

# Digital Marketing Transformation Optimization: Building Superior Brand Awareness for Hydroponic Products

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**Abstract.** This study examines the process of enhancing digital marketing transformation in order to establish a stronger brand awareness for hydroponic products. The objective of this study is to enhance the efficacy and productivity of digital media marketing through the examination of digital marketing strategies employed by hydroponic companies and the creation of novel approaches. The literature review encompasses the subjects of digital marketing, brand recognition, and hydroponics. The study methodology employed is qualitative, utilising data obtained from various sources such as articles, newspapers, journals, books, online articles, library data, and other relevant materials. The findings indicate that strategically enhancing digital marketing transformation, namely through popular social media platforms like Facebook, Instagram, TikTok, and YouTube, can effectively boost the visibility and recognition of hydroponic products. MSMEs and educational institutions have the ability to significantly broaden their promotional endeavours and enhance the visibility of hydroponic products. The study's findings suggest that optimising digital marketing transformation can be a very effective approach to enhance brand awareness for hydroponic products. This is particularly true when utilising major social media sites like Facebook, Instagram, TikTok, and YouTube. MSMEs and educational institutions could leverage this digital marketing change to broaden the promotional reach and enhance the visibility of the products.

**Keywords:** Digital Marketing Transformation Optimization; Brand Awareness; Hydroponic Products

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## INTRODUCTION

A product's ability to establish a strong brand is largely dependent on the transformation of digital marketing. Increasing brand awareness, expanding merchandise, enhancing customer interactions, enhancing business performance, and expanding marketing reach are some of the primary goals of the digital marketing transformation. As a result, it could affect what consumers decide to buy, boost communication and interaction between consumers and brands, particularly in the context of digital marketing, and positively affect the growth of product or service sales. The research is to examine how to enhance the digital marketing process for better product brand awareness, with a focus on hydroponics.

Hydroponics is a clean gardening technique that uses a variety of planting media, including husk charcoal, rock wool, sponge, powdered coconut fibre, and others, along with water

and nutrient solutions to grow plants. This technique is a good alternative, especially for people who live in urban areas with limited land, since it saves water, is environmentally friendly, and allows plants to grow efficiently. It can also be done in a variety of locations (Waluyo et al., 2021). Additional benefits include the ability to grow crops independent of the season, faster plant growth, and maintained yield quality. All things considered, hydroponics is a growing technique with many advantages. However, there are drawbacks to hydroponics as well, like the need for a sizeable initial investment and trouble locating necessary equipment. It is therefore necessary to develop these hydroponic product.

Digital media marketing strategies are essential for businesses to succeed in the competitive market in the rapidly expanding digital era. Digital media marketing strategies have the potential to enhance product or service sales by expanding the reach of

their target market and attracting consumers. Digital media allows businesses to communicate with customers more closely, which helps them understand their needs and offer more specialised services. Businesses can give customers more thorough and current information about the products and services that company offer through digital marketing. Businesses can increase the reach of their advertising and raise consumer awareness of their brands by utilising digital media (Jasri et al., 2022). The research aims to increase the efficacy and efficiency of digital media marketing by analysing digital marketing strategies used by hydroponic companies and developing innovative methods.

## I. LITERATURE REVIEW

### Digital Marketing

Digital marketing is the process of promoting a product, service, or brand through digital media. It involves the use of an internet network for its operations. Digital marketing originated as a result of businesses experimenting with new marketing strategies in response to the explosion of digital technology, which included the widespread use of computers and smartphones (Barone, 2023). The main purpose of this activity is to promote a brand, build preference, and increase sales through various digital techniques marketing (Riyadi et al, 2019). The objectives of digital marketing differ based on the demands and business strategy. The following are the general goals of digital marketing (Forbes, 2021):

1. Increase online visibility  
Efforts to improve a brand, product, or service's online presence and visibility are included in this goal. Numerous tactics, including search engine optimisation (SEO), interesting content, and a proactive social media presence, can be used to achieve this.
2. Increase traffic to websites  
The objective is to boost the amount of people who visit the business' website. Numerous digital marketing strategies, including social media, content marketing, and SEO, can help achieve this.
3. Lead Generation  
Attempts to produce leads or customers are part of this goal. Signup forms, content marketing strategies, and other customer-interesting marketing techniques can be used to accomplish this.
4. Increase the number of conversions  
The objective is to enhance the quantity of website visitors who either become customers or carry out intended actions. Enhanced user experience, content marketing techniques, and other marketing strategies can help achieve this.
5. Increase awareness of the brand  
The main objective of this goal is to raise consumer brand awareness. Digital ad campaigns, pertinent and interesting content, and an active social media presence can all help achieve this.

Each of these objectives can assist companies in achieving their intended outcomes and is an important part of the overall digital marketing strategy.

### Digital Media In Digital Marketing

Companies can improve efficiency, streamline procedures, and create new development prospects by focusing on integrating innovative technologies into the operations (JudiJanto, 2023). Media that uses electronic or digital

technology to reach its audience is referred to as digital media in the context of digital marketing. Digital media could be used in a variety of methods for digital marketing (Widyanto & Athanasius, 2021):

1. Owned Media  
Company-owned media includes blogs, websites, and social media profiles. It is possible to increase audience engagement and brand awareness with this kind of media.
2. Earned Media  
Naturally obtained media, like favourable client testimonials or press attention. Media of this kind is useful to raising brand and image awareness.
3. Paid Media  
Paid media, including search engine marketing, social media marketing, and internet advertising. This kind of media is useful in raising brand awareness and reach.
4. Social Media Marketing  
Marketing via social media sites like LinkedIn, Twitter, Instagram, and Facebook. Engaging audiences and increasing brand awareness are two benefits of this kind of media.
5. Email Marketing  
Email marketing includes promotions of products and newsletters. Both brand awareness and customer relationships can be fostered by this kind of media.
6. Content Marketing  
Marketing with interesting and educational content, like infographics, videos, and blog entries. Engaging audiences and increasing brand awareness are two benefits of this kind of media.
7. Search Engine Marketing  
Advertising using search engines, like Bing and Google Ads. This kind of media is helpful in raising brand awareness and reach.
8. Mobile Marketing  
Mobile marketing includes text messaging and in-app advertising. This kind of media is useful in increasing brand awareness and reach.
9. Affiliate Marketing  
Marketing via business partners or affiliates, like referral and affiliate schemes. This kind of media can aid in increasing brand awareness and reach.

Businesses can select the kind of digital media that best is compatible to target market and marketing objectives to raise brand awareness and improve campaign performance.

### Brand Awareness

The term "brand awareness" refers to the levels of consumer knowledge and awareness regarding the products or services provided by a brand (Ramadayanti, 2019). Customers' capacity to identify and recall brands or products is a part of this. Because it provides a solid foundation for marketing initiatives and customer interaction, brand awareness is important.

Businesses can easily develop more effective marketing campaigns and gather more audience data by increasing brand awareness (Arianty & Andira, 2021). This can assist companies in customising their content, marketing campaigns, and products to better suit the needs and desires of the target market. Several marketing strategies, including advertising, social media activity, and promotions, can help raise brand awareness. The following are some elements that can increase brand awareness (Halim, 2017):

1. **Product Excellence**  
Effective product quality could contribute to increased brand recognition because satisfied customers are more likely to remember and identify brands that make high-quality goods.
2. **Client Relationship**  
Because consumers are more likely to recognise and remember brands that offer a better experience, a positive customer experience can contribute to the development of brand awareness.
3. **Promoting**  
Because consumers are quick to identify and recall brands that offer effective advertising, high-quality and pertinent advertising can aid in increasing brand recognition.
4. **Marketing**  
Because customers could quickly identify and recall brands that have effective promotions, appealing and pertinent promotions are helpful in increasing brand awareness.
5. **Social media presence of the brand**  
Given that consumers could quickly identify and recall brands, having an active and relevant social media presence can aid in increasing brand awareness. Post interesting and pertinent content on social media.
6. **Content**  
Given that consumers are more likely to recognise and remember brands that offer interesting and relevant content, content that is both engaging and relevant helps increase brand awareness.
7. **Customer Perspective**  
Given that consumers are more likely to recognise and remember brands that offer a better experience, a positive customer experience can contribute to the development of brand awareness.
8. **Brand Allegiance**  
Given that consumers are more likely to recognise and remember brands with higher levels of brand loyalty, high brand loyalty is helpful in the development of brand awareness.
9. **Brand Image**  
Given that consumers can quickly identify and recall brands with strong brand awareness, a strong brand image is helpful in increasing brand awareness. A positive brand image and high brand awareness. Businesses can create more effective brand awareness by knowing these factors.

### Hydroponic

Hydroponics is a soilless gardening technique that uses a variety of planting media, including husk charcoal, rock wool, sponge, powdered coconut fibre, and others, along with water and nutrient solutions to grow plants. This technique is an excellent substitute, particularly for people who live in urban areas with limited land, since it enables plants to grow effectively, conserves water, is environmentally benign, and can be used in a variety of locations (Waluyo et al., 2021).

All things considered, hydroponics is a growing technique with many advantages. Furthermore, hydroponics is environmentally beneficial. The following factors

contribute to hydroponics' favourable effects on the environment (Wali et al., 2021):

1. **Effective land use**  
Even indoors, hydroponic plants can be grown on a small plot of land. In fact, a large growing substrate is not necessary for hydroponic plants.
2. **Conserve water**  
Compared to conventional growing techniques, hydroponic plants could be grown with less water.
3. **Does not require a lot of land for a garden**  
This method works well on small amounts of land because it doesn't require a large garden.
4. **Cutting Down on Pesticide Use**  
Hydroponic plants can grow without a lot of pesticides if they are given the right care.
5. **Reduce carbon emissions**  
Growing plants hydroponically indoors lowers carbon emissions from land use and transportation.
6. **Increase the quality of the air**  
Because hydroponic plants produce oxygen and absorb carbon dioxide, they could aid in improving the quality of indoor air.
7. **Enhancing the quality of the soil**  
Because hydroponic plants don't require soil, they minimise soil erosion and don't harm the quality of the soil.

By considering the advantages of hydroponics for the environment, this method can offer a more sustainable agricultural substitute and lessen the adverse effects of conventional farming.

### III. RESEARCH METHOD

This research uses a descriptive methodology and is qualitative in nature. Research that analyses descriptive data and data that cannot be directly measured is known as qualitative research (Fadli, 2021). The purpose of the descriptive approach is to present a thorough and comprehensive image of a specific subject, circumstance, or phenomenon. Documents pertaining to the research title or its correlation are used in the data collection process, such as newspaper articles, journals, books, online articles, library data, and other documents.

Qualitative approach involves deriving conclusions by interpreting the collected data. This step entails the process of inductive analysis, wherein the researcher derives results or general patterns from the specific data that has been acquired. The conclusions need to be substantiated by robust and pertinent evidence, and must align with the research objectives and conceptual framework employed.

### IV. RESULTS

Hydroponics is a soilless gardening technique that uses a variety of planting media, including husk charcoal, rock wool, sponge, powdered coconut fibre, and others, along with water and nutrient solutions to grow plants (Waluyo et al., 2021). Plants grown hydroponically that is without the use of soil are known as hydroponic products. Produce produced hydroponically includes fruits, vegetables, and flowers.

Common hydroponic plant species include cucumbers, kale, tomatoes, radishes, and lettuce. Products that are hydroponically grown offer a number of advantages, including increased space utilisation, water conservation, improved climate regulation, and expedited planting and harvesting. Furthermore, without the need

of pesticides, hydroponic plants could yield fruits and vegetables that are higher quality and healthier. Products grown hydroponically have a number of benefits over those grown conventionally, including (Roidah, 2014):

1. Given that hydroponic plants are grown in a regulated, pest-free environment, hydroponic products are fresher and healthier.
2. More land-efficient because hydroponics is a farming method that uses water as a medium instead of soil.
3. Given that hydroponic products don't require pesticides or soil, their cleanliness is better maintained.
4. Given that the water used is better absorbed by plants than by the soil, it conserves both energy and water.
5. Given that hydroponic systems yield higher yields and require less time for plant harvesting, planting takes place sooner.

A major obstacle in enhancing the digital marketing transformation to establish a prominent hydroponic product brand presence is the challenge of precisely assessing the efficacy of digital marketing campaigns and brand recognition. It is therefore necessary to have an effective marketing plan in order to develop these hydroponic products.

Efficiently enhancing the process of digital marketing transformation is a crucial measure in establishing exceptional brand recognition for hydroponic products. In the era of digital technology, implementing an appropriate digital marketing plan could significantly enhance a business's ability to effectively engage a larger target audience and improve its online presence. To optimise digital marketing transformation, it is important to focus on two key steps: assuring the production of relevant content and maximising the use of social media platforms (Trisnawati, 2024).

### Create relevant content in social media

To ensure relevant content in digital marketing, it is essential to prioritise the creation of content that aligns with the interests and demands of the target audience. The presence of pertinent material enhances the perceived worth of your website or digital platform, prompting users to invest time in reading the content. In order to ensure the relevance of the content, it is important to focus on the clarity of information from the outset. Additionally, it is crucial to provide a concise overview of the topics mentioned in the first paragraph. Lastly, it is essential to ensure that the content aligns with the specific demands of the target market (Humas, 2019). Creating relevant content in digital marketing offers numerous advantages, including:

#### 1. Enhance Engagement

Content that is pertinent has a tendency to captivate the attention of the audience and could amplify user engagement with a business or product. The primary factor in boosting engagement is the presence of captivating, educational, and pertinent material. Companies can enhance brand recognition among their target market by guaranteeing the provision of pertinent information. Utilising diverse formats like as photographs, videos, and captivating information helps enhance user interaction on social media platforms. Hence, pertinent information plays a crucial role in fostering robust audience engagement and enhancing brand recognition (Mueller, 2023).

#### 2. Enhance Brand Awareness

Through delivering pertinent material, businesses can bolster brand recognition among their intended consumer base. Ensuring appropriate content in digital marketing has the advantage of enhancing brand awareness. Companies can

enhance brand awareness among their target market by delivering pertinent content. Brand awareness is the level of customer recognition and recall of a brand while interacting with its products or services. Increased brand awareness correlates positively with the likelihood of acquiring and retaining loyal customers who will consistently select and endorse the brand (Izza, 2021).

#### 3. Enhance Conversion Rates

Pertinent material can effectively guide the audience towards the intended action, such as making a product acquisition or subscribing to a service. Relevant material serves a crucial role in guiding the audience towards the intended action, such as making a purchase or subscribing to a service. Compelling and pertinent content is crucial for boosting conversions. When marketing hydroponic items, successful tactics to boost conversions involve using agricultural cooperatives, engaging with communities or organisations, selling directly to the market, selling products directly from the garden, and utilising social media platforms for product promotion (Difin, 2023).

### Process of generating relevant content

The process of generating relevant content is a sequence of actions aimed at crafting material that aligns with the requirements and preferences of the intended audience (Meilyana, 2018). Following are some strategies for generating relevant content to enhance digital marketing transformation and establish strong brand recognition for hydroponic products: Understanding the target market, delivering valuable information, employing appropriate keywords, utilising various content formats, and optimising content for search engine optimisation (SEO).

### Understanding the target market

Identifying the target market is crucial for developing pertinent content as it involves understanding the specific audience and their requirements (Trisnawati, 2024). Following are some applicable methods, including:

#### 1. Clearly Identify Target Markets

To create an effective marketing plan, the initial stage is to ascertain the target market. By comprehending the characteristics and preferences of your intended audience, you can customise your marketing communications and strategies to enhance their effectiveness (Bri, 2023).

- Age of the target audience

The optimal target demographic for hydroponic products comprises those between the ages of 25 and 45, as this age group tends to exhibit greater receptiveness towards innovation, technology, and possess heightened environmental consciousness (Astuti & Suswatiningsih, 2022). Furthermore, hydroponic entrepreneurs have the opportunity to broaden their customer base by promoting hydroponic vegetable goods to establishments such as restaurants, hotels, and supermarkets.

- Target audience behavior Metropolitan areas

Hydroponics is well-suited for introduction to metropolitan populations due to its landless nature, making it a great option for urban farming (Rakhma, 2023).

### Social Media Users

Utilising social media platforms like Facebook, Instagram, and TikTok could effectively enhance the marketing reach of hydroponic products, ensuring that the intended demographic, who is actively engaged on social media, is precisely targeted

(Wahyudi, 2021).

### Agricultural and business enthusiasts

Individuals with a keen interest in agriculture, whether for recreational purposes or as a commercial venture, represent possible target demographics for the introduction of hydroponic products (Agromedia, 2023).

### Make Careful Use of Social Media

Exercise caution when utilising social media, as it serves as a potent instrument for promoting hydroponic items. Select a platform that aligns with your target market and create compelling content. Utilise graphic imagery and films showcasing your items in practical use (Sampoerna, 2022). Appropriate social media outlets for educating the target demographic of individuals aged 25-45 about cultivating hydroponic items include:

#### 1. Facebook

This network attracts users from a wide range of age groups, including individuals between the ages of 25 and

45. Facebook could serve as a platform for disseminating educational content related to hydroponic products, including blog posts, video instructions, and infographics (Bri, 2023).

#### 2. Instagram

Instagram is a widely used social media network favoured by individuals from the millennial and generation Z demographics, often ranging in age from 25 to 45 years. Instagram serves as a platform for sharing visual content related to hydroponic items, including images and videos (Bri, 2023).

#### 3. TikTok

TikTok is a suitable choice due to its increasing popularity among individuals aged 25-45 and its provision of videos that are both captivating and succinct (Ramadhani, 2023).

#### 4. Youtube

YouTube serves as a potent medium for introducing hydroponic items to the general audience and offering educational content on the subject of hydroponics. Youtube could facilitate the expansion of hydroponic product promotion and enhance sales. Furthermore, certain hydroponic micro, small, and medium enterprises (MSMEs) employ YouTube as a platform to advertise their hydroponic merchandise (Ramadhayanti et al., 2021).

### Use Educational Content in Social Media

An example of content utilised in this study is educational content. Begin marketing hydroponic products by offering valuable educational information. Education based material is a potent instrument that could enhance brand recognition, furnish valuable insights to customers, and cultivate consumer confidence in a product or brand. Additionally, it promotes audience participation and involvement, cultivating more robust connections between businesses and consumers (Harts, 2023).

Essentially, instructional content serves as a potent instrument for businesses to efficiently convey information about the products and services for the intended audience. Produce blog articles, video tutorials, or infographics elucidating the merits of hydroponics, providing guidance on

plant care, and highlighting the advantages of hydroponic items (Sholikhi et al., 2023). Possible educational content for introducing hydroponic products to the public may encompass the subsequent information:

#### 1. Advantages of Hydroponics

Emphasising the advantages of hydroponics in fulfilling food requirements and its potential as an agricultural remedy in urban regions (Nanang, 2023).

#### 2. Methods for Cultivating Plants Hydroponically Offers comprehensive instructions for cultivating hydroponic crops, including methods for growing hydroponic vegetables and strategies for their upkeep (Badai, 2021).

#### 3. Economic capacity

Examine the economic prospects of hydroponic farming and its potential as a future commercial venture (Badai, 2021).

#### 4. Environmental sustainability

Highlighting the ecological viability of hydroponic agriculture and its influence on the natural surroundings, as well as its relevance to environmental issues among individuals aged 25 to 45 (Nanang, 2023).

An effective technique for introducing hydroponic items to the public is to utilise educational content on various social media platforms, including Facebook, Instagram, Youtube and TikTok. Multiple research and business strategies have demonstrated that incorporating social media could enhance the marketing of hydroponic products and boost sales (Wahyudi, 2021).

Consequently, educational material regarding hydroponics may be customised to suit the distinctive characteristics of each platform, incorporating captivating visuals and videos on Instagram and Youtube, offering more individualised and varied content on Facebook, and adopting a creative and youth-centric approach on TikTok. This facilitates the successful dissemination of hydroponics-related communications to individuals between the ages of 25 and 45, who are a key demographic in the marketing of hydroponic products.

### Facebook

People could leverage Facebook's functionalities such as business pages, advertisements, and groups to market hydroponic products and enhance brand awareness. The company has the ability to produce captivating content such as photographs, films, and infographics in order to captivate people and connect with potential customers, thereby improving their brand reputation (Gusti & Nasution, 2019).

One illustration of this is the content in the form of infographics. Infographics are a type of educational content that could be utilised on Facebook's social media platform. Infographics are graphical representations of data, ideas, information, or knowledge using charts, images, timetables, and other visual elements to communicate information in a clear and visually appealing manner. Infographics could also be presented as a combination of text, graphics, illustrations, and typography.

Infographics are typically employed to visually depict facts in a manner that is readily comprehensible and legible. Infographics are visually appealing and instructive arrangements of photos,

graphs, illustrations, and typography used to convey information. Infographics offer a means to portray intricate information in a succinct and comprehensible manner, rendering them a powerful tool for educating and informing the audience (Hadza, 2023).

Utilising infographics on Facebook can efficiently promote hydroponic items to the public. Infographics provide inherent advantages in visually presenting information in an aesthetically appealing and comprehensible manner, making them a useful medium for educating and informing the audience (Saptaji, 2018).



Figure 1. The example of infographic of hydroponic

The (Figure 1) shown depicts an infographic sourced from Antara News, illustrating "Hydroponics Farming Solutions on Narrow Land". Provide details about hydroponics, a soilless agricultural technology that utilises nutrient-rich water to cultivate crops, making it suitable for limited or confined spaces. Furthermore, incorporating suitable and compelling visual aids can effectively cultivate public interest in reading while simultaneously enhancing brand awareness of hydroponic products (Antara, 2021). Some instructive material concepts in the form of infographics that can be used to market hydroponic product to the pubic on Facebook are (Julia et al, 2022):

- 1. Benefits of Hydroponics**  
Hydroponics has several advantages, which can be succinctly conveyed using infographics. These benefits include increased nutrient density, accelerated plant development, and enhanced water utilisation.
- 2. Hydroponic Growing Process**  
Please provide a graphic depicting the sequential stages of the hydroponic growing process, starting from the sowing of seedlings and concluding with the harvesting phase. Additionally, kindly include a concise explanation for each step.
- 3. Environmental Sustainability**

Infographics may effectively showcase the environmental sustainability of hydroponic farming by emphasising its positive influence on the environment, including the significant reduction in pesticide usage and water conservation.

- 4. Call to Action**  
Incorporate a compelling call to action that encourages your audience to explore the realm of hydroponics and contemplate initiating their own hydroponic cultivation endeavours.

**Instagram**

The University of North Sumatra proposes that hydroponic items could be effectively marketed on Instagram by creating informative and captivating content, which serves to introduce the products and foster consumer trust. Kompas.com emphasises Instagram's efficacy as a promotional medium, enabling hydroponic enterprises to broaden their audience and enhance brand awareness among Instagram users (Gusti & Nasution, 2019).

An Instagram feed refers to the visual display of a user's profile page within the Instagram application. It is a platform where users may distribute their images and movies for the followers. Instagram feeds offer users the opportunity to showcase their identity, interests, and lifestyle through captivating visual content, which is a distinct benefit.

Instagram feeds serve as a platform for promoting content and inspiring a multitude of individuals. Practically, this function manifests as an Instagram homepage that displays posts from other people whom users follow on the Instagram Feed. These posts could take the shape of either images or videos.

Typically, Instagram feeds are organised in a tidy manner, using specific colour schemes and captivating content. An aesthetically pleasing, captivating, and educational Instagram feed might enhance prospects in the commercial realm. The rise in the number of followers on Instagram accounts is expected to lead to an increase in the traffic of managed Instagram accounts. Managers might seize this as a chance to provide employment opportunities or market products and services. An organised, captivating, and educational Instagram feed can enhance the chances of success for those who oversee a business account (Patria, 2023).



Figure 2. The example of an Instagram feed about hydroponics

The (Figure 2) displayed depicts an Instagram feed belonging to the user @dr\_hidroponik, showcasing the SWU Indoor Farming promotion. This promotion highlights an inventive hydroponic kit system specifically suited for indoor cultivation. The system's advantages, along with low prices and appealing contemporary designs, could stimulate public interest in purchasing and simultaneously enhance brand recognition of hydroponic products (Fadhillah et al., 2023). Possible components of an instructional Instagram campaign on hydroponic items could encompass the utilisation of visual imagery to acquaint and familiarise the audience with the concept (Tanoto et al., 2024):

1. Illustration of a hydroponic product  
Eye-catching visuals showcasing a diverse range of hydroponic products, including vibrant green veggies, fruits, and spices, to captivate viewers.
2. Hydroponics Benefits  
Hydroponics offers several advantages, including enhanced nutritional content, accelerated plant growth, and improved water utilisation.
3. Hydroponic Plant Cultivation Procedure  
Outline the basic procedures involved in cultivating hydroponics, including the initial step of sowing seedlings, the subsequent maintenance of plants, and the implementation of irrigation systems.
4. Ecological Resilience  
Provide details on the sustainability of hydroponic farming, including its positive environmental impact through decreased use on pesticides and water conservation.
5. Call to Action  
Include a compelling call to action that encourages the readers to embark on cultivating hydroponics in personal homes and experiment with hydroponic items to enhance their well-being.

**TikTok**

TikTok is a social media site that allows users to generate distinctive content, such as brief films accompanied by music and effects. This platform enables hydroponic product managers to provide useful information regarding hydroponic items, thereby captivating customers' interest and augmenting brand recognition. Hydroponic product managers could enhance the visibility of their products by utilising pertinent hashtags for example #hidroponik and #tanamhidroponik. This strategy increases content visibility and expands the reach of promotional efforts (Novita et al., 2021).

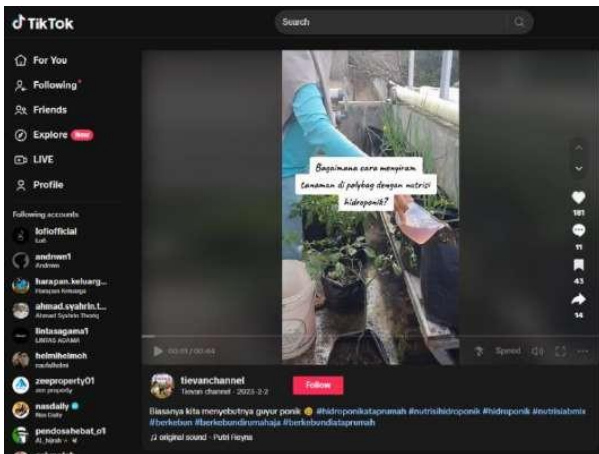


Figure 3. The example of hydroponic content on Tiktok

The (Figure 3) displayed depicts hydroponic video footage sourced from the TikTok account @tievanchannel, specifically focusing on the topic of "How to irrigate plants in polybags using hydroponic nutrients." The purpose of this content is to guarantee that hydroponic plants receive sufficient nutrients for their growth and development, while also maintaining an appropriate nutrient balance to maximise plant productivity.

Choosing the appropriate hashtag is important because it allows content to be easily discovered by other users, thereby enhancing its visibility. This, in turn, could increase user engagement, including metrics like impressions, likes, comments, and shares (Ismi, 2022).

Hashtags also facilitate the formation of communities centred around specific topics or interests, thereby fostering stronger connections among TikTok users. To effectively promote hydroponic items on TikTok and increase visibility on the For You Page (FYP), it is advisable to utilise appropriate hashtags like as #hidroponik, #tanamhidroponik, #produkhidroponik, and #pertanianperkotaan. Simultaneously, content of this kind could increase brand recognition for hydroponic products (Wahyudi, 2021).

TikTok offers a Live TikTok function that enables users to directly market items and communicate more closely with followers, hence enhancing brand awareness. The Live Tiktok function facilitates direct engagement between content creators and viewers. Utilise this functionality to engage with your audience, respond to inquiries, and offer comprehensive details about your merchandise, so enhancing customer involvement. TikTok's Live feature could be utilised to advertise exclusive offers and incentivize customers to make purchases (Pawoon, 2022). Furthermore, users could utilise the sticker feature to generate supplementary revenue by selling products using the TikTok Live feature.

Possible components of the educational content on TikTok, aimed at introducing hydroponic products to the public through videos, could encompass (Syidiq, 2022):

1. This text provides an introduction to the subject of hydroponics and highlights the significance of urban gardening.
2. Elucidate the fundamental principles behind hydroponics and delineate its distinctions from traditional agriculture.
4. Illustrate the procedure for sowing hydroponic plant seeds utilising suitable growing material.
5. Provide details on hydroponic plant maintenance, encompassing aspects such as nutrient management, pest mitigation, and disease prevention.
6. Explores the advantages of hydroponic agriculture and its economic viability, along with its influence on the urban ecosystem. Hydroponics, as a means of producing high-quality food, has the potential to conserve water and fertiliser while also minimising

the need on pesticides.

7. Summarising the key takeaways and encouraging the audience to experiment with cultivating hydroponics in individual homes.

**Youtube**

Hydroponic product managers have the ability to generate informative material concerning hydroponic products, encompassing topics such as the cultivation of hydroponics, the utilisation of hydroponic nutrients, and the benefits of hydroponics in contrast to traditional farming methods (Hariyanto et al., 2020). The educational content has the potential to be disseminated on YouTube and could leverage YouTube advertisements to endorse hydroponic items. YouTube advertisements have the ability to reach a broader demographic, so facilitating the introduction of hydroponic products to the general public and enhancing brand recognition (Fadhillah et al., 2023).



Figure 4. The example of hydroponic content on youtube

The (Figure 4) displayed depicts hydroponic video content produced by PT. PLN (Persero) on the topic of "Education of Hydroponic Plants in Beset Farmer Tourism". This movie explains the cultivation of organic vegetable plants at WTB, employing hydroponic techniques and relying on electricity for watering and nocturnal UV light illumination. These practices ensure the preservation of nutrients and provide a continuous 24-hour light supply.

PT. PLN (Persero) effectively utilises cinematic techniques and informative educational content to demonstrate the process of hydroponic cultivation, explain its advantages, and highlight its economic potential. This strategy enables PT. PLN (Persero) to expand its reach to a broader audience and enhance the awareness of hydroponic products. Furthermore, utilising marketing tactics via social media platforms and forming partnerships with relevant entities, such as educational institutions and micro, small, and medium enterprises (MSMEs), could effectively broaden the scope of promotional efforts and enhance the awareness of hydroponic products.

**The Analysis From Forum Group Discussion**

The HydroGrowth Marketers forum is a dynamic community designed for individuals interested in using digital marketing strategies to enhance hydroponic products. It invites experienced marketers, hydroponics enthusiasts, and beginners

to share knowledge, tactics, and achievements in the hydroponics sector.

The forum discusses various topics such as SEO strategies for hydroponic brands, social media marketing, email marketing campaigns, content creation, influencer and affiliate marketing, digital advertising, marketing data analysis, e-commerce tactics, customer engagement, and the latest digital marketing trends in the hydroponic sector. This platform is a crucial resource for individuals seeking to enhance their knowledge and skills in digital marketing specific to hydroponics.

The HydroGrowth Marketers forum is enriched by a dynamic mix of individuals such as Bram, a 34-year-old male digital marketing specialist focused on advanced SEO strategies for hydroponic brands; Mia, a 28-year-old female social media manager with innovative ideas for customer engagement on Instagram and Pinterest; Jordan, a 31-year-old, male, e-commerce strategist dedicated to optimizing online sales channels; Bella, a 26-year-old female content creator and blogger passionate about crafting educational content; Indra, a 40-year-old male affiliate marketer exploring influencer partnerships to boost brand visibility; and Sophia, a 35-year-old female customer engagement expert specializing in retention strategies. These contributors, representing a spectrum of expertise and interests within digital marketing and hydroponics, play pivotal roles in fostering a collaborative environment that encourages the exchange of insights and strategies, thereby enhancing the forum's value for all members interested in merging the realms of digital marketing with hydroponic cultivation.

**SEO Strategies for Hydroponic Brands**

In a structured approach to leveraging digital marketing for hydroponic brands, various strategies have been implemented with notable results and deeper enrichment initiatives. One approach focused on SEO strategies, where a hydroponic company engaged in comprehensive keyword research to identify high-traffic keywords relevant to their industry. This effort led to the optimization of their website content, blog posts, and product descriptions, which in turn resulted in a 40% increase in organic website traffic and a notable enhancement in user engagement. To further enrich their community's knowledge, the company offered free SEO webinars, providing practical advice on setting up hydroponic gardens with their products. Based in the forum group discussion, below is the example of SEO Strategies for Hydroponics brand.



Figure 5. Content Marketing Plan for Hidroponic Brands

In the Getting Started phase (0-6 months), the plan focuses on foundational activities such as identifying the target audience, defining the brand's unique selling propositions (USPs), creating a cohesive



brand voice, and setting up social media accounts.

Moving into the Intermediate Strategies phase (6-12 months), the emphasis shifts to applying basic SEO principles to content, exploring co-marketing partnerships, and engaging with the community to foster relationships and build loyalty.

The Diversify/Tactics phase (12-18 months) introduces more dynamic activities like incorporating email campaigns, conducting A/B testing of marketing strategies to refine them, and segmenting the market for targeted outreach.

Finally, in the Mature Strategies phase (18-24 months), the plan calls for integrating advanced SEO practices, expanding the types of content created for various platforms, leveraging customer feedback for content creation, and enhancing co-marketing partnerships to solidify and expand market reach.

Each phase builds upon the previous, demonstrating a strategic approach to content marketing with a clear progression from establishing brand fundamentals to engaging in more sophisticated marketing tactics as the brand grows.

**Social Media Marketing for Hydroponics**

Social media marketing also played a crucial role, with the company launching an Instagram campaign that encouraged users to share their hydroponic setups. This initiative, bolstered by influencer partnerships and user-generated content, increased their social media following by 50% and direct sales by 20%. They deepened engagement by hosting interactive social media events, where hydroponic experts answered questions live, demonstrating how the company's products address common issues.



Figure 6. Social Media Marketing Plan for Hydroponics

The depicted mind map provides a concise overview of a social media marketing strategy for hydroponics. Central to the strategy is fostering engagement by showcasing authentic customer experiences. To amplify content, it utilizes share and tag tactics, as well as contests, across various platforms like Instagram, Facebook, and Twitter, each with its own unique methods such as stories, live sessions, and hashtags. The strategy highlights the importance of communicating the benefits of hydroponics to build trust and increase audience interaction. To gauge success and adapt accordingly, the strategy includes monitoring content performance and analyzing engagement metrics. Community interaction is enhanced through creative presentations of hydroponic setups, user-generated content, Q&A sessions, and polls. This holistic approach aims to increase brand visibility and cultivate a community around hydroponic products, leveraging the strengths of each social media platform to inspire and engage users.

**Email Marketing Campaigns for Hydroponic Products**

Email marketing campaigns tailored to different segments of their audience offered another avenue for success. By sending out educational series and monthly newsletters featuring DIY tips and exclusive offers, the company saw a 30% increase in open rates and a 20% increase in click-through rates, leading to a 10% boost in sales attributed to email. A feedback loop was integrated into their emails to foster a sense of community and tailor content to audience interests.



Figure 7. E-mail Marketing Campaign

The image outlines a monthly email marketing campaign for hydroponic products. The timeline is organized into color-coded blocks, each representing a specific focus area. The campaign starts with introductory emails, welcoming new subscribers to the brand. Subsequent months include educational emails offering insights on hydroponic systems and setup tips, as well as promotional emails featuring discounts and special offers. Regular newsletters provide company updates and industry news, while product highlights and customer testimonials build knowledge and trust. The content aligns with seasonal themes to remain relevant and incorporates feedback requests and surveys to engage customers actively. Re-engagement emails target less active subscribers to reignite their interest. This email marketing roadmap is critical for strategic content delivery, nurturing leads, and retaining customers by keeping them connected to the brand throughout the year.

**Analyzing Marketing Data for Hydroponic Products**

Lastly, the company utilized data analysis tools and conducted A/B testing on their website and email campaigns to optimize conversions. This strategic use of data led to the identification of the most effective marketing channels and content types, yielding a 25% improvement in marketing ROI and enhancing the customer journey. To share these insights, the company began issuing quarterly marketing insights reports to the community, highlighting successful strategies and areas for improvement. Each of these steps illustrates a comprehensive and evolving strategy towards digital marketing in the hydroponic sector, emphasizing the importance of adaptation and community engagement in driving success.

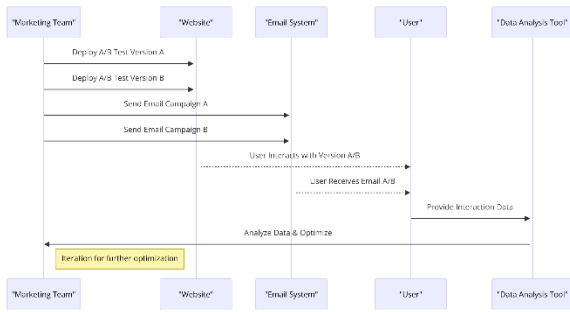


Figure 8. Analyzing Marketing Data for Hydroponic Products

The image represents a flowchart for an A/B testing procedure used in marketing campaigns. The marketing team starts the process by deploying two variations, A and B, which are distributed to users through an email system. As users interact with these versions, their engagement data is collected. This data is then fed into a data analysis tool, which evaluates the performance of each variant based on specific metrics. Based on the analysis results, the marketing team iterates on the campaign, applying refinements to optimize the content and strategy. This cyclical process of testing, feedback, and improvement is designed to incrementally enhance the effectiveness of the marketing efforts.

**Results and Deeper Enrichment From FGD**

After a few months of active discussions, several key insights and successful strategies would likely emerge:

1. **SEO:** High-quality, informative content around hydroponics, including how-to guides and benefits of hydroponic gardening, paired with strong backlinking strategies, has driven significant traffic increases for participants' websites.
2. **Social Media:** Platforms like Instagram and Pinterest are highly effective for hydroponic products due to their visual nature. User-generated content and regular engagement with followers have proven to be key strategies.
3. **Email Marketing:** Segmentation and personalization of email campaigns have led to higher open rates and conversions. Educational content mixed with product promotions keeps the audience engaged.
4. **Influencer Partnerships:** Collaborating with influencers in the gardening and sustainable living niches has significantly boosted brand visibility and sales for hydroponic products.
5. **Paid Advertising:** Google Ads and Facebook Ads are effective channels, with retargeting campaigns providing the highest ROI.

**Deeper Enrichment:**

1. **Workshops and Webinars:** Organizing online events with experts in digital marketing and hydroponics to provide deeper insights and training.

2. **Case Studies:** Developing detailed case studies of successful digital marketing campaigns within the community, highlighting strategies, implementation, and results.
3. **Market Research:** Conducting and sharing research on consumer trends in the hydroponics market and how digital marketing strategies can be aligned with these trends.

**V. CONCLUSION**

The results of this study indicate that optimising digital marketing transformation, particularly through social media platforms like Facebook, Instagram, TikTok, and YouTube, could be a successful approach for enhancing brand awareness of hydroponic products.

Compelling and enlightening educational material regarding hydroponic merchandise can effectively broaden the scope of advertising efforts and enhance brand recognition among urban individuals aged 25-45 who frequently engage with social media platforms. By leveraging the innovative and educational functionalities of these social media platforms, hydroponic product businesses are anticipated to expand their reach to a broader audience and establish a robust brand identity in the industry.

Furthermore, engaging in partnerships with relevant stakeholders, such as micro, small, and medium enterprises (MSMEs) and educational institutions, could effectively broaden the scope of promotional efforts and enhance the recognition of hydroponic products.

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