The impact of viral marketing on the green purchase intention for products of the Faculty of Agriculture
(By the Appling on Mina University employees)

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Abstract

The study aimed to know the effect of viral marketing on the green purchase intention of the products of the Faculty of Agriculture (applied to employees of Minia University). The research community consists of all employees of the university, numbering 3500 individuals, and the sample size was 347 individuals. One of the most important results of this study is that there is a statistically significant effect of viral marketing on the green purchase intention among employees of Minia University.

Keywords: viral marketing; green purchase intention; Minia University.

INTRODUCTION

Viral marketing known as electronic word-of-mouth marketing (eWOM),helps spread the marketing message of an organization or brand, itis a very effective way of promotion because customers trust the word of mouth of other customers, which builds trust among the customer base (Lakruwan et al, 2032).

On the other side,green marketing has been a vital academic research topic over the past three decades. Green consumers have become a powerful force behind how companies do business, and these environmentally friendly customers are creating a new economy around the world. (Radwan et al, 2014). However, some consumers do not intend to purchase green products even though these products appeal to them (Silva et al., 2021); Many studies have claimed that consumers may not be willing to preserve the environment because they believe that they will have to spend more money to buy green products instead of suitable products (Devinney et al., 2010). According to Chen and Chai (2010), green purchasing is associated with environmentally friendly products, thus neglecting those products that cause harm to the environment.

1/ Previous studies

1/1 Previous research and studies on viral marketing

(Sharma& Kaur, 2020) This study aimed to identify the factors influencing the opening and forwarding of commercial emails received directly from companies

to promote products through consumer engagement and create a viral infection. It aimed to explain the factors that lead to the emergence of "viral infections" especially commercial emails directed to individuals with high network capabilities. The results further indicated that "social network ties", "sense of involvement with others", "content utility" and "recipients" emotional response to the message content" are significant determinants of intentions to forward commercial e-mails. In terms of emotional response, the "negative emotions in the message content.

(Lakruwan et al, 2023), This study aimed to investigate how consumers' (millennials) purchase intentions in Sri Lanka are affected when exposed to viral messages through virtual platforms, taking into account consumers' brand awareness. This research focuses on studying the impact of viral marketing on purchase intention. A sample of 25 districts in Sri Lanka was selected, from people born between 1980 and 1996 (millennials) who number 6,569,000 millennials in Sri Lanka. The sample size used in the study is 384 out of 6,569,000 millennial (1970) millennial respondents (Generation Y) born between 1980 and the end of 1999. One of the most important findings of this study is the existence of a direct and positive relationship between viral marketing, brand equity, and purchase intention.

(Abbas et al,2024), This study aimed to analyze the impact of viral marketing media on brand awareness and ultimately influence consumer purchase intention. It also compared Facebook, mobile phones, and email to see which is more effective, our study sample was an online survey conducted among viral marketing media users who consisted of university students, private sector employees, and government employees in Pakistan. Based on the survey with Facebook, mobile phones, and email users according to AIDA theory of hierarchy of effects, the results show that Facebook is the most influential and effective viral marketing media in Pakistan for creating brand awareness and consumer purchase intention, and it is proved that brand awareness mediates the relationship between the viral marketing and purchase intention.

(Sudarta&Mahyuni, 2024) This study aimed to delve deeper into the study and analysis of the use of viral marketing to increase customer loyalty, brand awareness, and brand trust in coffee shops. By looking at two case studies of coffee shops that use influencer engagement and organic viral marketing tactics, a qualitative approach is used. By using two case studies with two distinct approaches, this study also aimed that viral marketing has a direct positive effect on customer loyalty and it shows that viral marketing using the S, H, A, and RE concepts in its content can increase brand awareness, trust, and customer loyalty in coffee shops. This idea can be applied to other companies that use social media as their marketing connection. Effective viral content can be created by marketing

teams, social media, or influencers, either organically or inorganically. Reaching a national or international reach cannot be defined as viral but can be tailored to specific markets, such as local markets. If there are more than 15,000 views, it is considered viral.

1/2Previous research and studies on Green Purchase Intention

(Indriani et al, 2019)This study aimed tostudy the students in State Universities in Manado, Indonesiaspecifically examining their intention to buy Body Shop products. Using a sample size of 100 respondents, which adheres to Roscoe's (1975) guidelines for adequate sample size, the study employed Smart PLS for analysis. Key findings revealed that Environmental Knowledge does not have a significant direct effect on consumers' Green Purchase Intention. However, it was found that Attitude serves as a full mediator in the relationship between Environmental Knowledge and Green Purchase Intention. This suggests that while awareness of environmental issues alone may not influence purchasing intentions, a positive attitude towards these issues can enhance the impact of environmental knowledge on buying behaviors.

(Chen et al, 2020)This study aimed to concentrate on the Influence of Green Brand Act on Green Purchase Intentions: The Mediation Effects of Green Brand Associations and Green Brand Attitude this research conducted an empirical study using a questionnaire survey and structural equation model (SEM) to verify the research framework. A total of 1000 consumers were randomly selected and 365 valid responses were received. The results show that green brands etc. have no direct influence on green purchase intentions. Besides, this study indicates that green brand associations and green brand attitude fully mediate the relationship between green brand aect and green purchase intentions.

(Choshaly&Mirabolghasemi,2020)This study aimed to study the role of viral marketing strategies in predicting the purchasing intention of eco-labeled products the researcher used a sample consisting of a total of 200 shoppers in the Hyper Star store in Tehran located in the Tehran Pars area. And the study found that formativeness, entertainment, and source credibility are positively related to the purchase intention of eco-labeled products, whereas, irritation is negatively related to the purchasing intention of eco-labeled products.

(Manh Vu et al., 2021)This study aimed to concentrate on Environmental corporate social responsibility initiatives and green purchase intention: an application of the extended theory of planned behavior, they used the data of 823 consumers using the tool of the mall-intercept survey recruited from several big cities in Vietnam. One of the most important results of this studyfound that ECSR initiatives were strongly and positively correlated with attitudes towards green products, subjective norms, perceived behavior, and green purchase intention. Perceived behavioral control was found to be a partial mediator in the link

between ECSR initiatives and intention to engage in pro-environmental consumption while the meditating roles of attitude towards green products and subjective norms in this linkage were not statistically significant. Additionally, this study illustrated that the impacts of subjective norms, perceived behavioral control, and ECSR initiatives on green purchase intention were stronger for females than males.

(Zameer & Yasmeen,2022)This study aimed toconcentrate on green innovation and environmental awareness-driven green purchase intentions, the researcher Based upon the existing literature and relevant theories the study developed several assumptions/hypotheses. To test the hypothesis, a comprehensive data set that was collected through an online survey method was utilized. The valid data used for analysis was obtained from 549 managers and 549 customers.One of the most important results of this study for the empirical analysis, the study employed the structural equation modeling technique and found that environmental awareness significantly reinforces green purchase intentions. Whereas, the authors could not find evidence for the direct influence of green innovation on green purchase intentions. The analysis shows, that green product knowledge and environmental concerns partially mediate the relationship between environmental awareness and green purchase intentions. However, green product knowledge and environmental concerns fully mediate the relationship between green innovation and green purchase intentions.

(Moslehpour et al,2023)This study aimed tostudyPredictors of green purchase intention toward eco-innovation and green products: Evidence from Taiwan and used questionnaires to collect the primary data from the sampled population.The researchers have sent around 607 surveys but only received 374 surveys after one month.One of the most important results of this study indicated that environmental concern, environmental knowledge, green products, and eco-innovation have a positive association with green purchase intention. The findings also exposed that consumer attention significantly and positively mediates environmental concern, environmental knowledge, green products, eco-innovation, and green purchase intention.

1/3Previous studies on the viral marketing and green purchase intention

(Sobhanifard&Balighi, 2018)This study aimed tostudy the Emotional modeling of green purchase intention improvement using viral marketing in social networks, this study explores a model of viral marketing emotional methods to increase green purchase intention in social networks. In this research, 500 forms were distributed to respondents, and 384 responses were used for analysis. All of the viral marketing emotional method items were created by the Delphi method. The study discovered that viral marketing-based joy and surprise have a significant positive effect on the social value of green product consumption. Also, the effect

of the social value of green product consumption on the green purchase intention was confirmed.

(Choshaly& Mirabolghasemi, 2020) This study aimed to study the role of viral marketing strategies in predicting the purchasing intention of eco-labeled products, they used a sample consisting of a total of 200 shoppers in the Hyper Star store in Tehran located in the Tehran Pars area. One of the most important results of this study they reached that informativeness, entertainment, and source credibility are positively related to the purchase intention of eco-labeled products, whereas, Uneasy is negatively associated with the purchasing intention of eco-labeled products.

The study by Sawaftaha (2020) aimed to investigate the relationship between viral marketing and consumer purchase intention, with a focus on the moderating roles of brand image and age among smartphone users in North Cyprus. The research was conducted with a population of graduate students at a private Cypriot university, using a sample of 177 participants recruited through convenience sampling. Statistical analyses included multiple linear regression and analysis of variance to test the hypotheses. Findings indicated that viral marketing positively influenced customer purchase intention, particularly enhanced by brand image, while age did not significantly affect this relationship. Notably, viral advertising proved to have a stronger impact on customer purchase intention compared to electronic word-of-mouth (E-WOM).

(Putri et al, 2021) This study aimed to examine the impact of viral marketing, celebrity endorsers, and brand awareness on the purchase intention of dessert box products. To collect data, the study utilized a survey method with a Likert scale. Respondents were selected using purposive sampling, focusing on individuals living in the JABODETABEK area who had previously purchased dessert box products. The questionnaire was administered to 250 respondents, One of the most important results of this study positive and significant influence of viral marketing, celebrity endorsers, and brand awareness on the purchase intention of dessert box products.

(Anissa &Tobing, 2022) This study aimed toconcentrate on the influence of product reviews and viral marketing on the purchase intention of skincare products of local Indonesian brands.This study used a causal associative quantitative approach with a total sample of 100 respondents. The instrument used was a questionnaire containing 28 statements. The results showed that: 1. product reviews did not have a positive and insignificant effect on the purchase intention of local Indonesian brand skincare products. 2. Viral marketing has a positive and significant effect on the purchase intention of skincare products of local Indonesian brands. 3. Product reviews and viral marketing simultaneously have a

positive and significant effect on the purchase intention of local Indonesian brand skincare products.

(N G T S et al, 2023) This study aimed to study the Impact of Viral Marketing on the Purchasing Intention of Millennials in Sri Lanka; Mediating the Role of Brand Equity, the study utilizes cluster and convenience sampling methods and a structured questionnaire to collect data the majority of respondents were males (157) and females (132). The focus on the millennial generation is justified as they are a prominent generation connected to social media platforms. A sample size of 177 participants. One the most important results of this study the viral marketing influenced customer purchase intention magnified under the moderating role of brand image but age did not affect the relationship.

(Mukherjee et al, 2023) This study aimed to study the Viral Marketing in Increasing Brand Awareness and Predicting Purchase Intention: Exploring the Mediating Role of Brand Loyalty in the FMCG Sector, in this study, 452 FMCG customers in India participated. One of the most important results of this study viral marketing has a sizable impact on brand awareness leading to purchase intention. This study explored that brand loyalty has a partial mediating effect between the aforementioned two constructs. To gain a competitive advantage over their rivals, FMCG companies can benefit from this study by formulating their brand management strategies in light of the findings.

2/ Analysis and commentary on previous research and studies

Previous research and studies related to the subject of the study were reviewed and highlighted, for theoretical foundation and determining the objectives, hypotheses, and variables of the current study, as well as clarifying its importance, identifying the research gap, and trying and seeking to fill this gap through the current study, and they are presented from the newest to the oldest with their classification into (3) three main groups, previous research and studies that dealt with viral marketing, research and studies that dealt with green purchase intention and studies that link the two variables.

- Previous studies have identified several variables that may contribute to the improvement of viral marketing.
- Previous studies have shown that there is no agreement on the dimensions of viral marketing and green purchase intention.
- All previous research and studies studied viral marketing as an independent variable and green purchase intention as a dependent variable. These dimensions were studied in previous research and studies. the dimensions of viral marketing (influencers - trust and credibility in the source - word-of-mouth electronic promotion - electronic publishing means) and the Dimensions of green purchase intention (focus on the products of the Faculty of Agriculture - attitude towards the products of the Faculty of Agriculture -

knowledge towards the products of the Faculty of Agriculture - concern for the environment). Scales used to measure the independent variable viral marketing (Chatzigeorgiou, 2017; Rukuni et al., 2017; Reyes-Menendez et al., 2019; Shin & Choi, 2021; Salam et al, 2023)-Scales used to measure the independent variable green purchase intent (Paul et al,2016: Zanmeer& Yasmeen, 2021, Sisal et al, 2021).

- Previous research and studies have identified several variables that may contribute to improving green purchase intentions.

- All these studies were far from green products in the university sector in Egypt, and far from encouraging the production of the Ministry of Higher Education and the relationship between the Ministry of Trade and Higher Education and how to spread the ideas of purchasing green products in Egypt and the relationship between viral marketing and green purchase intention and how these concepts affect the increase in demand for green products.

- The majority of previous research and studies have contributed significantly to setting the general framework for the current study, determining the criteria used in the study and scientific hypotheses, and clarifying the importance of the study. The study of both viral marketing and the intention to purchase green products still needs further research, especially in an important sector such as universities. It has been noted, according to the limits of the studies reviewed by the researchers, that there are no Arab studies that dealt with viral marketing in the higher education sector. Also, most of these studies were conducted in foreign societies whose nature and working conditions differ from Egyptian society. Therefore, the current study aimed to test the extent to which the results differ according to the research communities. The dynamics and nature of work in these environments differ from Arab and Egyptian societies, thus showing the importance of applying this study in the Egyptian environment. It will provide an addition to scientific research by studying the relationship of influence between viral marketing and the intention to purchase green products for the products of the Faculty of Agriculture. The study was applied at Minya University.

- The study of (Sharma& Kaur, 2020) focused on the relationship between viral marketing and selling products from afar, while the study of (Sudarta& Mahyuni, 2024) focused on the relationship between viral marketing and increasing customer loyalty. The study of (Lakruwan et al, 2023) and the study of (Abbas et al, 2024) concentrated on the relationship between viral marketing and customer intentions **.**

- The study of (Indriani et al, 2019) concentrated on the relationship between environmental Knowledge and green Purchase Intention, while the study of (Choshaly&Mirabolghasemi,2020) concentrated on green purchase intention

and eco-labeled products, while the studies of (Manh Vu et al., 2021) and (Zameer & Yasmeen,2022) focused on the environmental corporate social responsibility initiatives and green purchase intention**.**

- The study (Sobhanifard & Balighi, 2018) concentrated on the Emotional modeling of green purchase intention improvement using viral marketing in social networks, and (Choshaly& Mirabolghasemi, 2020) focused on studying the role of viral marketing strategies in predicting the purchasing intention of eco-labeled products, (Sawaftaha, 2020) concentrated on the relationship between viral marketing and consumer purchase intention, (Putri et al, 2021) focused on Viral Marketing, Celebrity Endorser, dan Brand Awareness Terhadap Purchase Intention Produk Dessert Box, (Anissa &Tobing, 2022) concentrated on the influence of product reviews and viral marketing on the purchase intention of skincare products of local Indonesian brands. (N G T S et al, 2023) studied the Impact of Viral Marketing on the Purchasing Intention of the Millennials in Sri Lanka (Mukherjee et al, 2023) studied Viral Marketing in Increasing Brand Awareness and Predicting Purchase Intention **.**

2/ The study Problem

Based on the above and the results of previous research and studies, the study problem can be crystallized in the following main question: What is the impact of viral marketing on the green purchase intention for products of the Faculty of Agriculture by the Applying on Minya University employees?

3/ Importance of the study

3/1 Scientific Importance

- This study derives its scientific importance from the scarcity of Arab and foreign research and studies that dealt with the topic of viral marketing and green purchase intention.
- Contributing to adding more studies and research that discuss this important topic for environmentally friendly products.
- Adding a systematic scientific study to more studies and research in the field of viral marketing.
- Contributing to bridging the research gap related to identifying the impact of viral marketing and green purchase intention for products of the Faculty of Agriculture at Minia University.

5/2 Applied importance

- The importance of this study at the applied level is to help increase the awareness of employees at Minia University of the importance of purchasing green products, Highlighting the importance of purchasing College of Agriculture products for the health of employees and their

families, Also helps the employees to preserve the environment from the use of chemicals in agriculture, food industry, and livestock raising.

▪ To know the importance of the dimensions of viral marketing (influencers - trust and credibility in the source - word-of-mouth electronic promotion - electronic publishing means) and the Dimensions of green purchase intention (focus on the products of the Faculty of Agriculture - attitude towards the products of the Faculty of Agriculture - knowledge towards the products of the Faculty of Agriculture - concern for the environment).

4/ Study Objectives

The current study aims to determine the impact of viral marketing on green purchasing intention among employees at Minia University. This is achieved through the following objectives:

- Identify the extent of the impact of viral marketing on green purchasing intention among employees at Minia University.
- Identify the extent of the impact of viral marketing dimensions on product focus as one of the dimensions of green purchasing intention among employees at Minia University.
- Identify the extent of the impact of viral marketing dimensions on the attitude towards products as one of the dimensions of green purchasing among employees at Minia University.
- Identify the extent of the impact of viral marketing dimensions on product knowledge as one of the dimensions of green purchasing among employees at Minia University.
- Identify the extent of the impact of viral marketing dimensions on environmental concerns as one of the dimensions of green purchasing among employees at Minia University.

5/ Study hypotheses

Achieving the previous objectives requires verifying the validity or invalidity of the following

hypotheses:

1. The first hypothesis (H_1) is "There is a statistically significant relationship between viral marketing and green purchase intention among workers at Minya University."

2. The second hypothesis (H_2): "There is a statistically significant effect of viral marketing on the green purchase intention of workers at Minya University." This hypothesis is divided into the following sub-hypotheses.

   A- There is a significant effect of the dimensions of viral marketing on product focus as one of the dimensions of green purchase intention among workers at Minya University.

B- There is a significant effect of the dimensions of viral marketing on the attitude toward products as one of the dimensions of green purchasing among workers at Minya University.

C- There is a significant effect of the dimensions of viral marketing on knowledge about products as one of the dimensions of green purchasing among workers at Minya University.

D- There is a significant effect of the dimensions of viral marketing on concern for the environment as one of the dimensions of green purchasing among workers at Minya University.

6/ Study Methodology

6/1 The Method Used

The descriptive analytical method was used to describe the phenomenon under study identify its components, and analyze the trends of the respondents towards the study variables.

The study data was collected through the following:

- Desk study: Collecting secondary data:By referring to modern literature, whether references or periodicals, or Arabic or foreign articles found in libraries, or on the World Wide Web sites that dealt with the study topics, to establish the cognitive framework for each (viral marketing and green purchase intention), and the relationship between them and determining the measures used for each of them, which necessarily contribute to setting the objectives, formulating the hypotheses and the cognitive aspect of the study.

- Applied study: A field study was conducted by distributing survey lists according to the appropriate standards for the study variables, through a survey list prepared for this purpose, attached to the appendices, and including the standards for (viral marketing and green purchase intention), then the results of that study were analyzed to identify the validity or invalidity of the research hypotheses and determine the final results and recommendations.

6/2 Research population and sample

The research community consists of all 3,500 employees at Minya University. Due to the large size of the population and the difficulty of accessing all its components, the researchers relied on sampling methods and procedures to collect primary data, and the Sample Size Calculator program, according to an error rate of 5% and a confidence rate of 95%, the sample size reached 347 individuals. According to the statistical sample tables from the following website: https://www.calculator.net/sample-size-culculator.html.

6/3 Measures used for study variables

-Scales used to measure the independent variable viral marketing (Chatzigeorgiou, 2017; Rukuni et al., 2017; Reyes-Menendez et al., 2019; Shin &

Choi, 2021；Salam et al, 2023)-Scales used to measure the independent variable green purchase intent(Paul et al,2016:Zanmeer&Yasmeen,2021, Sisal et al,2021).

7/ Theoretical framework of study variables

7/1Viral marketing

Viral marketing creates a snowball effect, as the message passes from consumer to consumer and constantly increases the total number of people reached. As soon as a consumer starts to convey his opinions about the product he buys to other people, it means that he has had the opportunity to market to potential consumers (Çakirkaya& Aytaç Afşar, 2024).

Viral marketing, an internet-based marketing technique, encourages consumers to pass along a marketing message (e.g. company developed products and services or audio video or written information) via electronic platforms such as blogs, e-mail, forums, virtual opinion platforms, and social networking sites It is a new concept of electronic word-of-mouth (eWOM) marketing that emerged in the twenty-first century with the introduction of the internet (Sharma& Kaur, 2020).

Although it is such an important member of modern marketing and has a history of over 25 years, there is no common definition of viral marketing that everyone accepts.

(Quesenberry &Coolsen,2019) defined viral marketing as unpaid peer-to-peer communication of provocative content originating from parties who use the Internet to persuade or influence the audience to forward the content to other people. In simpler terms, viral marketing can be defined as persuasive messages distributed by advertisers through unpaid channels among peers on interactive digital platforms, He also added (Utakaeva,2020). Viral marketing has an impact on the target audience, to sell goods and services with the help of the target audience itself, which voluntarily participates in the dissemination of viral information about the marketing product.

(Alfarez & Sadat,2024) According to(Puriwat&Tripopsakul,2021) added, viral marketing is an electronic form of marketing from mouth to mouth, which includes news, environment, and information, viral marketing combines internet technology and word-of-mouth tactics, Viral marketing is usually associated with the use of social media applications, this use of social media facilitates opportunities for social interaction, allowing communication between many people.

(Bunjamin et al,2024) Also, believe that viral marketing is a marketing technique aimed at allowing people to voluntarily send marketing messages to others. In viral marketing, consumers market their products or services in a way that minimizes marketing efforts and costs for businesses. According to(Çakirkaya& Aytaç Afşar,2024) viral marketing is a 'marketing strategies that permit exponential distribution of content in network-based channels in the shortest time

with comparatively little effort and additionally generate measurable added value through the content, which leads to a high cost-benefit effect.

Viral marketing is more effective when it leverages strong emotions in its content, A study shows that content that evokes strong positive emotions like admiration or strong negative emotions like anger or anxiety is more likely to go viral, also states that influencers can help create engaging and authentic content, making it easier to spread virally on social media platforms (Sudarta & Mahyuni, 2024),Viral marketing is considered the most effective medium for attracting people's attention. It has a broad reach and influence, attracting and engaging people (Bunjamin et al, 2024).

Viral marketing aims to disseminate knowledge about goods and services from customer to customer instead of the company to the consumer, this leads to a quicker and more economical uptake of the product on the market (Yuniati et al, 2021).

that viral marketing is an electronic marketing technique that spreads product information to a large audience by using social media platforms that are already in use, such as email or social media the advent of social media platforms like Facebook, Twitter, and YouTube (Lestari & Tuti, 2024).

It is propagation primarily relies on social networks, essentially for free. Moreover, viral content possesses a remarkable capability to swiftly reach a vast audience, surpassing the limitations of conventional advertising channels, (Alfarez & Sadat, 2024) leveraging the interconnected nature of social media and digital platforms, a well-executed viral campaign can effortlessly accumulate millions of views, shares, and engagements, additionally, viral marketing often features original, engaging content that resonates with audiences on a personal level. when individuals share their content with their networks, it carries implicit endorsement and increases trust and credibility for the brand or product being promoted In a constantly evolving digital world (Çakirkaya& Aytaç Afşar, 2024; Yuniati et al, 2021).

(As Utakaeva,2020) sees it, the most important disadvantage of viral marketing technology is the ability to change the content of the message before it is distributed.

7/1/2Dimensions of viral marketing
1-Digital Influencers
2-Trust and credibility in the source.
3-Electronic word-of-mouth promotion (E-WOM).
4-Social media.

7/1/2/1Digital Influencers
The social media influencer is first and foremost a content generator: one who has expertise in a specific area and has cultivated a sizable number of captive

followers—who are of marketing value to brands—by regularly producing valuable content via social media.

Influencer ،(2019,Lou& yuan)

7/1/2/2Trust and credibility of the source

Trust and Source credibility is the degree of respect shown to the originator of the message (Cannon et al, 2008; Salam et al, 2023)

7/1/2/3Electronic word-of-mouth promotion (E-WOM)

WOM refers to the process of exchanging marketing information between consumers. It is usually described as person-to-person verbal communication between a receiver and a sender, where the sender delivers a non-commercial message to other people. Consumers frequently use WOM when they are seeking information about brands, products, services, and organizations (Chu & Kim, 2011; Farzin & Fattahi, 2018; Verma & Yadav, 2021).

WOM can be generally defined as consumers' information sharing and exchange about a product or company via the Internet, social media, and mobile communication. eWOM has been recognized to lead to high retransmission intentions because it is easy for consumers to generate conversations online (Salam et al, 2023).

7/1/2/4social media

Social media is several internet-based applications created on the ideological and technological base of Web 2.0 that allow the formation and trade of user-generated content. Organizations use social media channels, technologies, and software to develop, communicate, and trade offerings that have value for organizations' stakeholders (Al-Nabawi et al, 2020).

7/2The green purchase intent

Numerous studies have explored the factors influencing greenn, a wide range of studies has been done on examining the impacts of different variables such as environmental attitudes, environmental knowledge, past behavior, social influence, and confidence (Joshi and Rahman, 2016; Lee, 2014; Zhang et al., 2018). Green or environmentally friendly buying behavior is defined as the use of eco-friendly products that are sensitive recyclable and beneficial to the environment (D'Souza et al., 2006).

The ABC (Attitude-Behavior-Context) model proposed by Guagnano et al. (1995) is considered an effective framework for understanding consumer behavior. According to this model, green purchase intentions are influenced not just by consumer attitudes but also by various contextual factors, which can be either positive or negative. For example, a consumer may hold a positive attitude toward green products, yet their intention to purchase may be limited by the availability of such products (Joshi & Rahman, 2015).

According to, Ramayah et al. (2010), green purchase intention reflects an individual's willingness to consider green products when making purchasing decisions. It can be defined as the intention to buy goods or services that are less harmful to society and the environment. This intention also represents an internal desire and readiness to choose environmentally friendly products (Rizwan et al., 2014). Green purchase intention specifically refers to a customer's intention to buy products that are more sustainable while avoiding those that harm the environment (Moslehpour et al., 2023).

7/2/1 The Dimensions of Green Purchase Intent

      1- Green Product Positioning

      2- Attitude toward green product

      3 -Product knowledge

      4 -Environmental concern

7/2/1/1 Green Product Positioning

Green product positioning (GBP) is concerned with the value of environmentally friendly products or services and thus is focused on the brand's environmentally friendly features that are useful for consumers (Chin,202; Suki,2016). "The purpose of the positioning is to generate a competitive advantage in the minds of consumers over other competitor brands based on tangible or intangible product attributes," according to popular belief (law &LAMB,2000).

7/2/1/2 Attitude toward green product

Consumers will be able to choose among brand alternatives due tocompanies' attempts to transmit environmentally friendly aspects to them [Rios et al,2006]. According to certain recent studies, consumers' attitudes regarding green brands have a significant impact on their decision to purchase GP. For instance, Solomon (Phelps&Hoy,1996) defined attitude towards brands as consumers' likes/dislikes/preferences and overall evaluation of a brand.

7/2/1/3 Product knowledge

Product knowledge is the information and understanding of a certain product that helps stakeholders decide on the product (Stanton and Cook, 2019).

7/2/1/4 Environmental concern

In the recent past, efforts have been made to introduce green products in the market which has resulted in more and more green products in every industry, ranging from food, hospitality, energy, automobile, and construction (Chung, 2020; Goh and Balaji, 2016). The study by Zsoka et al (2013) stated that environmental awareness refers to knowledge, information, and awareness of environmental issues and potential solutions.

7/3 The practical framework

Evaluate the reliability and self-validity coefficients for the survey list.

The researchers aimed to assess the validity and reliability of the scale as follows: They utilized Cronbach's Alpha test to evaluate the stability of the measures for all variables, including viral marketing and its dimensions, as well as green purchase intention and its dimensions. The data presented in Table 1 shows the reliability and self-validity coefficients for the research variables.

Table (1)

Evaluation of the reliability and self-validity coefficients for the survey instrument

Variables	Number of phrases	Cronbach's Alpha	coefficient Intrinsic validity	ranking
Viral marketing	**20**	**0.973**	**0.986**	
Digital influencers	**5**	**0.933**	**0.966**	**2**
Trust and credibility of the source	**5**	**0.932**	**0.965**	**3**
Electronic promotion	**5**	**0.926**	**0.962**	**4**
Social media	**5**	**0.949**	**0.974**	**1**
Green purchase intention	**20**	**0.965**	**0.982**	
Focus on products	**5**	**0.920**	**0.959**	**2**
Attitude towards products	**5**	**0.922**	**0.960**	**1**
Knowledge towards products	**5**	**0.865**	**0.930**	**4**
Caring for the environment	**5**	**0.904**	**0.950**	**3**

Source: Prepared by the researchers according to the results of the statistical analysis of the SPSS program.

- For the viral marketing scale, the alpha coefficient for the overall scale was found to be 0.973, indicating a high level of reliability. The reliability coefficients for the dimensions of viral marketing ranged from a maximum of 0.949 to a minimum of 0.926.

- Regarding the green purchase intention scale, the overall alpha coefficient was 0.965, also reflecting a high degree of reliability. The reliability coefficients for the dimensions of green purchase intention ranged from a maximum of 0.922 to a minimum of 0.865.

- These results demonstrate a high level of reliability for both scales. According to Idris (2008: 423), an alpha coefficient between 0.50 and 0.60 is considered sufficient and acceptable, while a coefficient of 0.80 or higher indicates an excellent level of confidence and reliability. Therefore, the coefficients observed in this study are statistically significant and suitable for achieving the research objectives, making the results generalizable to the entire research population.

7/3/1 Confirmatory factor analysis of the research variables:

Indicators of the quality of conformity of the proposed model of the scale with the hypothesized model were obtained from the outputs of the statistical analysis through several indicators of confirmatory factor analysis to judge the significance of the scale for each variable as follows:

-Confirmatory factor analysis of the independent variable (viral marketing)Viral marketing includes four dimensions: (digital influencers - trust and source credibility - electronic promotion - social media). (20) statements were used to measure the dimensions of viral marketing using a five-point Likert scale, with 5 statements for each dimension. The results of the statistical analysis showed that all standard coefficients are significant. This is shown in Figure No. (1).
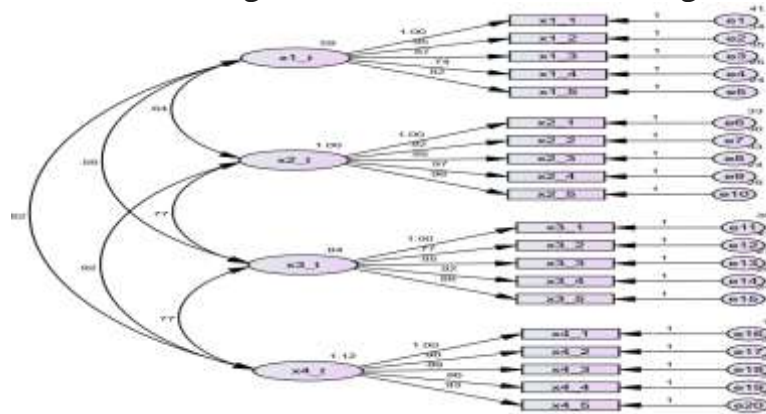

Figure (1): Confirmatory factor analysis of the Viral Marketing Scale.
Source: Prepared by the researchersaccording to the results of the statistical analysis of the AMOS program.

It is clear from the previous figure No (1) that:

- The standard loading coefficients for the statements for the digital influencers dimension ranged between (1.00) and (.074), and for the trust and source credibility dimension, they ranged between (1.00) and (0.82), while they ranged between (1.00) and (0.77) for the electronic promotion dimension.

- The loading coefficients for the social media dimension ranged between (1.00) and (0.86). All of these coefficients are acceptable as they must be greater than or equal to (0.5) (Hooper et al., 2008)**.**

- It also became clear that the cross-correlation coefficients between the four dimensions of the independent variable and each other ranged between (0.92) and (0.62), which are higher ratios than (0.20), which expresses the convergent validity of the statements and the scale as a whole, and its ability to measure what it was prepared for.

Indicators of the quality of conformity of the proposed model of the scale with the assumed model were obtained from the statistical analysis outputs, as shown in Table No. (2).

Table No. (2)Goodness of fit indicators for the viral marketing variable.

Fit indices and their acceptable thresholds (Hooper et al., 2008)	Test Value
CMIN/DF> 5	4.007
X2/ Degree of freedom > 5	164
P. value < 0.05	0. 000
Goodness of fit Index (GFI) > 0.95	0.829
Tuker-Lewis Index (TLI) > 0.95	0.924
Comparative Fit Index (CFI) > 0.90	0.934
Normed Fit Index (NFI) > 0.95	0.914
Incremental Fit Index (IFI) > 0.95	0.934
Relative Fit Index (RFI) > 0.90	0.901
Root Mean Square Residual (RMR)>0.05	0.048
Root Mean Square Error of Approximation (RMSEA)> 0.09	0.093

Source: Prepared by the researchers according to the results of the statistical analysis of the SPSS program.

• It is clear from the previous table that the results of the indicators used indicate a test of goodness of fit, as they provide good and acceptable estimates to indicate the construct validity of the viral marketing scale and that the statements measure what they were prepared for.

7/3/2 Confirmatory factor analysis of the dependent variable (green purchase intention)

Green purchase intention includes four dimensions: (focus on products - attitude towards products - knowledge about products - concern for the environment). (20) statements were used to measure the dimensions of green purchase intention using a five-point Likert scale, with 5 statements for each dimension. The results of the statistical analysis showed that all the standard coefficients are significant, as shown in Figure No. (2).
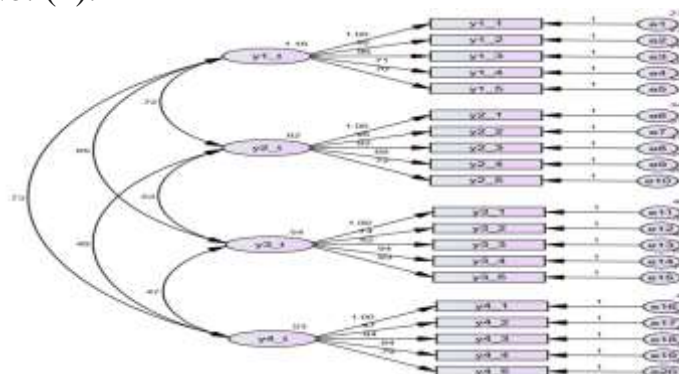

Figure No. (2)
Source: Prepared by the researcher according to the results of the statistical analysis of the AMOS program.

It is clear from Figure No. (2) that:

• The standard loading coefficients for the expressions for the product-centric dimension ranged between (1.00) and (0.70), and for the attitude toward products dimension, they ranged between (1.00) and (0.72), while they ranged between (1.00) and (0.74) for the knowledge dimension. towards products, and the loading coefficients for the dimension of concern for the environment ranged between (1.00) and (0.79). All of these coefficients are acceptable as they must be greater than or equal to (0.5) (Hooper et al., 2008).

• It also became clear that the correlation coefficients between the four dimensions of the independent variable and each other ranged between (0.73) and (0.47), which are higher ratios than (0.20), which expresses the convergent validity of the statements and the scale as a whole, and its ability to measure what it was prepared for.

Indicators of the quality of conformity of the proposed model of the scale with the assumed model were obtained from the statistical analysis outputs, as shown in Table No. (2):

table number (2)

Goodness of fit indicators for the green purchase intention variable

Fit indices and their acceptable thresholds (Hooper et al., 2008)	Test Value
CMIN/DF> 5	14.447
X2/ Degree of freedom > 5	164
P. value < 0.05	0. 000
Goodness of fit Index (GFI) > 0.95	0.609
Tuker-Lewis Index (TLI) > 0.95	0.670
Comparative Fit Index (CFI) > 0.90	0.715
Normed Fit Index (NFI) > 0.95	0.702
Incremental Fit Index (IFI) > 0.95	0.716
Relative Fit Index (RFI) > 0.90	0.654
Root Mean Square Residual (RMR)>0.05	0.088
Root Mean Square Error of Approximation (RMSEA)> 0.09	0.197

Source: Prepared by the researchers according to the results of the statistical analysis of the SPSS program.

• It is clear from the previous table that the results of the indicators used indicate a test of goodness of fit, as they provide good and acceptable estimates to indicate the construct validity of the green purchasing construct scale and that the statements measure what they were prepared for.

7/3/3 Descriptive analysis of research variables:

The researchers used descriptive analysis of the data (means and standard deviations) using the statistical program (SPSS.V.20), with the aim of describing the research variables, and identifying the availability of viral marketing dimensions and the level of green purchase intention among the research sample.

Table No. () shows the means and standard deviations for the two variables. Research (viral marketing and green purchase intention) and their dimensions in the sample under research, as follows.

Table number (3)

Averages and standard deviations for the two research variables and their dimensions

Variables	Mean	Std. Deviation	Variance	ranking
Viral marketing	**3.149**	**0.894**	**0.800**	
Digital influencers	**3.368**	**0.922**	**0.945**	**1**
Trust and credibility of the source	**3.06**	**0.955**	**0.912**	**4**
Electronic promotion	**3.071**	**0.950**	**0.903**	**3**
Social media	**3.100**	**0.998**	**0.998**	**2**
Green purchase intention	**2.613**	**0.693**	**0.800**	
Focusing on the products of the College of Agriculture	**3.361**	**0.976**	**0.954**	**1**
Attitude towards the products of the College of Agriculture	**3.188**	**0.996**	**0.993**	**4**
Knowledge towards the products of the College of Agriculture	**3.21**	**0.890**	**0.793**	**3**
Caring for the environment	**3.309**	**0.939**	**0.882**	**2**

Source: Prepared by the researchers according to the results of the statistical analysis of the SPSS program.

It is clear from Table No. (3) that:

• The mean of viral marketing was (3.149) and its standard deviation was (0.894). On the other hand, the arithmetic mean of green purchase intention as a whole was (2.612) and its standard deviation was (0.693), which means the availability of the two concepts of green purchasing viral marketing among the workers at Minya University, the subject of the study, to a moderate degree.

• As it became clear from the table, the dimensions of viral marketing recorded averages ranging from (3.368) to (3.06), so the digital influencers dimension ranked first with an arithmetic mean of (3.368) and a standard deviation of (0.922), followed in second place by the means dimension. Social networking has an arithmetic mean of (3.100) and a standard deviation of (0.998), and in third place comes the dimension of electronic promotion with an arithmetic mean of (3.071) and a standard deviation of (0.950), while in fourth and final place comes the dimension of trust and credibility of the source with an arithmetic mean of (3.06) and a standard deviation. Its value is (0.912), while the dimensions of green purchase intention recorded averages that ranged between (3.361) to (3.188), so the dimension of focusing on the products of the College of Agriculture ranked first with an arithmetic mean of

(3.361) and a standard deviation of (0.996), followed in second place by the dimension of concern for the environment with an arithmetic mean of (3.309) and a standard deviation of (0.939). Third comes the dimension of knowledge toward the products of the College of Agriculture, with a mean of (3.21) and a standard deviation of (0.890), while in the fourth and last place comes the dimension of attitude toward the products of the College of Agriculture, with a mean of (3.188) and a standard deviation of(0.996).

• It is also clear from the table that all variables receive moderate acceptance among the subjects of the research sample due to the arithmetic mean being higher than (2.34). It is also clear from the table that the standard deviation rates for the variables are fairly low (less than the correct one), which indicates a low difference between the opinions of the sample members regarding the degree of agreement on the availability of the dimensions of the independent variable (viral marketing).

7/3/4The relationship between viral marketing and green purchase intention:

The researchers conducted a Pearson correlation analysis to identify the nature of the correlation between the research variables (viral marketing with its dimensions, and green purchase intention with its dimensions), in order to determine the strength and direction of the correlation between these two variables. The closer the value of the correlation coefficient is to the correct one, the more this indicates the strength of the relationship. The correlation between variables. A positive sign for that correlation indicates that the relationship is positive, and a negative sign indicates that the relationship is inverse.

Table No. () shows the value of the correlation between the independent variable (viral marketing) and the dependent variable (green purchase intention) as follows.

Table number (4)

Matrix of correlation coefficients between viral marketing with its dimensions and green purchase intention with its dimensions

Variables	Caring for the environment	Knowledge towards products	Attitude towards products	Focus on products	Green purchase intention
Digital influencers	.773**	.771**	.769**	.759**	.843**
Trust and credibility of the source	.753**	.682**	.727**	.684**	.780**
Electronic promotion	.748**	.702**	.716**	.667**	.777**
Social media	.739**	.616**	.686**	.618**	.729**
Viral marketing	.827**	.761**	.796**	.749**	.859**

Significant correlation coefficients at 1% significance level

Source: Prepared by the researchers according to the results of the statistical analysis of the SPSS program.

It is clear from Table No. (4) that:

- There is a statistically significant relationship between viral marketing and its dimensions and green purchase intention and its dimensions, as the value of the correlation coefficient between viral marketing and green purchase intention was (0.895), which is statistically significant at a significance level of 0.01. We also find that the correlation coefficients between viral marketing and the dimensions of green purchase intention ranged between (0.749) and (0.827), all of which are statistically significant at a significance level of 0.01, where the value of the correlation coefficient between Viral marketing and the dimension of concern for the environment were (0.827), and the value of the correlation coefficient between viral marketing and the dimension of attitude towards products was (0.796), while the value of the correlation coefficient between viral marketing and the dimension of knowledge towards products was (0.761), and finally it was The correlation coefficient between viral marketing and the dimension of focusing on products (0.749), and this indicates the veracity of the statements in measuring the relationship between viral marketing and the dimensions of green purchase intention for the products of the Faculty of Agriculture among employees at Minya University in Minya, and that there is a real correlation between the variables.

- There is a correlation between all dimensions of viral marketing and green purchasing, the value of which ranged between (0.729) and (0.843), all of which are statistically significant at a significance level of 0.01, where the value of the correlation coefficient between digital influencers and one of the dimensions was Viral marketing and green purchase intention (0.843), and the relationship between the dimension of trust and source credibility, as one of the dimensions of viral marketing, and green purchase intention was (0.780), while the relationship between the electronic promotion dimension, one of the dimensions of viral marketing, and green purchase intention was(0.77).

- Finally, the relationship between the social media dimension, as one of the dimensions of viral marketing, and green purchase intention reached (0.729). This indicates the validity of the statements in measuring the relationship between the dimensions of viral marketing and green purchase intention among employees at Minya University in Beni Suef, and that there is a real correlation between the variables.

- There is a correlation between digital influencers as one of the dimensions of viral marketing and all dimensions of green purchase intention, with the ranges between (0.759) and (0.773), all of which are statistically significant at a significance level of 0.01, and all of which are positive values indicating the existence of a real correlation between Variables are not due to chance.

- There is a correlation between trust and the credibility of the source as one of the dimensions of viral marketing and all dimensions of green purchase intention, with the ranges between (0.682) and (0.753), all of which are statistically significant at a significance level of 0.01, and all of which are positive values indicating the existence of a real correlation between Variables are not due to chance.

- There is a correlation between electronic promotion, one of the dimensions of viral marketing, and all dimensions of green purchase intention, with ranges between (0.667) and (0.777), all of which are statistically significant at a significance level of 0.01, and all of which are positive values indicating the existence of a real correlation between the variables. Not due to chance.

- There is a correlation between social media as one of the dimensions of viral marketing and all dimensions of green purchase intention, with ranges between (0.616) and (0.739), all of which are statistically significant at a significance level of 0.01, and all of which are positive values indicating the existence of a real correlation between Variables are not due to chance.

- The level of availability of total viral marketing was at a high level with an arithmetic mean (3.149) and a standard deviation (0.894) in the sector under study, and the level of availability of viral marketing dimensions (influencers - trust and credibility in the source - electronic word of mouth - electronic publishing methods) was at a high level, according to the trends of the study sample paragraphs.

- There is a variation in the order of relative importance, in the degree of availability of viral marketing dimensions, as they came according to the following order in succession (influencers - electronic publishing methods - electronic word of mouth - trust and credibility in the source).

- Accepting the first main hypothesis which states "There is a statistically significant relationship between viral marketing and green purchase intention among employees at Minya University".

7/3/5 The effect of viral marketing on green purchase intention

In light of the analysis of the correlation between the research variables, it was found that there is a direct correlation with statistical significance between viral marketing and green purchase intention for the products of the Faculty of Agriculture, Minya University. To clarify the effect of viral marketing on green purchase intention among the research sample, it was used Simple (Enter) and multiple regression methods. This part of the statistical analysis discusses the testing of the second hypothesis of the research, which is related to testing the effect of viral marketing on green purchase intention. Below, the results of the correlation and multiple regression of the dimensions of viral marketing as

independent variables and green purchase intention as a dependent variable can be clarified, as in Table No. (5):

table number (5)Results of simple regression analysis of the effect of viral marketing on green purchase intention

Dependent Variable:	Predictors: (Constant)	R^2	F	Sig		Beta	T	Sig
Green purchase intention	Viral marketing	0.738	972.958	0.000	Constant	0.514	7.360	0.00
					X	0.666	31.192	0.000

Source: Prepared by the researchers in light of the results of the statistical analysis.

SPSS program

The data in table No. (5) indicates:

• The regression model proved significant, as the F value reached (972.958), which is significant at the 1% level of significance. The direct effect factor β proved significant, reaching a value of (0.514) for the fixed term, and for viral marketing (0.666), which is a significant positive effect.

- Significance of the regression coefficients for viral marketing and the fixed term, where the value of T for the fixed term reached (7.360) at a significance level of 1%, and the value of the interpretation factor R2 reached (0.738), which means that viral marketing explains 73.8% of the change that occurs in the green purchase intention for the College of Agriculture's products. Minya University, and the remaining 26.2% is due to the influence of other factors that did not appear in the model.

- The level of availability of green purchase intention was at an average level, with an arithmetic mean (2.612) and a standard deviation (0.693) in the sector under study, and the level of availability of green purchase intention dimensions was according to the following order in succession (focus on the products of the Faculty of Agriculture - interest in the environment - knowledge towards the products of the Faculty of Agriculture - attitude towards the products of the Faculty of Agriculture).

- Accepting the second main hypothesis which states "There is a statistically significant effect of viral marketing on green purchase intention among employees at Minya University".

7/3/6 The effect of viral marketing dimensions on product positioning

This part of the statistical analysis discusses the testing of the first sub-hypothesis of the second hypothesis, which is related to testing the effect of viral marketing dimensions on product focus as one of the dimensions of green purchase intention. Below, the results of the correlation and multiple regression of the viral

marketing dimensions as independent variables and the product focus dimension as a dependent variable can be clarified. This is as shown in Table No. (6):

table number (6)Results of stepwise multiple regression analysis
The impact of viral marketing dimensions on product positioning

Variables Entered	R	R^2	Std. Error	Stepwise		Sig
				Beta	T	
Digital influencers	.773[a]	.598	.6202	0.773	22.655	0.000
Social media	.815[b]	.664	.5675	0.375	8.249	0.000
Electronic promotion	.828[c]	.686	.5502	0.250	4.802	0.000
Trust and credibility ofthe source	.830[d]	.689	.5479	0.1247	1.974	0.049
R	0.830					
R^2	0.689					
F	189.507107					
Df	4-342					
Sig	0.000					

Source: Prepared by the researchers according to the results of the statistical analysis of the SPSS program**.**

It is clear from Table No. (6) that**:**

Regarding the impact of viral marketing dimensions on product concentration, the following became clear:

- The calculated value of (F) for the model was (189.507), and its significance value (Sig.) was (0.000), which is statistically significant at the 1% level of significance, which means that the significance of the model as a whole is high, and it is clear that there is a significant effect for all dimensions of viral marketing. They are, in order (digital influencers - social media - electronic promotion - trust and credibility of the source) based on the products of the Faculty of Agriculture, Minya University.

- The value of (R2) for the model as a whole was (0.689), which indicates that the dimensions of viral marketing explain (68.9%) of the change that occurs in the dependent variable (focus on products), and that the remaining percentage (31.1%) is explained by other factors and variables that were not included in the relationship. Regression, in addition to random errors resulting from the sampling method, measurement accuracy, etc. (due to factors that are not explained by the relationship between the two variables)**.**

- The dimension of digital influencers represents the most important elements explaining the change that occurs in the dependent variable (focus on products), as the value of (Beta) for that element reached (0.773), which is a positive, significant effect. It is followed in importance by the dimension of social media, where the value of (Beta) for that element reached (0.375), which is a positive, significant effect. It comes in third

place after electronic promotion, where the Beta value for that element reached (0.250), which is a positive, significant effect. And finally, after trust and credibility of the source, where the Beta value for that element reached (0.124), which is a positive effect. moral**.**

- Accepting the first sub-hypothesis of the second main hypothesis which states "There is a significant effect of viral marketing dimensions on product focus as one of the dimensions of green purchase intention among employees at Minya University".

7/3/7 The effect of viral marketing dimensions on attitude towards products

This part of the statistical analysis discusses the testing of the second sub-hypothesis of the second hypothesis, which is related to testing the effect of viral marketing dimensions on the attitude towards products. Below, the results of the correlation and multiple regression of the viral marketing dimensions as independent variables and the attitude dimension towards products as a dependent variable can be explained, as in Table No. (7):

Table number (7)Results of stepwise multiple regression analysis
The influence of viral marketing dimensions on attitude towards products

Variables Entered	R	R^2	Std. Error	Stepwise		Sig
				Beta	T	
Digital influencers	.771a	.595	.6353	.771	22.509	0.000
Electronic promotion	.791b	.625	.6118	.271	5.297	0.000
R		.792				
R^2		.627				
F		143.884896				
Df		2-344				
Sig		0.000				

Source: Prepared by the researchers according to the results of the statistical analysis of the SPSS program.

It is clear from Table No. (7) that:Regarding the impact of viral marketing dimensions on the attitude towards products, the following became clear:

- The calculated value of (F) for the model reached (143.884), and its significance value (Sig.) reached (0.000), which is statistically significant at the 1% level of significance, which means that the significance of the model as a whole is high, and it is clear that there is a significant effect for only two marketing dimensions. Viral is an illusion In order (digital influencers - electronic promotion) to focus on the products of the Faculty of Agriculture, Minya University, and the model (social media - trust and credibility of the source) was excluded.

- The value of (R2) for the model as a whole was (0.627), which indicates that the two dimensions of viral marketing explain (62.7%) of the change that occurs in the dependent variable (attitude toward products), and that the

remaining percentage (37.3%) is explained by other factors and variables that were not included in the regression relationship. In addition to random errors resulting from the sampling method, measurement accuracy, etc. (due to factors that are not explained by the relationship between the two variables).

- The dimension of digital influencers represents the most important elements explaining the change that occurs in the dependent variable (attitude toward products), as the value of (Beta) for that element reached (0.771), which is a positive, significant effect. It is followed in importance by the dimension of electronic promotion, where the value of (Beta) for that element reached (0.271), which is a significant positive effect. The post-model (social media - trust and source credibility) was excluded from the regression relationship because they are not statistically significant.

- Partially accepting the second sub-hypothesis of the second main hypothesis, which states "There is a significant effect of viral marketing dimensions on the attitude towards products as one of the dimensions of green purchase intention among employees at Minya University", with the exception of two dimensions (social media - trust and credibility in the source), as they do not have a direct significant effect on the attitude towards products among employees at Minya University".

● **The effect of viral marketing dimensions on product knowledge**

This part of the statistical analysis discusses the testing of the third sub-hypothesis of the second hypothesis, which is related to testing the effect of viral marketing dimensions on knowledge about products. Below, the results of the correlation and multiple regression of the viral marketing dimensions as independent variables and the knowledge dimension of products as a dependent variable can be clarified, as in Table No(8).

Table number(8)

Results of stepwise multiple regression analysis

The impact of viral marketing dimensions on knowledge towards products

Variables Entered	R	R^2	Std. Error	Stepwise		Sig
				Beta	T	
Digital influencers	.769a	.591	.570	.769	22.335	0.000
Electronic promotion	.794b	.631	.542	.310	6.105	0.000
Trust and credibility of the source	.802c	.644	.534	.210	3.513	0.001
R		.805a				
R^2		.648				
F		157.209910				
Df		3-343				
Sig		0.000				

Source: Prepared by the researchers according to the results of the statistical analysis of the SPSS program.

It is clear from Table No. (8) that:

Regarding the impact of viral marketing dimensions on knowledge about products, the following became clear:

- The calculated value of (F) for the model reached (157.209), and its significance value (Sig.) reached (0.000), which is statistically significant at the 1% level of significance, which means that the significance of the model as a whole is high, and it is clear that there is a significant effect of three dimensions of viral marketing And they are in order Digital influencers - electronic promotion - trust and source credibility) focused on the products of the Faculty of Agriculture, Minya University, and the model was excluded after (social media).

- The value of (R2) for the model as a whole was (0.648), which indicates that the dimensions of viral marketing explain (64.8%) of the change that occurs in the dependent variable (knowledge of products), and that the remaining percentage (35.2%) is explained by other factors and variables that are not included in the relationship. Regression, in addition to random errors resulting from the sampling method, measurement accuracy, etc. (due to factors that are not explained by the relationship between the two variables).

- The dimension of digital influencers represents the most important elements explaining the change that occurs in the dependent variable (knowledge about products), as the value of (Beta) for that element reached (0.769), which is a positive, significant effect. It is followed in second place after electronic promotion, where the value of (Beta) for that element was (0.310) which is a positive and significant effect, and finally after trust and credibility of the source, where the Beta value for that element was (0.210), which is a significant positive effect, and the model was then excluded social media has no effect because it is not statistically significant.

- Partially accepting the third sub-hypothesis of the second main hypothesis, which states "There is a significant effect of viral marketing dimensions on knowledge about products as one of the dimensions of green purchase intention among employees at Minya University", with the exception of the dimension (social media), as it does not have a direct significant effect on knowledge about products among employees at Minya University".

This part of the statistical analysis discusses the testing of the fourth sub-hypothesis of the second hypothesis, which is related to testing the effect of the dimensions of viral marketing on concern for the environment. Below, the results of the correlation and multiple regression of the dimensions of viral marketing as independent variables and the dimension of concern for the environment as a dependent variable can be clarified, as in Table No. (9):

Table number (9)

Results of stepwise multiple regression analysis to the impact of viral marketing dimensions on environmental concern.

Variables Entered	R	R^2	Std. Error	Stepwise Beta	T	Sig
Digital influencers	.759a	.576	.6121	.759	21.668	0.000
Trust and credibility of the source	.771b	.595	.5996	.222	3.942	0.000
Electronic promotion	.775c	.601	.5957	.141	2.353	0.019
R	.775					
R^2	.601					
F	128.887814					
Df	3-343					
Sig	0.000					

Source: Prepared by the researchers according to the results of the statistical analysis of the SPSS program.

It is clear from Table No. (9) that:

Regarding the impact of viral marketing dimensions on environmental concern, the following became clear:

- The value of (F) calculated for the model was (128.887), and its significance value (Sig.) was (0.000), which is statistically significant at the 1% level of significance, which means high significance. The model as a whole, and it is clear that there is a significant effect of three dimensions of viral marketing, which are in order (digital influencers - trust and credibility of the source - electronic promotion) on the focus on the products of the Faculty of Agriculture, Minya University, and the model excluded the social media element from the relationship.

- The value of (R2) for the model as a whole was (0.601), which indicates that the dimensions of viral marketing explain (60.1%) of the change that occurs in the dependent variable (concern for the environment), and that the remaining percentage (39.9%) is explained by other factors and variables that were not included in the regression relationship. In addition to random errors resulting from the sampling method, measurement accuracy, etc. (due to factors that are not explained by the relationship between the two variables).

- The dimension of digital influencers represents the most important elements explaining the change that occurs in the dependent variable (concern for the environment), as the value of (Beta) for that element reached (0.759), which is a positive, significant effect. It is followed in importance by the dimension of trust and credibility of the source, where the value of (Beta) for that element reached (0.124), which is a positive, significant effect. It is followed

in third and last place after electronic promotion, where the Beta value for that element reached (0.250), which is a positive, significant effect. The model excluded the social media dimension from the relationship because it is not statistically significant**.**

- Partially accepting the fourth sub-hypothesis of the second main hypothesis, which states "There is a significant effect of viral marketing dimensions on environmental concern as one of the dimensions of green purchase intention among employees at Minya University", with the exception of the dimension (social media), which does not have a direct significant effect on environmental concern.

8/ Results and recommendations

8/1 Results

✓ The level of availability of total viral marketing was at a high level with an arithmetic mean (3.149) and a standard deviation (0.894) in the sector under study, and the level of availability of viral marketing dimensions (influencers - trust and credibility in the source - electronic word of mouth - electronic publishing methods) was at a high level, according to the trends of the study sample paragraphs.

✓ There is a variation in the order of relative importance, in the degree of availability of viral marketing dimensions, as they came according to the following order in succession (influencers - electronic publishing methods - electronic word of mouth - trust and credibility in the source).

✓ The level of availability of green purchase intention was at an average level, with an arithmetic mean (2.612) and a standard deviation (0.693) in the sector under study, and the level of availability of green purchase intention dimensions was according to the following order in succession (focus on the products of the Faculty of Agriculture - interest in the environment - knowledge towards the products of the Faculty of Agriculture - attitude towards the products of the Faculty of Agriculture).

✓ Accepting the first main hypothesis which states "There is a statistically significant relationship between viral marketing and green purchase intention among employees at Minya University".

✓ Accepting the second main hypothesis which states "There is a statistically significant effect of viral marketing on green purchase intention among employees at Minya University".

✓ Accepting the first sub-hypothesis of the second main hypothesis which states "There is a significant effect of viral marketing dimensions on product focus as one of the dimensions of green purchase intention among employees at Minya University".

- ✓ Partially accepting the second sub-hypothesis of the second main hypothesis, which states "There is a significant effect of viral marketing dimensions on the attitude towards products as one of the dimensions of green purchase intention among employees at Minya University", with the exception of two dimensions (social media - trust and credibility in the source), as they do not have a direct significant effect on the attitude towards products among employees at Minya University".
- ✓ Partially accepting the third sub-hypothesis of the second main hypothesis, which states "There is a significant effect of viral marketing dimensions on knowledge about products as one of the dimensions of green purchase intention among employees at Minya University", with the exception of the dimension (social media), as it does not have a direct significant effect on knowledge about products among employees at Minya University".
- ✓ Partially accepting the fourth sub-hypothesis of the second main hypothesis, which states "There is a significant effect of viral marketing dimensions on environmental concern as one of the dimensions of green purchase intention among employees at Minya University", with the exception of the dimension (social media), which does not have a direct significant effect on environmental concern.

8/2 recommendations

Fields	Recommendations	Recommended
Digital Influencers	To send the biggest number of message and we should send more than advancement. Create advertising campaigns for products through an influential person in the community.	Sales department in agriculture faculty. Customers (employees) of the university.
Trust and credibility in the source.	To commit to produce products with high quality.	production department in agriculture faculty.
Electronic word-of-mouth promotion (E-WOM)	To use every way of technology to spread knowledge about green products.	Sales department in agriculture faculty.
Social media	Learning everything about social media and use them appropriately. Activating the role of social networking sites.	Sales department in agriculture faculty.
Product knowledge	To clear everything about products to customers.	Sales department in agriculture faculty.

Environmental concern	How they are away from pollution and also too sure from this point in production. Raising awareness and spreading the importance of caring for the environment.	production department in agriculture faculty. Sales department in agriculture faculty.

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