Using Drones for Virtual Tourism

Abstract  In the current situation and given the Covid-19 pandemic, which significantly affects the tourism industry, and the rising travel costs, virtual tourism can be the best strategy to overcome these challenges. The utilization of drones in virtual tourism has a great potential to become one of the best alternative models in tourism. Drones have many applications in the tourism industry, including online/offline filming of natural, historical, and recreational places. Virtual tourism is a novel pattern aiming to reduce the limits by recreating the real recreation places on computers and virtual networks and can be considered an alternative for physical tourism. In this operational research, a new conceptual model in the virtual tourism approach has been presented, called dynamic virtual tourism. In this model, modern technologies, such as drones, are introduced and utilized to provide a completely alive way to visit tourist places, where accessing them may be very hard and costly. In a case study, a drone (MAVIC PRO) was used to fly over Ibrahim Khan Castel, Najafabad, Isfahan, and the live video was sent to the local stations. Then, the live video with a realistic view was accessed by the virtual tourists, who were over a hundred kilometers far away from the target, on the internet platform with the help of virtual reality cameras. In this method, the drones are deployed in one of the five local stations located near the castle, and they were flying between the stations smartly and without human interventions. The tourists who were far away from the castle could only control the motion path between stations, displacement speed, and the “virtual eye.”

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