 0.00; f² = 0.19) and the perceived ease of use (β = 0.24; p ≤ 0.00; f² = 0.07). In addition, the perceived consumer effectiveness (β = 0.15; p ≤ 0.00; f² = 0.03) also shows an influence. The path coefficient of financial advantage is significant but low and thus has no significant influence (β = 0.09; p ≤ 0.05; f² = 0.01). Performance expectation has no effect on perceived usefulness (β = -0.01; p = 0.73). Perceived usefulness (β = 0.38; p ≤ 0.00; f² = 0.18) and environmental awareness (β = 0.25; p ≤ 0.00; f² = 0.09) have the strongest effect on the attitude towards using. However, initial trust (β = 0.13; p ≤ 0.00; f² = 0.02) also shows an influence. The path coefficient for perceived ease of use (β = 0.08; p ≤ 0.10; f² = 0.01) is significant, but has barely any influence on the attitude towards using. The target variable purchase intention is most strongly influenced by the attitude towards using (β = 0.47; p ≤ 0.00; f² = 0.34). However, perceived usefulness (β = 0.22; p ≤ 0.00; f² = 0.07) and the subjective norm (β = 0.21; p ≤ 0.00; f² = 0.07) also have an effect on purchase intention.

After assessing the criteria, the structural model can be described as acceptable concerning multicollinearity, the explained variances, and the level and significance of the path coefficients. Overall, this shows a reliable estimation. The results are interpreted in the following.

Conclusions. A basic prerequisite for the adaptation and use is the given acceptance of the consumers. To examine that, the following question was the focus of the work: Which factors influence the acceptance of frugal household appliances within Generation Y in Germany? For answering this research question, a model to explain the acceptance factors of frugal household appliances was developed based on the TAM and extended by 6 constructs based on literature. Established scales were used to measure the constructs, which were adapted to the context of the study. Subsequently, a primary data collection was carried out using an online survey. The evaluated answers of the 463 Generation Y participants could be summarized in the following central findings: The influence of the subjective norm has a significant impact on perceived usefulness and purchase intention. As already shown by Ajzen and Fishbein (1980), also concerning frugal household products, consumers want to see their behavior and their purchase decision as approved by others. The low-cost production and use of frugal household products is part of the definition of the product (Tiwari et al., 2017b). However, Generation Y shows that this factor has little influence on the perceived usefulness of frugal household appliances. The environmental influence in the form of the own possibility to influence something and the general environmental awareness is a factor for Generation Y that influences the perceived usefulness and the attitude towards using frugal household appliances. The results also show that these product innovations should be developed and offered by already well-known brand manufacturers. In Generation Y, a leap of faith is also granted to previously unknown manufacturers so that this area of innovation also offers potential for previously unknown manufacturers in Germany. The performance expectation showed no influence on perceived usefulness. However, the participants' answers (with a median of 7) suggest that performance in the form of, for example, product quality, reliability, and workmanship of the frugal household appliances is expected. The influence of the main constructs of the TAM is proven in the model. Concerning perceived usefulness, perceived ease of use is identified as a strong factor from the TAM. The participants perceive it as useful if the operation of the frugal household appliances is easy to learn and understandable. However, ease of use has no significant influence on attitude towards using.

The influence of perceived usefulness on the attitude towards using, however, can be confirmed. Furthermore, it can be seen that the purchase intention is influenced by the perceived usefulness, but to a greater extent by the attitude towards using. The study provides a comprehensive first insight into the acceptance factors of frugal household appliances in Generation Y in Germany. Future research could examine whether the influencing factors are similar in other generations or other industrial nations. Furthermore, the influencing factors should also be determined for other product areas. Together, the studies could give the economy essential indications about the potentials of frugal products.

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Сандра Шнайдер, Угорський університет сільського господарства та наук про життя, Угорщина

Сприйняття інноваційних ресурсозберігаючих технологій поколінням Y Німеччини: модифікований ТАМ підхід

Розвиток та імплементація ресурсозберігаючих інновацій забезпечує підвищення якості продукції при одночасному скороченні сировинних та фінансових витрат на всьому ланцюгу створення вартості продукту. Автором зазначено, що, на перших етапах імплементації ресурсозберігаючі інновації створюють умови для задоволення первинних потреб суспільства країни. При цьому систематизація наукових напрацювань засвідчила, що найвищий рівень популярності ресурсозберігаючі інновації мають у промислово розвинутих країнах. Метою дослідження є виявлення відмінностей у факторах сприйняття ресурсозберігаючих інновацій між споживачами, які проживають у розвинутих країнах та країнах, що розвиваються. Автором наголошено, що покоління Y формує значну групу споживачів Німеччини (понад 15 мільйонів осіб), які зацікавлені у продуктах, що вироблені відповідно до принципів сталого розвитку та соціальної справедливості. Побутова техніка, така як пральні та посудомийні машини або кавоварки, є потенційною групою продуктів ресурсозберігаючих інновацій у таких розвинених країнах, як Німеччина. Попри те, що дана група продуктів протягом багатьох років є невід'ємною частиною повсякденного життя в промислово розвинутих країнах, вони є високовартісними та, часто, функціонально складними. У ході дослідження висунуто 12 гіпотез, які об'єднано в ТАМ-модель. Об'єктом дослідження є покоління Y, яке проживає у Німеччині. Детерміновану вибірку даних сформовано на основі онлайн-опитування 463 респондентів з грудня 2020 року по січень 2021 року. Для підтвердження висунутих гіпотез використано багаторівневу структурну модель, яка побудована та оцінена з використанням методу часткових найменших квадратів. Отримані результати підтвердили статистично значущий вплив думки третіх сторін на покоління Y при прийнятті рішення щодо купівлі певного товару. Автором виявлено вплив рівня екологічної освіти на відношення до продукції. Попри спорідненість технологічних застосувань, у роботі виявлено, що простота використання впливає на корисність ресурсозберігаючих побутових приладів. Встановлено, що можлива цінова перевага не впливає на корисність товару для цієї групи споживачів.

Ключові слова: інновації, модель прийняття технологій, побутові прибори, покоління Y, купівельні наміри.