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Ambient Media in Agriculture: Cultivating a Smarter and Greener Future

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Abstract

Ambient Media is a type of advertising that we have grown accustomed to because it permeates nearly every area of our everyday lives. These commercials can be seen as we go about our everyday activities on shopping carts, public transportation, and on automobiles and trucks. The manifestation, morphing, intelligence, and experience elements are all incorporated into the idea of ambient media. Numerous factors, including its adaptability in reaching consumers at the points of sale and its nearly universally precise consumer targeting, have contributed to this style of marketing's rapid growth over the past few years. Media powered by ambient intelligence can also help focus mass attention in one place or engage with users directly as they are going about their daily business. Media powered by ambient intelligence can also help focus mass attention in one place or engage with users directly as they are going about their daily business. The messages that appear on the backs of parking receipts, on subway billboards, and on the sides of city buses are other examples of ambient media. Hot air balloons during festivals, blimps at sporting events, and more lately, commercial placement in television shows and motion pictures, all feature more overt displays.

Keywords: Ambient Media, Morphing, Adaptability, Manifestation, Intelligence

Introduction:

Ambient media has evolved as a distinctive and engrossing mode of communication in a time marked by constant connectedness and information overload (Dhanaraju *et al.*, 2021). It blends in perfectly with our environment, improving our daily experiences without requiring our complete focus. Ambient media marks a transition away from traditional, obtrusive advertising tactics

and towards more covert, immersive strategies that engage our senses in novel ways. Due to technological improvements and shifting consumer habits, the idea of ambient media has become more popular in recent years. It takes use of the notion that individuals are exposed to an increasing amount of information and advertising in their daily lives. By blending in with the surroundings rather than disrupting it, ambient media aims to cut

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through the noise. The interesting realm of ambient media is explored in this article, along with its description, examples, and effects on our daily life.

Defining Ambient Media

The term "ambient media" refers to any type of communication or content that easily integrates into our surroundings, frequently without our conscious knowledge. Ambient media evoke surprise with the aim of gaining the attention of consumers who are overexposed to traditional types of advertising (Hutter, K., & Hoffmann, S. 2014). Ambient media strives to blend into our surroundings and become less intrusive than traditional advertising, which disrupts our daily routines. People are made both a passive and active part of the communication process by utilising a variety of channels and technology to engage with them in unique ways.

Examples of Ambient Media

- 1. Digital billboards:** The shift of outdoor advertising from static billboards to dynamic digital displays is noteworthy. Digital billboards can modify their display in response to real-time data, such as traffic patterns or weather conditions. They become less invasive and more interesting due to their contextual significance.
- 2. Scent Marketing:** Visual or auditory inputs are not the only types of ambient media. Fragrances are used in scent

marketing to develop distinctive brand experiences. For instance, the aroma of freshly brewed coffee can trigger strong feelings and improve the whole customer experience when you enter a coffee shop.

- 3. Projection Mapping:** Using this technology, regular structures or objects can be transformed into dynamic, interactive displays. Oftentimes during concerts and festivals, artists and advertisers employ projection mapping to tell stories or deliver messages in a visually compelling way.

- 4. Interactive Urban Art:** Street art that reacts to audience involvement or the surrounding environment is becoming more and more well-liked. These technologically advanced art works use sensors to produce a constantly changing visual experience that blends in with the urban environment.

- 5. Smart Cities:** Using ambient technology to enhance urban living is the idea behind smart cities. For instance, intelligent lighting may change their brightness according to the amount of foot traffic, conserving energy while maintaining safety. This improves the urban environment while simultaneously conserving resources.

- 6. Audio branding:** Businesses are increasingly incorporating distinctive tunes

and sounds into their brand identities. These audio cues can be purposefully positioned in a variety of settings to boost brand recognition and elicit favourable associations.

Ambient Media in Agriculture

In agriculture, ambient media refers to the use of discrete, context-aware technologies to deliver real-time information, improve decision-making, and streamline agricultural processes. Contrary to conventional forms of media like print or digital advertising, ambient media in agriculture is made to blend in with the surrounding environment, providing helpful information and support while causing the least amount of disruption to farmers' daily activities.

Interventions of Ambient Media in Agriculture

- 1. Smart farming:** To monitor soil conditions, weather patterns, and crop health across farms, ambient media technologies, such as sensors and Internet of Things (IoT) devices, can be used. Farmers may utilise this data to inform their decisions about irrigation, fertilisation, and pest control because it is processed and presented in a user-friendly way.
- 2. Precision Agriculture:** The application of precision agriculture techniques is aided by ambient media. Precision planting,

harvesting, and resource allocation are made possible by GPS-guided tractors and drones that are fitted with cameras and sensors. This lessens the impact on the environment, decreases waste, and boosts yields.

- 3. Weather Alerts:** Farmers can prepare for unfavourable weather circumstances like storms or droughts by receiving real-time weather information through ambient media sources. This reduces the likelihood of crop damage and enables rapid adjustments to farming techniques.

- 4. Livestock Monitoring:** Ambient media also has advantages for managing livestock. The health and behaviour of animals can be monitored by sensors and wearable technology, which can notify farmers of potential problems like disease or distress. The welfare of animals and farm output are enhanced by this proactive approach.

- 5. Regular crop scouting:** It can be carried out by drones and autonomous vehicles that are fitted with cameras and sensors. They take pictures and data that can be examined to find early indications of illness or nutritional deficits, allowing for prompt intervention.

Benefits of Ambient Media in Agriculture

- 1. Greater Efficiency:** By providing real-time data and insights, ambient media

streamlines agricultural operations. This improves resource utilisation, cuts waste, and boosts farm productivity all around.

- 2. Sustainability:** Ambient media contributes to reducing the environmental impact of agriculture by enabling precision agriculture and data-driven decision-making. It enables the wise application of pesticides, fertilisers, and water, resulting in more environmentally friendly farming methods.
- 3. Cost-saving measures:** Through better resource management, farmers can reduce their operating expenses. Significant cost reductions may result from decreased input costs, higher yields, and a need for less labour.
- 4. Better Decision-Making:** Farmers may make timely, well-informed decisions because ambient media puts useful information at their fingertips. Better crop yields and profitability follow from this.
- 5. Resilience:** Farmers who have access to real-time weather and environmental data can adjust to changing conditions and become more resilient to climate-related difficulties.

Conclusion

Ambient media represents a paradigm shift in the way we communicate and interact with our surroundings. It improves our daily lives without being invasive because it easily

integrates into our surroundings. We may anticipate seeing even more imaginative and fascinating types of ambient media that improve our lives in unexpected ways as technology continues to advance. Ambient media encourages us to envision a world where communication is as natural and unobtrusive as breathing, whether through smell marketing, digital billboards, or interactive urban art. Ambient media is ushering in a new era of smart, data-driven agriculture. Through the seamless integration of technology into the farming environment, farmers are given the information and tools they need in order to make educated decisions, use resources as efficiently as possible, and increase productivity. Ambient media in agriculture is emerging as a possible way to address these complicated demands as the globe struggles to feed a growing population while maintaining the environment. It lays the way for an agricultural future that is greener, wiser, and more sustainable, which is advantageous to both farmers and the environment.

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