

DETERMINANTS OF INTENTION TO USE DIGITAL MARKETING: A STUDY AMONG CONSUMERS' INTENTION IN PURCHASING AGRO-BASED PRODUCTS IN SELANGOR.

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Abstract: *This comprehensive study delves into the multifaceted factors shaping consumers' intentions to engage in the purchase of agro-based products through digital marketing within the context of Selangor. Anchored in the theory of planned behavior, the research meticulously scrutinizes the intricate interplay of attitudes, subjective norms, and perceived behavioral control, dissecting their impact on consumers' proclivity to embrace digital marketing for agro-based product procurement. A robust dataset of responses from 385 participants was meticulously gathered through a survey questionnaire, and subsequent analysis employed both descriptive statistics, chi-square analysis and regression analysis. The study's insightful conclusions highlight how important perceived behavioral control is and clarify how much of an impact it has on customers' willingness to choose to buy agro-based products via digital marketing channels. Furthermore, the research illuminates a noteworthy correlation between consumers' demographics and their inclination to engage in agro-based product purchases through digital platforms. In essence, this study serves as a rich repository of insights into the intricate dynamics influencing consumers' intentions to leverage digital marketing for agro-based products acquisitions in Selangor. The nuanced findings hold substantial relevance for businesses and marketers operating in the agribusiness sector, offering a roadmap for refining marketing strategies and fostering more profound consumer engagement in this evolving digital landscape.*

Keywords: *consumer intention, determinants, digital marketing, agro-based products*

Introduction

Consumer's Purchase Intention

The intention to transact, or purchase intention, can be defined as the intention of buyers to engage in an exchange relationship at shopping websites, such as sharing information, maintaining business relationships, and creating business transactions (Zwass, 1998). According to Pavlou (2003), a consumer's willingness to purchase a product through an online store is measured by their online purchase intention. Park, J. (2007) defined purchase intention as "what we think we will buy". For instance, A home gardener may need to restock agricultural supplies due to low organic soil or pesticide needs. They may conduct preliminary research on e-commerce platforms, read customer reviews, and check for promotions. This research phase ensures they select the right product for their specific plants and gardening requirements. The final purchase may not be made until they have completed the necessary research. Purchase intention can also be defined as the decision to act or a physiological action that shows an individual's behaviour according to the product (X. Wang & Yang, 2008).

Digital Marketing

Marketing has now turned into digital marketing, which has widened its reach. According to Kotler and Armstrong (2009), digital marketing is a type of direct advertising that uses interactive tools to link buyers and sellers electronically. These engaged technologies include email, websites, online forums and newsgroups, television shows that are interactive, mobile data communications, and more. Digital marketing consists in the promotion of products or brands through one of more electronic forms. It should be considered significant whether a given product or service may be used in digital marketing (Yasar & Gillis, 2023). Digital marketing has grown significantly due to the widespread penetration of the internet. The 12 increasing global internet penetration has provided a vast and accessible audience for digital marketing efforts, making it easier for marketers to reach consumers through various digital channels. Using digital marketing for specific products or services do not always need to be justified (Persons, 1996).

Types of E-Commerce Platforms

Digital marketing encompasses a wide variety of marketing tactics and technologies used to reach consumers online. According to Alexa, (2023), traditional media is effective for reaching a broad consumer base, while digital media excels in targeting specific audiences, emphasizing that the choice of channels depends on the characteristics of the target audience for optimal effectiveness. Digital marketing can be broadly broken into eight main categories including: affiliate marketing, content marketing, email marketing, marketing analytics, mobile marketing, pay-per-click, search engine optimization and social media marketing (Alexa, 2023). One sector is business information services, for example, services selling captured customer information to others for marketing purposes. It can also be advertising found on websites and search engines (Slevin, 2000). Digital marketing provides opportunities for businesses to gain economic value through collaboration with stakeholders, customers and employees (Purkayastha & Sharma, 2016). The digital marketing focuses on incorporating its appropriate marketing channels to make it easier for E-commerce businesses. The example of e-commerce platforms is AgroBazaar Online. The Agrobazaar Online portal is a program under the National Blue Ocean Strategy (NBOS) which is an eCommerce infrastructure that is fully

owned by the Ministry of Agriculture and Food Industry (MAFI) and managed by Federal Agricultural Marketing Authority (FAMA). It provides the access for users to get agricultural products and agro-food products through online purchases as well (FAMA, 2024). Additionally, HappyFresh is the first and fastestgrowing online grocery platform in Southeast Asia (HappyFresh, 2020). Other than that, there are more online grocery platform in Malaysia such as Tesco Online, GrabMart, Jaya 13 Grocer, Lalamove, Mydin and Organic4u (Travel, 2021). Last and but not least, In May 2023, shopee.com.my was ranked first and was the most popular e-commerce and shopping website, followed by lazada.com.my, who came in second as the top e-commerce and shopping websites in Malaysia (Statista, 2023).

Agriculture Based Products Through Online Marketing Platforms

According to Department of Statistics Malaysia (DOSM), in the third quarter of year 2023, E-commerce income in Malaysia increase by 5.4 per cent year-on-year which is RM289.5 billion from RM274.6 million in the same quarter last year (Online, 2023). Electronics and fashion products are the two most popular products that Malaysians purchase through ecommerce marketplaces (Statista, 2023). Then, for E-commerce of grocery has the lowest value that cause the agri-supply chain is often controlled by well-entrenched intermediaries or known as middlemen, the logistical challenge of handling perishable products is complex and most consumers still prefer to buy groceries in-person rather than online, given the inconsistent physical appearance of fresh produce, especially fruit and vegetables (Joiner, 2019). Nowadays, Global lockdown, social distancing, and other measures introduced to limit the spread of the COVID-19 pandemic have urged consumers to purchase more on the online marketplaces (Guo et al., 2022). The pandemic sparked a meteoric rise in online sales. As visits to physical stores were restricted, and many were running low on money, consumers went online to shop, causing online purchases to grow higher and higher (Dannenberg et.al, 2020). Consumer behaviours have also shifted in the past few years, mainly caused by the government's Movement Control Order (MCO) during the COVID-19 pandemic. The majority of Malaysians said they had made more purchases online since the pandemic began. The impact of COVID-19 has associated with a surge of online sales of agricultural products (Guo et al., 2022). The frequency with which Malaysian consumers shopped online has remained high, even after the MCO was lifted.

Theory of Planned Behaviour

An existing theory or theories that are employed for your specific study are included in a theoretical framework together with concepts and their definitions. The theoretical framework must show an understanding of ideas and concepts related to the research paper's topic and that will connect it to the more general domains of knowledge in the course that are taking. In this research, the theory used is, Theory of Planned Behaviour (TPB). In 1980, the Theory of Reasoned Action (TRA) was renamed the Theory of Planned Activity (TPB) to forecast a person's intention to engage in a behavior at a particular time and place. The theory's goal was to explain every action that a person can exercise self-control over. The most important aspect of this model is behavioral intent. Behavioral intents are impacted by attitudes regarding the likelihood that a behavior will have the desired outcome as well as by a subjective assessment of the risks and advantages of that outcome. The TPB has been used successfully to predict and explain a variety of health behaviors and intents, including substance use, health services, and smoking. According to the TPB, behavioral success is a function of both ability and motivation (intention) (behavioral control). It makes a distinction between the behavioral, normative, and control types of beliefs. Six constructs that together represent a person's actual control over the behavior make up the TPB. The intention of an individual to carry out certain conduct is a key component of the theory of planned behavior, which investigates individual behavior from a

psychological standpoint. The motivational elements that affect behavior are thought to be captured by an individual's intention. In general, an activity should be more likely to occur the more determined the purpose to engage in it. The theory also suggests that perceived risk, perceived value, and perceived trust can influence consumers' attitudes and subjective norms, which in turn can affect their purchase intention. This theory has been applied in the e-commerce platform to understand and predict online shopping behaviour. According to Ajzen presents some data that support a claim that intention is more predictive of behaviour than attitudes alone. 15 (Ajzen, 2005).

Problem statement

In the ever-changing landscape of agro-based product sales in Selangor, a crucial task is figuring out the nuances of consumer 'Determinants of Intention to Use Digital Marketing'. This research is driven by the primary objectives of identifying the pivotal factors influencing consumers' intention in purchasing agro-based products through digital marketing channels and meticulously examining the interplay between consumers' demographics (age, gender, income, and education) and their intention to engage in such transactions. The existing gap in understanding these determinants and demographic influences poses a significant barrier to formulating targeted strategies for fostering digital marketing adoption in the local agro-commerce landscape. This thesis seeks to bridge this gap, contributing valuable insights essential for the development of informed interventions aimed at propelling the integration of digital marketing platforms within the agro-based product market in Selangor.

Despite the significant rise in e-commerce, the agricultural product buying system is still in its early stages. Multiple considerations, such as immature online purchasing systems, as well as logistical and security concerns, have caused many customers to be hesitant for online purchases. Many agricultural businesses are still unable to properly comprehend various aspects that impact customers' online purchase intention, resulting in a lack of appropriate and effective marketing tools and approaches (Ogutu, 2018).

Research Objectives. To identify the key determinants influencing consumers intention in purchasing agro-based products on digital marketing.

- b) To examine the relationship between consumers demographics (such as age, gender, race and level of education) and their intention to purchase agro-based products.

Significance of Study

The study on consumer intention in purchasing agro-based products holds significant implications for both businesses and policymakers. It provides valuable insights into consumer behaviour and preferences, which can inform decision-making processes and contribute to the development of sustainable agricultural practices and market growth. The first significance of this study is to contributes the promotion of sustainable agricultural practices. By identifying the factors that influence consumer intention, policymakers and agricultural stakeholders can implement policies and practices that align with consumer preferences for environmentally friendly farming methods, reducing negative environmental impacts and fostering sustainable agriculture. Another significance of the study is to understand the consumer intention in purchasing agro-based products helps businesses develop effective marketing strategies. By identifying the factors that drive consumer preferences, businesses can tailor their product offerings, branding, and communication strategies to meet consumer demands, resulting in improved customer engagement and increased market share. Last but not least, this study can also drive market demand and influences purchasing decisions. According to the findings, there

are problems with market demand that affect Malaysian consumers' decisions to buy agricultural products. The primary internal impediments to Malaysia's agricultural sector are the high expenses and low returns of agricultural output. Additionally, they are the main cause of the agriculture sector's deterioration and the limitation of farmers' ability to increase their revenue. By understanding consumer behaviour, businesses can develop products and services that align with consumer preferences, fostering market growth and economic development in the agro-based sector. 19 This, in turn, contributes to job creation, investment opportunities, and overall economic growth

Materials and Methods

Population and sample

Population

In the focal scope of this research, the target population comprises consumers residing in Selangor, Malaysia, representing a dynamic and diverse demographic. To ensure a robust and representative sample for the study, the sample size was meticulously estimated using Daniel WW software, a reliable tool for calculating sample sizes based on the population parameters. According to recent demographic statistics, Selangor boasts a population of 6,994,423 individuals, with a nuanced breakdown indicating that consumers within the age range of 15 to 64 years constitute a significant subset, numbering 4,962,244 people.

A deeper exploration of the demographic dynamics reveals noteworthy shifts in age distribution within the population of Selangor. The composition of individuals aged 0-14 years, indicative of the young age bracket, experienced a slight decline from 23.6 percent in 2021 to 23.2 percent in 2022. Conversely, the working-age population, encompassing those aged 15-64 years, witnessed a marginal increase from 69.4 percent in 2021 to 69.5 percent in 2022. This shift can be attributed, in part, to changes in the composition of male foreign workers among non-citizens within this demographic. Meanwhile, the proportion of the population aged 65 and over, representing the old age cohort, exhibited a notable increase from 7.0 percent to 7.3 percent during the same period.

These demographic nuances collectively signify a transformative trend, aligning with the United Nations definition of Malaysia transitioning into an ageing society. The median age, a pivotal demographic indicator, also experienced a gradual uptick, rising from 30.1 years in 2021 to 30.4 years in 2022, as reported by Brinkhoff (2022). This increase in the median age further underscores the evolving demographic landscape, shedding light on the ageing dynamics within the population of Selangor.

Considering the multifaceted nature of demographic changes, the study is poised to delve into consumer intentions in purchasing agro-based products against the backdrop of these evolving population dynamics. The calculated sample size, tailored to this nuanced demographic profile, aims to capture a comprehensive and representative cross-section of consumer perspectives within the diverse age groups prevalent in Selangor. As the research unfolds, these demographic insights will serve as a foundational backdrop, enriching the study's findings with a nuanced understanding of consumer behavior in the context of agro-based product purchases in Selangor.

Sample

In the meticulous design of this study, a judicious consideration of sample size emerges as a critical facet, warranting a robust approach to ensure statistical reliability and meaningful insights. The calculated sample size, quantifying the number of participants or measurements necessary for the research endeavor, is strategically set at approximately 385 samples. This determination is not arbitrary; instead, it is rooted in the fundamental principles of statistical confidence and precision.

The significance of this sample size becomes pronounced when viewed through the lens of confidence level and margin of error. With a targeted confidence level of 95%, the study endeavors to instill a high degree of certainty in the findings. In practical terms, this means that there is a 95% probability that the true value lies within the calculated margin of error, which, in this case, is set at $\pm 5\%$ of the measured or surveyed value.

The meticulous consideration of sample size is underpinned by the recognition that an adequate and representative sample is essential for extrapolating findings to the broader population. In essence, the chosen sample size of 385 or more measurements/surveys serves as a strategic balance, striking a harmonious chord between statistical rigor and pragmatic feasibility.

As the study aims to unravel the intricacies of consumer intention in purchasing agro-based products in Selangor, the judicious selection of sample size becomes pivotal in ensuring the generalizability and applicability of the findings. This approach not only contributes to the methodological robustness of the research but also underscores the commitment to producing results that withstand scrutiny and resonate with broader implications.

The deliberative choice of a sample size of approximately 385 samples reflects a meticulous approach to research design, aligning with statistical principles and aiming for a high level of confidence in the study's outcomes. This methodological nuance, ingrained in the very fabric of the research framework, underscores the commitment to generating findings that not only illuminate the specific context of consumer behavior in Selangor but also contribute meaningfully to the broader discourse on agro-based product purchases.

Data Collection

A questionnaire, a versatile and indispensable research instrument, serves as a structured set of inquiries or prompts designed to elicit valuable data from respondents concerning their attitudes, experiences, or opinions (Bhandari, 2021). In the realm of research methodology, questionnaires emerge as dynamic tools capable of capturing both quantitative and qualitative information. The nature of questionnaires can vary, encompassing structured formats with close-ended questions like yes or no queries and free-flowing formats that include open-ended questions, allowing respondents the freedom to expound upon their thoughts and insights (Bhat, 2018).

The strategic design of a questionnaire assumes paramount significance, as it plays a pivotal role in mitigating survey errors and optimizing the quality of gathered data (Qualtrics, 2018). A well-crafted questionnaire not only facilitates efficient data collection but also contributes to the overall reliability and validity of the research findings. An additional advantage inherent in the utilization of questionnaires is the expeditious completion by respondents, enhancing the practicality and feasibility of data acquisition (Debois, 2022).

In the context of this study, the questionnaire is meticulously structured, encompassing three distinct sections designed to comprehensively capture relevant information. The first section, Section A, delves into the demographic characteristics of respondents, encompassing vital details such as gender, age, race, and residential area within Selangor. This section seeks to establish a foundational understanding of the diverse respondent profile, enabling nuanced insights into the contextual factors influencing their perspectives.

Moving to Section B, the questionnaire navigates into an evaluation of attitudes toward behavior, subjective norms, and perceived behavioral control. This section seeks to unravel the intricacies of respondent perspectives, shedding light on the factors that shape their attitudes and influence their behaviors in the specific context under investigation.

Finally, Section C focuses on the evaluation of the dependent variable, specifically homing in on purchase intention. This section serves as the linchpin of the questionnaire, probing into the core research objective by gauging the respondents' inclination and predisposition towards purchasing agro-based products in Selangor.

Data analysis

At the inception of this quantitative study, a comprehensive approach is undertaken to ascertain the ideal profile of respondents, determining the sample size, and selecting the most fitting survey methodology. The envisaged participation of approximately 385 Malaysian consumers stands as a pivotal aspect of this research endeavor, offering a sizable pool from which to draw valuable insights into consumer behavior regarding agro-based product purchases.

In alignment with the digital age and the ubiquity of online platforms, the chosen survey method revolves around leveraging the capabilities of Google Forms. This web-based survey administration tool, seamlessly integrated into Google's suite of free online applications, provides an efficient and accessible means of collecting data from participants. The design of the survey questions and the layout is a meticulous process, ensuring clarity and relevance to the research objectives.

The initial segment of the online survey is dedicated to securing participants' informed consent, a fundamental ethical consideration in research. Following this, demographic variables such as age, gender, race, and other pertinent information are gathered, laying the groundwork for a comprehensive understanding of the participants within the context of the study.

Once the Google Form is meticulously crafted, the survey embarks on a journey across diverse online platforms, maximizing outreach through popular channels like WhatsApp, Instagram, Facebook, and Twitter. This strategic distribution methodology seeks to tap into the expansive reach and varied user demographics of these platforms, fostering a diverse and representative respondent pool.

As responses begin to flow in, the subsequent phase involves a meticulous analysis of the collected data. Utilizing the statistical prowess of SPSS, the data is subjected to a rigorous examination, with careful consideration given to excluding any missing or incomplete data points. This analytical process aims to distill meaningful patterns, trends, and correlations within the dataset, contributing to a comprehensive understanding of consumers' intentions in the digital marketing landscape.

Results and Discussion

Demographics Information

The demographic information of the respondents is presented in Table 2. The gender distribution within this participant pool reveals that 161 respondents, constituting 41.8% of the total, identify as male. Conversely, a majority of 224 respondents, representing 58.2% of the total, identify as female. According to age of consumer, the highest frequency within the age range of 30 to 39 years, encompassing a total of 197 individuals. This age group commands a significant share, representing 51.2%. A close contender is the age group of 40 to 49 years, accounting for 27.5% of the total respondents, equivalent to 106 individuals. The age group of 20 to 29 years follows closely with percent of 15.6%, correlating to a count of 60 individuals. For the 50 to 59 age group, the total frequency stands at 21, contributing to percentages of 5.3% respectively. Lastly, the age group of 60 years and above is represented by a solitary individual, constituting 0.3%.

Based on race, the Indian race emerges as the most prevalent, with 136 individuals representing 35.3% percentage. In close succession, the Chinese race constitutes 33%, encompassing 127 individuals. The Malay race follows suit with 119 individuals, comprising 30.9% percentage. Notably, individuals from other races total three, constituting 0.8%. The most prevalent educational attainment is a bachelor's degree, encompassing 173 respondents, constituting 44.9% percent. Subsequently, individuals with a master's degree background comprise 35.8%, totaling 138 participants. Furthermore, the educational category of diploma studies is observed in 34 respondents, accounting for 8.8% percentage. Noteworthy is the presence of respondents with a Doctor of Philosophy (PhD) background, totaling 34 individuals, representing 8.8% percentage. Finally, those with alternative educational backgrounds total six individuals, constituting 1.6%.

The majority of consumers are situated in Klang, totaling 81 individuals, equivalent to 21% percentage. Subsequently, Hulu Selangor accommodates 66 respondents, sharing an equal percentage of 17.1%, While for Petaling, it attains 17.9%. Additionally, residents of Sabak Bernam amount to 55 people, constituting 14.3% percentage. Furthermore, Hulu Langat encompasses 48 individuals, making up 12.5% percentages. Similarly, Gombak comprises 28 respondents, accounting for 7.3% percentage. Following this, individuals residing in Sepang total 26 respondents, contributing 6.8% percentage. Finally, beyond the confines of Selangor, there are 12 people, representing 3.1%.

Model summary of multiple linear regression analysis of factor influenced consumers' intention to purchase agro-based products.

As in Table 3, the findings elucidate that the coefficient of determination, R^2 , stands at 0.254, denoting that approximately 25.4% of the variability in the dependent variable can be elucidated by the independent variable. In social science research, an R-squared value of 0.254 is considered acceptable. This is because the goal of most social science research modelling is not to predict human behaviour. According to Ozili (2022), in the realm of social science empirical modeling, an R-square value of at least 0.1 (or 10%) is considered acceptable, particularly when the predictors or explanatory variables exhibit statistical significance. This underscores the limited explanatory power of the model, suggesting a notable disparity between the anticipated and observed data points. Consequently, the residual portion of 74.6% implies a substantial unexplained variance, emphasizing the need for further exploration and consideration of factors beyond those examined in this study. Simultaneously, the cumulative impact of the correlated

factors influencing consumer intentions in purchasing agro-based products yields a coefficient of 0.248, indicating that 24.8% of the observed variations can be attributed to the factors under investigation, while a substantial 75.2% remains influenced by unexplored variables not encompassed in the current study.

Coefficient of multiple linear regression analysis on factor influencing consumers' intention to purchase agro-based products.

The multiple regression analysis outcomes, encompassing the research population with a sample size of 385, have unveiled critical insights into the three variables under consideration: attitudes, subjective norm, and perceived behavioral control. Based on the Table 4, the results distinctly highlight subjective norms as the predominant factor influencing consumer intention in purchasing agro-based products through e-commerce platforms. The statistical significance of the subjective norms score ($\beta = 0.209$, $p < 0.05$) underscores its pivotal role in shaping consumers' purchasing intentions for agro-based products. The positive Beta value signifies a noteworthy influence of subjective norms on consumer intentions, reaffirming its substantial impact in the context of e-commerce transactions. Furthermore, the analysis demonstrates that perceived behavioral control also contributes significantly to the variance ($R^2 = 0.254$), with a noteworthy increase of 0.204 in consumer intention for every unit increase in perceived behavioral control ($\beta = 0.204$, $p < 0.05$). Conversely, attitudes, while included in the analysis, do not exhibit a statistically significant contribution to the variance in consumer intention ($\beta = 0.077$, $p > 0.05$). These findings offer a nuanced understanding of the interplay between perceived behavioural control, subjective norm, and attitudes in shaping consumer intentions, providing valuable insights for businesses aiming to optimize their strategies in the agro-based product e-commerce landscape.

Chi-square analysis of the relationship between consumers' demographics and their intention to purchase agro-based products on e-commerce platforms.

Chi-square test of gender

As portrayed in Table 5, the chi-square test yields a value of 31.7 with 13 degrees of freedom, and the associated p-value is found to be less than 0.05. This statistical significance implies that there is a discernible relationship between gender and online purchase intentions among consumers. Numerous studies, including those by Brown, Pope, and Voges (2003); Doolin et al. (2005); El Ansary and Roushdy (2013); Fan and Miao (2012); Girard and Silverblatt (2003); Lian and Yen (2014); Rodgers and Harris (2003); Thamizhvanan and Xavier (2013); and Vaidehi (2014), suggest a prevailing trend wherein men exhibit a higher inclination toward making online purchases compared to women. However, contrary findings are presented by Clemes et al. (2014), who report that women tend to engage in online shopping more frequently than men. Girard, Korgaonkar, and Silverblatt (2003) further argue that the influence of gender on online purchase intentions is contingent on the product category, with women dominating purchases in non-digital product categories like clothing, personal care items, and home fashions, while men exhibit a higher preference for digital products such as consumer electronics, computers, and software (Rodgers & Harris, 2003). Han et al. (2015) extend this discourse by noting that male and female users display distinct purchase intentions based on factors like dedication, responsiveness, and sentiment. This divergence can be elucidated through the elaboration likelihood model (Petty et al., 1983), which posits that the level of cognitive processing influences how a message shapes attitudes and purchase intentions. Moreover, the nature of the shopping experience is identified as a potential influencing factor on purchase intention, as observed by Das (2014). Das's research on gender as a moderating

variable in the relationship between store image, attitudinal loyalty, behavioral loyalty, and purchase intention reveals that the positive impact of store image on attitudinal loyalty, behavioral loyalty, and purchase intention varies across gender, with a notably stronger effect observed among females than males.

Chi-square test of age

An attempt was made to assess the influence of age on online purchases. For this purpose, purchase intention was selected. Analysis of Table 5 reveals a chi-square test was employed to determine whether a significant relationship exists between age and purchase intention of products through e-commerce. Table 5 indicates a chi-square value of 148.220 with 52 degrees of freedom, and the p-value is less than 0.05. Consequently, it can be concluded that the purchase intention of agro based products depends on age. According to past research studies, age plays a role in shaping consumers' purchase intention, with different age groups having varying attitudes and behaviours towards online purchases (Law & Ng, 2016). For example, users aged 41-50 have a higher perceived ease of purchasing than older users (aged 51-70), and males have stronger personal innovativeness and perceived usefulness than females. (Chong et al., 2020).

Chi-square test of race

Employing a chi-square analysis, the study aimed to discern the presence of a significant relationship between an individual's racial background and their inclination to engage in online purchases, focusing on the variables of purchase intention and racial background. Table 5 reveals a chi-square value of 102.729 with 39 degrees of freedom and a p-value less than 0.05, affirming a statistically significant association between racial background and consumers' intentions to procure agricultural products through digital channels. This substantiates the notion that racial, ethnic, and cultural backgrounds play a pivotal role in influencing consumer intentions within the digital marketing landscape, as indicated by prior research (Christiansen, 2000). Notably, variations in the impact of social media influencers on purchase intentions based on customers' ethnicity underscore the importance of considering diverse socio-cultural factors in crafting effective digital marketing strategies (Lim, 2021).

Chi-square test of level of education

Employing a chi-square analysis, the study sought to ascertain the existence of a significant relationship between levels of education and purchase intentions. Table 5 reveals a chi-square value of 83.892 with 52 degrees of freedom, and a p-value less than 0.05, affirming a statistically significant association between the level of education and consumers' intentions to procure agro-based products via digital platforms. This conclusion aligns with previous research, which posits that the adoption of electronic commerce is influenced by various factors, including socioeconomic status and educational level (Agudo-Peregrina et al., 2014). Existing studies suggest a higher inclination for individuals with elevated education levels to embrace online shopping (Hui et al., 2007). However, the literature also reflects inconsistency, indicating that aspects of education may impact internet-related activities differently. For instance, a study by Eurostat (2007) revealed that 63.0% of the population with lower education or no formal education refrained from any internet-related activities, compared to only 12.0% of those with higher education. Moreover, heightened education levels may contribute to greater consumer awareness concerning safety, quality, and authenticity of agri-food products, leading to a more informed and discerning approach in the purchasing process (A. et al., 2019).

**Table 1: List of question items on determinants of intention to use digital marketing:
A study among consumers' intention in purchasing agro-based products in Selangor.**

No.	Question Items
1	I believe that the quality of agro-based products significantly influences my purchasing decisions
2	I believed that the availability of agro-based products in my area affects my intention to buy them
3	I believed that recommendations from friends and family impacted my decision to purchase agro-based products
4	I believe that my level of knowledge about agro-based products affects my purchasing behaviour
5	I believed that the convenience of purchasing agro- based products online or in stores is important to me
6	I trust that my friends and family believe I should buy agro-based products
7	I trust that my social circles (e.g., colleagues, social media contacts) influence my decision to buy agro- based products
8	I trust that my personal network's opinions and recommendations affect my purchasing behaviour of agro-based products
9	I trust that the government's support for agro-based products affects my decision to buy them
10	I trust that popular public figures or influencers endorse the use of agro-based products
11	When I use agro-based products, I feel in control of my purchasing decisions
12	When I use agro-based products, I am confident in my ability to find them easily in stores or online
13	I admit that I have the freedom to choose agro-based products regardless of external pressures or constraints
14	I believe that I have control over when and where I can purchase agro-based products
15	I believe that I have the financial means to afford agro- based products when I decide to buy them
16	Agro based products that I purchase through E- Commerce platform interest me a lot
17	Once I used online platform to purchase agro based product, I will used it regularly
18	I like to be permanent consumer through the E- E-Commerce platform purchasing in future
19	I have no problems when shopping agro based product by using E-Commerce platform
20	I am satisfied from the E-Commerce service providers which easily accessible during Covid-19

Table 2: Demographic Information

Demographic Information	Category	Frequency	Percentage (%)
Gender	Male	161	41.8
	Female	224	58.2
Age	20 – 29 years old	60	15.6
	30 – 39 years old	197	51.2
	40 – 49 years old	106	27.5
	50 – 59 years old	21	5.3
	60 years old and above	1	0.3

Race	Malay	119	30.9
	Chinese	127	33.0
	Indian	136	35.3
	Others	3	0.8
Background of study	Diploma	34	8.8
	Bachelor's degree	173	44.9
	Master's degree	138	35.8
	Doctor of philosophy (PhD)	34	8.8
	Others	6	1.6
Residential area in of Selangor Consumer	Gombak	28	7.3
	Hulu Langat	48	12.5
	Hulu Selangor	66	17.1
	Klang	81	21.0
	Petaling	69	17.9
	Sabak Bernam	55	14.3
	Sepang	26	6.8
	Others	12	3.1

Table 3: Model Summary of Linear Multiple Regression Analysis

R	R Square	Adjusted Square	Std. Error of the Estimate	Durbin Watson
0.504 ^a	0.254	0.248	0.37339	1.668

Table 4: Coefficients of Linear Multiple Regression Analysis

Model (Mean)	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.166	0.161		13.451	0.000
Attitudes	0.077	0.051	0.088	1.500	0.134
Subjective Norm	0.209	0.049	0.256	4.310	0.000
Perceived behavioural control	0.204	0.051	0.238	4.004	0.000

Table 5: Summary of Chi-Square Analysis

		Value	df	Asymp. Sig. (2-sided)
Gender	Pearson Chi-Square	31.777 ^a	13	0.003
	Likelihood Ratio	36.561	13	0.000
Age	Pearson Chi-Square	148.220 ^a	52	0.000
	Likelihood Ratio	129.076	52	0.000
Race	Pearson Chi-Square	102.729 ^a	39	0.000
	Likelihood Ratio	107.387	39	0.000
Level of Education	Pearson Chi-Square	83.892 ^a	52	0.003
	Likelihood Ratio	91.844	52	0.001

Conclusion

The primary purpose of this research is to uncover the key characteristics influencing customers' intentions to purchase agricultural-based products through online marketing in Selangor. According to the findings, perceived behavioural control has a substantial impact on willingness

to purchase agricultural-based items via digital marketing. The good impacts of this research allow market researchers as well as practitioners to grasp customer intention, which is the most significant component in their considerations, and so deepen and widen their market. This strategy is truly applicable to many business kinds.

The final finding showed that there is a significant and beneficial connection between the consumers demographics (such as age, gender, race, and level of education) and their intention to purchase agriculture-based products. According to the research's findings, people behave rationally in accordance with their attitudes, subjective norms, and perceived behavioural control, which is explained by the theory of planned behaviour.

There are inherent limitations to every study, and this one is no different. Firstly, because surveys are designed to gather data, respondents might not tell the whole truth about their actions and feelings. Second, while acknowledging the significant differences in consumer preferences and behaviours across various regions and cultures, the research is limited by its geographical scope. Thirdly, because the study relies on self-reported data, there is a chance that participants will exhibit social desirability bias, which causes them to align their responses with social norms rather than expressing their true intentions. Furthermore, the dynamic nature of technology and digital marketing presents a challenge, as the study's conclusions become more pertinent over time as consumer preferences and technological environments change.

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