Abstract This paper examines the forecasting and modelling of consumer demand for organic agricultural products in the context of sustainable development and digital marketing. The study is based on an online survey of 423 consumers in Ukraine and Slovakia and applies factor analysis, regression modelling, and scenario forecasting. The results indicate that demand formation is driven by a combination of economic, social, and behavioural factors, with income level, price sensitivity, trust in certification, and awareness of organic benefits playing a central role. The findings further confirm that digital marketing tools significantly influence purchasing decisions by enhancing information transparency and strengthening consumer trust. From a theoretical perspective, the study contributes to the literature by integrating economic determinants of demand with digital marketing and sustainability related factors within a unified analytical framework. From a managerial perspective, the results provide practical guidance for organic producers and marketers regarding the communication of environmental value and the effective use of digital channels to stimulate demand and build long-term consumer loyalty. The novelty of the study lies in the combined application of demand modelling and digital marketing analysis within a comparative cross-country context, offering an integrated approach to forecasting organic product demand and supporting the development of sustainable marketing strategies.