

Effects of weather on UK e-commerce

ADOBE DIGITAL INSIGHTS X THE WEATHER COMPANY

The Adobe Digital Economy Index (DEI) offers the **most comprehensive set of insights** of it's kind, based on analysis via <u>Adobe Analytics</u> that covers tens-of-billions of visits to retail sites from UK consumers, 100 million SKUs, and 18 product categories, to provide the most comprehensive view of the UK digital economy. Adobe Analytics is part of Adobe Experience Cloud, relied upon by major retailers to deliver, measure, and personalise shopping experiences online.

Analysis is significantly **more in-depth and accurate** compared to survey-based reports, because only Adobe has access to this volume of real-time, transactional consumer data. It is aggregated and anonymized, to provide insights on consumer spending, online prices and 18 product categories.

This specific report focuses on weather's impact on ecommerce behaviors, leveraging weather data from the **world's most accurate forecaster overall***, The Weather Company, an IBM business. The weather data in this report spans two years, 3 unique weather conditions (rain, snow and wind) and is UK only.

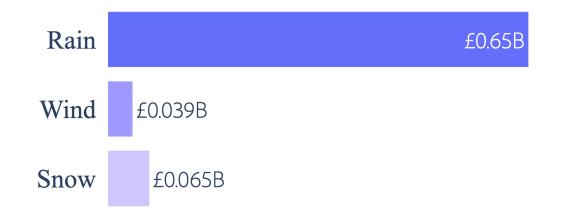
*Source: ForecastWatch, Global and Regional Weather Forecast Accuracy Overview, 2017-2020, https://www.forecastwatch.com/AccuracyOverview2017-2020, commissioned by IBM.

Weather will add a Cyber Monday worth of spend in 2023

We project **£754 million extra** to be spent online due to weather effects this year, which is more than the £732 million spent on Cyber Monday in 2022.

Rain alone will bring £650 million.

Rain brings the most influence on spend. Both snow (which is rare) and wind contribute little to the overall spend.



Projected 2023 online spend from each weather phenomenon



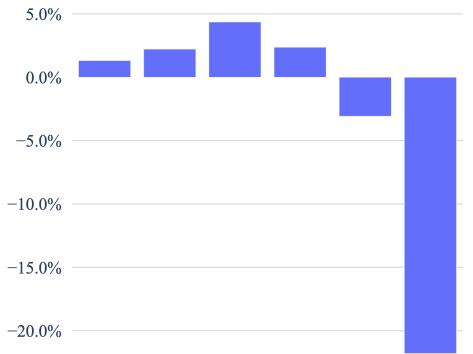
Moderate rain pushes consumers inside, increasing online shopping activity

Consumers are pushed indoors by rainfall and increase their online spending when the rain is between 1-4 cm in a day.

The spend boost from rainfall peaks at 4.4%.

UK consumers are undeterred by light rain. On days with less than 1cm of rain, online spend is only boosted by 1.3%. Similarly, 1-2 cm of rain pushes spend up only by 2.2%.

After 4 cm of rain in a day, spend can be negatively impacted by over -20%.



Online spend increase by amount of rain in a 24h period

0.1 - 1.0 1.0 - 2.0 2.0 - 3.0 3.0 - 4.0 4.0 - 5.0 5.0 - 6.0

24h precipitation (cm)



Higher weather impact on weekends, low influence on weekdays

The influence of weather on e-commerce is strongest during the weekend.

Weekend rain influences spend dramatically more than weekday rain which is often between 1-4% influence.

Weekend influence can increase spend by up to 12%.

14% weekday weekend 12% 10% 8% 6% 4% 2% 0% 18.0000 - 20.00000 6.0mm ~ 8.0mm 10.0mm - 12.0mm 2.00000 ~ 4.00000 14.0mm - 16.0mm

Precipitation (mm)

Online spend increase by amount of rain in a 24h period



Snow impacts consumers regardless of region

Cities in the UK with low amounts of annual snow are more influenced by a dusting of snow than cities that receive more than 10 cm of snow per year.

Consumers in those cities will spend upwards of 17% more during a snow event.

Snowfall encourages consumers to go online regardless of annual level of snowfall.

Even cities that receive regular snow each year will spend about 6% more during a snow event.

Effect of 1-2cm of snow by amount of yearly snow in a city

