

## Innovation And Augmented Reality Applications in Food And Beverage Companies

### Duran Cankül

Eskişehir Osmangazi University  
Faculty of Tourism  
Eskişehir, Turkey  
[orcid.org/0000-0001-5067-6904](https://orcid.org/0000-0001-5067-6904)  
[durancankul@hotmail.com](mailto:durancankul@hotmail.com)

### Atakan Doğan

Eskişehir Osmangazi University  
Institute of Social Sciences  
Eskişehir, Turkey  
[orcid.org/0000-0002-6933-9681](https://orcid.org/0000-0002-6933-9681)  
[atakandogan95@hotmail.com](mailto:atakandogan95@hotmail.com)

### Batuhan Sönmez

Eskişehir Osmangazi University  
Institute of Social Sciences  
Eskişehir, Turkey  
[orcid.org/0000-0002-5156-6608](https://orcid.org/0000-0002-5156-6608)  
[bthnsnmz26@gmail.com](mailto:bthnsnmz26@gmail.com)

### Extended Summary

Due to the changing and evolving conditions, competition in the food and beverage sector, is increasing day by day. In the age of technology, consumers have become experience-oriented. The product and price that the food and beverage companies hold in front as a competition element, stays in back for consumers. This situation, lead to businesses create more individual, better quality and differentiated products for consumers. Due to the changing and evolving conditions, competition in the food and beverage sector, is increasing day by day. In the age of technology, consumers have become experience-oriented. The product and price that the food and beverage companies hold in front as a competition element, stays in back for consumers. This situation, lead to businesses create more individual, better quality and differentiated products for consumers. In this light, the concept of innovation is emerging for businesses.

The concept of innovation was first described by economist and policy scientist Joseph Schumpeter as the "driving force of development". According to Schumpeter, innovation, a product that a customer does not already know, or a new quality of an existing product, the introduction of new production methods and processes, the entering the new markets, the discovery of new markets for the supply of resources necessary for business activities, the reorganization and redesign of the enterprise

(Peters and Pickemaat, 2006). The most fundamental way in which a service business can provide sustainable competitive advantage, in particular, is based on differentiating its activities, processes and products through innovation (Hassan ve Diğ., 2013). One of the innovations called tomorrow's technology is the augmented reality applications. Augmented reality practices are one of the most unique ways to be chosen, differentiating from the competitors in the business.

Actually augmented reality, means the destruction of the walls between the real world and the virtual world. Augmented reality is a combination of virtual objects and real life. Augmented reality users, experience a visual illusion using interactivity with virtual objects to illustrate real-life space (Cirulis and Brigmanis, 2013). The general approach of augmented reality is to combine real and computer-generated digital information in such a way that the user can look at the physical real world at the same point of view (Höllerer and Feiner, 2004). Augmented reality is one of the most popular concepts of today. Businesses can invest to Augmented reality technologies for better market their products and create creative jobs.

Augmented reality applications in the field of literature are seen to be heavily used in the marketing and advertising sectors. Within the scope of food and beverage business, it mainly stands out in terms of creating a positive image in consumers' minds and product orientation. In this context, existing enterprises in the food and beverage industry gain the ability to achieve sustainable competitive advantage by raising their original values. In this direction, food and beverage businesses have the opportunity to use augmented reality in several areas. Through projector on the tables and with electronic devices in location services. This several type of usage will provide much powerful and quick communication and service between business and customer.

The research has conceptually addressed augmented reality applications foreseen for use in existing innovation technologies and food and beverage sector. With the use of technology that develops day by day, changing competitive environment businesses have led to different experiences with consumers through innovations. In this context, 'FoodInk' restaurant, which prepares its food and presentations with 3D printer and The 'Inamo' restaurant, which has been awarded numerous awards in London with interactive projection supported applications, has received positive feedback with the innovations it has made in customer surveys. It is envisaged that various added values can be created by integrating digital contents such as 3D pictures, video and audio, which are frequently heard in the name and used for various purposes by many different sectors, into the food and beverage businesses of the augmented reality technologies which are used to add to the real physical environment through holograms. The purposes and means of using augmented reality applications in food and beverage business in the light of literature survey and information obtained are determined. It is possible to make various proposals for the purposes and areas of use of augmented reality practices in food and beverage businesses in this framework. These are;

- Mobile augmented reality application, which will be implemented through QR codes in the context of printed menus vital for food and beverage management, may be effective in the menu level of the business and may affect its image positively. Mobile augmented reality applications, which are also used in menus, will give consumers more detailed information about the product content and the

consumer will be able to choose the right product for himself. Thus, in the mind of the consumer, the business may have a more positive positioning.

- With mobile augmented reality application created by food and beverage companies, business location can be made more accessible and accessible to consumers, supported by 3D visuals on maps. With this practice, the consumer can be directed to destinations that can attract interest in the business environment and the activities they can participate.
- With the help of the augmented reality applications to be used, consumers can be more fun with 3D animations and games when they wait for the product in preparation. Such an application may have a feature that will be a priority in selecting a business especially for families with children.

Augmented reality is a technology that has become popular in recent times, but it is not a fully integrated technology. New work is being done and improved on reality technologies that are increasing day by day. There are very few studies in food and beverage companies that examine augmented reality practices. It should be taken into consideration that augmented reality technologies are being developed every day and that they can be used more intensively in food and beverage businesses in the tourism sector as well as in every sector. In future work on the subject, it is thought that it would be useful to conduct studies that measure the effects of augmented reality technologies on consumer experiences and the impact on catering businesses.