# A multiple criteria decision-making approach for increasing the preparedness level of sales departments against COVID-19 and future pandemics: A real-world case

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## Abstract

The impact of the pandemic and the lockdown has been more devastating than expected on the world economy. It is essential to formulate strategies in real-time. In this research, a multicriteria decision-making model for increasing the preparedness level of sales departments when facing COVID-19 waves and future pandemics is proposed. The model is comprised of 8 criteria, 29 sub-criteria, and 7 alternatives. The study is based on the integration of the AHP and TOPSIS techniques. AHP is used for calculating the criteria and sub-criteria weights. While, TOPSIS is used for calculating the preparedness level, ranking the companies, and identifying the weaknesses that should be addressed for increasing their effectiveness in the current market scenario. The model is developed with the aid of an experts' group from the electrical appliance sector and studies from the reported literature. This application is completely novel in the literature and has been applied in the wild with remarkable companies in Colombia. A case study in the electrical appliance sector is presented as a pilot study but it should be noted that the methodology is flexible and scalable in any scenario.

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