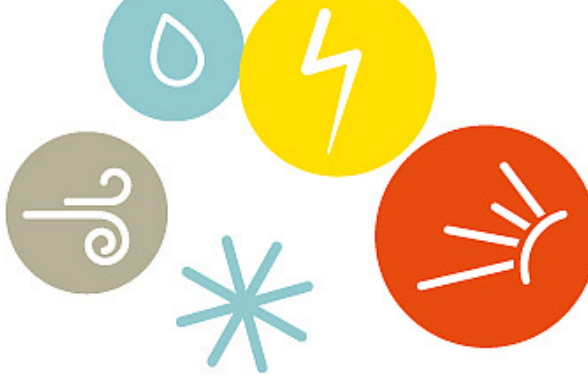
The Complete Guide to
Weather Based Marketing

Weather Unlocked



Context is King

Marketing is no longer about broadcasting messages to an audience.

The most successful campaigns are ones that engage individuals with customized and contextually relevant experiences to inform their decision making process.

Understanding who a person is, is only the first step. The challenge is to understand where they are, what they are doing, and what they are likely to do next.

By leveraging real-time information about an individual and their context, more relevant and impactful content can be delivered at the precise moment when it offers the most value.

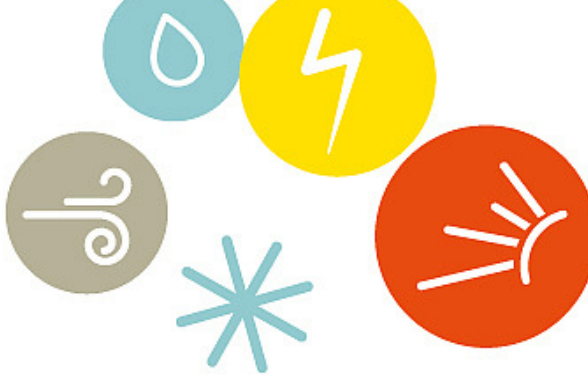
Why Weather Matters

"Weather affects where we go, what we buy, and how we feel"

Weather is the most primal and universal factor in consumer decision-making. It affects where we go, what we wear, what we eat, what we buy – and crucially, how we feel. This makes weather data the perfect tool for contextual targeting. It is virtually the only real-time data-set available to marketers which provides an insight into a consumer's mood, desires, and purchase intent at any given moment.

By utilizing weather targeting to deliver customized creative, marketers can drive higher campaign returns through more meaningful consumer interactions.

- Weather is the 2nd biggest influence on consumer behavior after the state of the economy
- Weather affects around $3 trillion worth of business in the private sector alone in the US.
- 70% of British people check the weather forecast at least once every day



Weather-Driven Demand

"A temperature shift of just one degree can significantly impact the sales of numerous products"

Weather is a fundamental driver of consumer spending habits. However, many of us don't realize just how pervasive weather's impact on the sales of goods and services really is.

Forget about umbrellas and ice cream - the relationship between weather and product demand spans across nearly every industry including:

- Food & Drinks
- Clothing & Fashion
- Travel
- Hospitality
- Leisure & Entertainment
- Health & Beauty
- Pharmaceuticals
- Home & Garden
- Automotive
- Energy
- Insurance
- Electronics

The chart on the following page illustrates how a year-on-year rise or fall in temperature by just one degree Fahrenheit can have significant knock-on effects on the sales of a wide range of products in the USA - Triggering a 24% sales increase in air conditioners, 2% lift in soft drinks, and 4% rise in infant apparel purchases. A greater variation in temperature can produce even more pronounced effects.

Weather-Driven Demand

"weather-driven demand varies according to locality, seasonality, and deviation from seasonal norms"

Weekly increase in sales when temperature is 1˚ F hotter

- 2% soft drinks
- 24% air conditioners
- 11% suncare products
- 4% Infant Apparel
- 13% hedge trimmers

Weekly increase in sales when temperature is 1˚ F colder

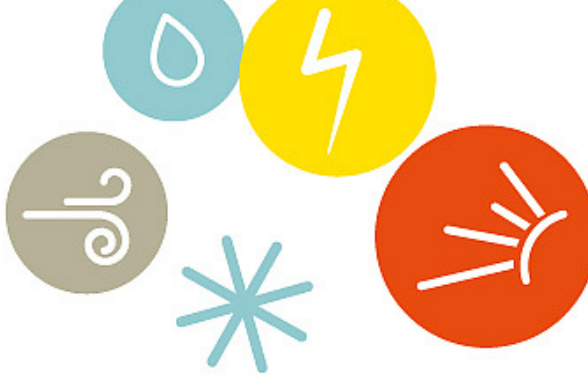
- 2% Soup
- 15% Portable heater
- 25% Mousetraps
- 2.5% Softline goods
- + 5000 units lipcare

Source: 'Profit of One Degree' by wxtrends.com

The demand for myriad products and services (even ostensibly weather-neutral ones) is largely shaped by weather conditions. However, these correlations vary according to locality, seasonality, and deviation from seasonal norms.

For example an 80˚ F day in Seattle might prompt people to shop for air conditioners, but 80˚ F in San Diego may cause locals to search for sweatshirts.

Likewise, a 60˚ F spell in winter will promote different consumption patterns to a 60˚ F spell occurring during the summer, in the same location.



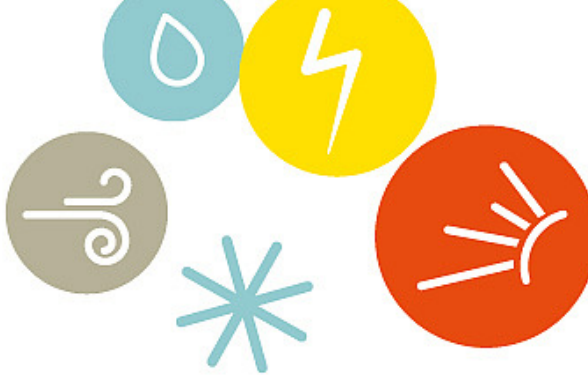
Weather-Driven Demand

"The importance of running a weather analysis on product sales data cannot be overstated"

- When Sainsbury's examined the link between weather and sales for a selection of product categories in the UK, they found that just a few degrees rise in temperatures in early spring will produce a 200% lift in BBQ sales.

- However, in Scotland, a temperature of 20˚ C or 68˚ F will prompt BBQ sales to triple, whilst in London, the temperature has to be exactly 24˚ C or 75˚ F to induce the same result.

The above example demonstrates the importance of performing an accurate analysis on weather-driven product trends. By examining POS data against normalized historical data, and factoring in location, seasonal averages, methods of purchase and other variables – accurate and nuanced correlations between weather and product sales can be established.



How Weather Affects Mood

"Weather data can be used by marketers to tap into the consumer's psyche at any given moment"

Weather targeting is not just about tying a particular product to the weather (although this is a big part of it). Weather data can also be used by marketers to tap into the consumer's psyche at any given moment in time.

Understanding the customer's mindframe, and tailoring marketing messages accordingly, will result in a much more potent campaign strategy. A message that delivers timely and relevant information, in a tone that resonates with the consumer's mood, will elicit far greater purchase intent.

- Exposure to sunlight has been proven to increase our willingness to spend money on products/services by up to 56%.

Products	No Sunlight (Willingness to pay in $)	After Sunlight (Willingness to pay in $)
Green tea	3.35	4.61
Orange juice	2.90	3.51
Gym membership	32.89	41.67
Airline Ticket	400.00	517.98
Newspaper subscription	11.41	17.79

Source: 'The effect of weather on consumer spending' in Journal of Retailing and Consumer Services 17 (2010)

How Weather Affects Mood

"Bad weather can make consumers respond better to negative messaging in adverts"

- Negative moods caused by bad weather can make consumers respond better to negative messaging e.g. fear-based ads. This hard-hitting ad by the The American Dental Association drove significantly more sales on dark, gloomy days than a positive message about healthier teeth and whiter smiles.

- Cold, wet, and windy weather forces people to stay indoors, and triggers an increased use of coupons and gift cards for food delivery services such as pizza.

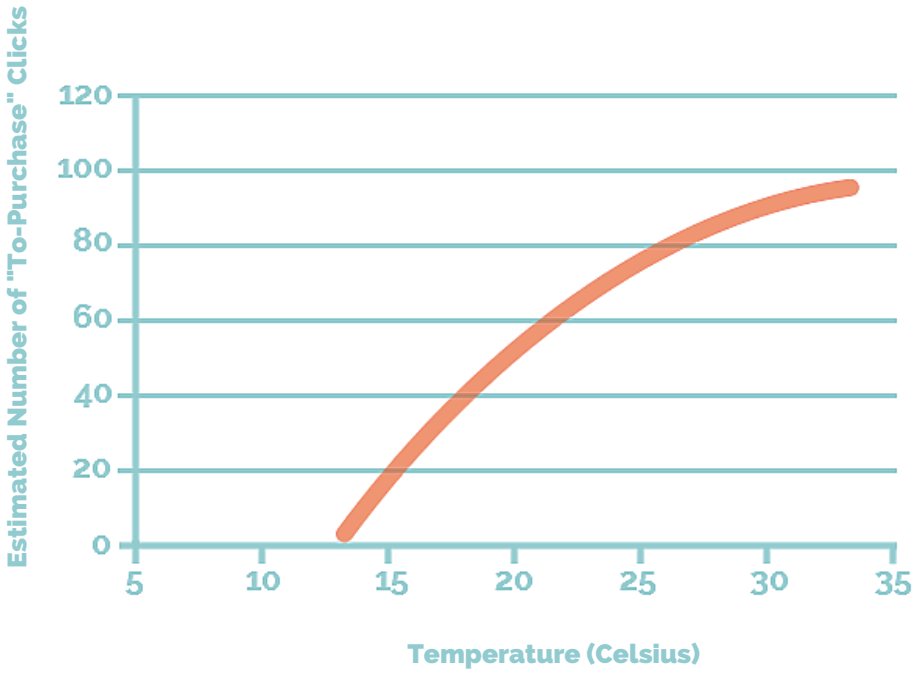
- An advert is likely to have a greater influence if the consumer is in warm surroundings (but not too hot) with optimum ambient temperature being between 75-77˚ F, or 24-25˚ C.

How Weather Affects Mood

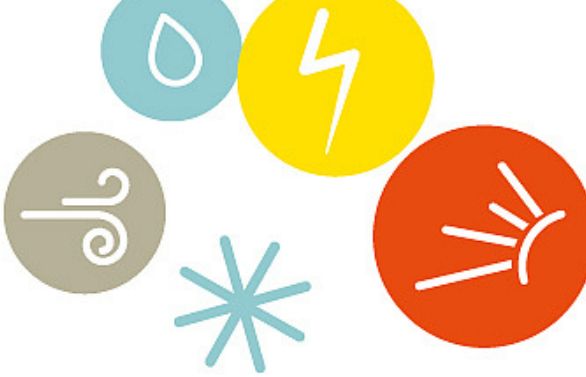
"Warm surroundings can trigger a rise in purchase intent"

- A large online shopping portal found that for many 'weather-neutral' products there's a direct correlation between ambient temperature and purchase intent with an optimal point of around 30-35˚ C.

Relationship Between Temperature and Purchase Intention ("To-purchase" Clicks)



Source: 'The temperature premium: Warm temperatures increase product valuation' in Journal of Consumer Psychology (2013)



Weather Triggered Marketing

"An advertising or marketing platform can enhance its offering with a weather targeting capability through the integration of a 3rd party API such as WeatherTrigger API"

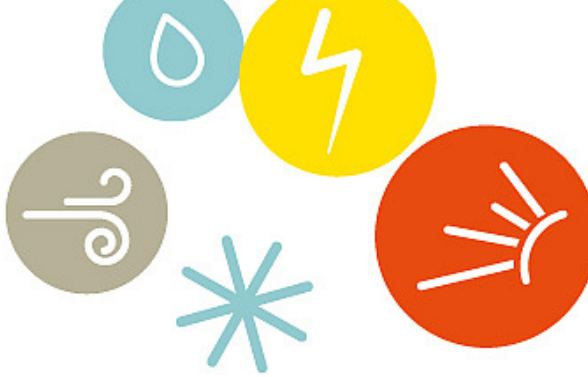
For brands and agencies, weather data is a powerful tool to legitimize communications and contextualize ads. This is being recognized across the entire digital advertising ecosystem – with a number of advertising technologies rolling out weather targeting capabilities as part of their offering.

A weather targeting capability can be added to an advertising technology or marketing platform through the integration of a robust 3rd party API such as WeatherTrigger API.

WeatherTrigger API seamlessly integrates into an Ad Exchange, Demand Side Platform (DSP), Marketing Automation technology, Email Marketing Platform (ESP), or mobile marketing application to equip it with a powerful weather targeting capacity.

Likewise, WeatherTrigger API can be utilized by an e-Commerce portal, deal website, or a real-time website optimization tool to sync promotions and offers with local weather events.

Listed below are just a few examples of weather-triggered campaigns that have produced considerable performance uplift.



Weather Triggered Marketing

"A weather targeted PPC campaign increased sales revenue by nearly 600% and conversion rate of browsers to buyers by 103%"

- Stella Cidre reported **65.6% increase in YOY** sales during the period they ran their weather-responsive DOOH campaign.
- Molson Coors **increased CTR by 89%** via their weather-triggered ad campaign on social media.
- Neutrogena Beach Defence Sunscreen used in-app ads which were activated by sun and UV levels, **increasing purchase intent by 43%** and **product awareness from zero to 63%**.
- Fashion retailer La Redoute saw **34% traffic uplift** and **17% sales increase** generated by a weather-triggered DOOH signage campaign.
- Bravissimo's weather-triggered PPC ad campaign increased PPC-driven sales revenue for their swimwear range by **nearly 600%** during the 3-month campaign. Conversion rate of browsers to buyers **increased by 103%.**
- Burton menswear used weather-activated dynamic website promotions to generate **11.6% uplift in conversions.**
- Pure360 reported **500% increase in email open rates** for campaigns relating to domestic holidays during good weather. **Click through rate rose from 12% to 27%.**
- Pantene's weather targeted display ads produced a **28% sales increase** as well as **600,000+ social impressions**.
- Liptons ran a weather-sensitive campaign across Facebook mobile. They reached **6.9 million people**, and achieved a spectacular **12.8% video view rate** - which equated to just £0.06 cost per view.

Leveraging The Past, Present and Future

"Past, current, and forecast weather all influence our purchase intentions"

As consumers our attitudes and behavior towards brands, products and services is strongly guided by weather. But it's not just the current weather that influences us. The weather we have previously experienced, what we're currently experiencing, and what we expect to experience will influence us as well. This is a critical point to take into consideration when planning a weather-responsive marketing campaign.

Past (Historical Weather)

Past weather data is often wrongly overlooked as a targeting criteria. However, past weather data can offer real value to marketers. The weather a consumer has recently been exposed to will shape their purchase intention.

- Sears Automotive knows that 5-year old car batteries die after three consecutive days of sub-zero temperatures. They interrogate 3 days of historical data, and activate ads on the fourth day after 3 days of freezing temperatures.

Leveraging the Past, Present and Future

"Current weather has the most immediate and salient influence on a consumer's mood and purchase behavior"

Current (Live Weather)

Current weather data is the most widely used data-set for weather targeted ads. The weather that an individual is experiencing at any given moment has the most immediate and salient influence on their mood and purchase behavior

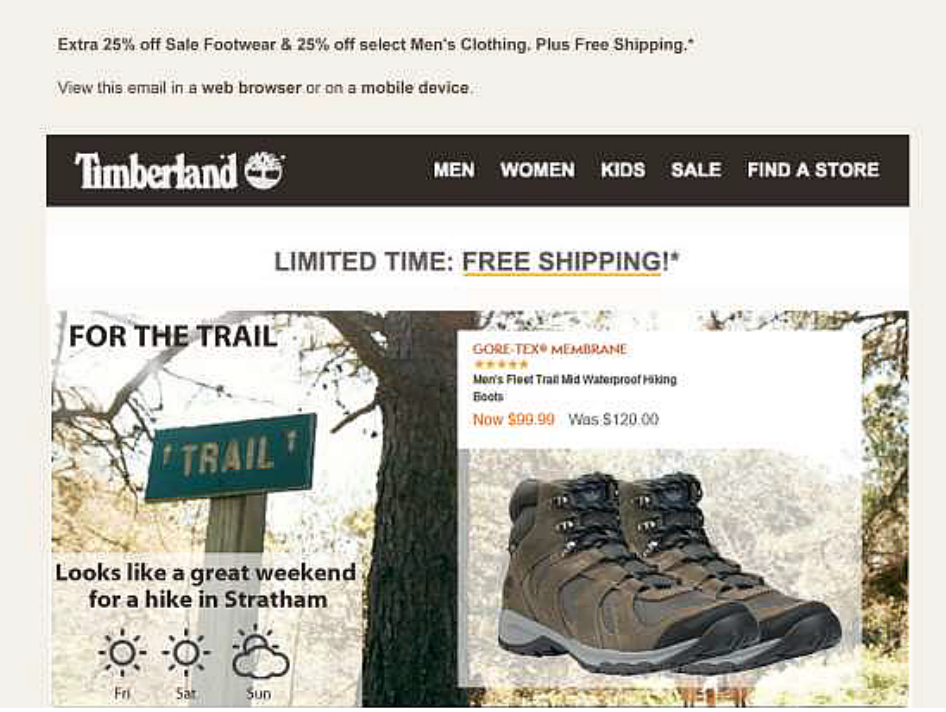
- Bravissimo increased their PPC driven sales revenue by 600% by displaying weather-sensitive ads based on current weather conditions.

Leveraging the Past, Present and Future

"Weather content is an excellent way to legitimize comms with customers whilst promoting your product or service"

Future (Forecast Weather)

Forecasts offers an excellent way to legitimize communications with customers whilst providing a value-add (personalized forecast information or weather warning) which affirms the consumer's need for the product or service.



- Timberland send weather-triggered emails advising subscribers that good weather is forecast over the next few days, with the tagline 'looks like a great weekend for a hike in [user's location], and a promotional discount on hiking boots.

Weather-Based Marketing Strategies

"There are 3 main strategies to consider when devising a weather responsive campaign - targeting by weather signal, contextualizing, and value-adding"

When devising a weather-responsive campaign, there are three main strategies to consider. All three embrace the fact the weather experienced by consumers is a key determining factor in their receptiveness to an advert, willingness to act, and motivation to purchase.

Targeting by Weather Signal

Using past, current or forecast weather signals to activate a creative. The consumer is typically unaware that weather is being used for targeting.

Example - displaying an ad for a cold drink when temperature reaches above a certain threshold.

- This digital OOH advert for Stella Cidre appears only when temperatures rise by 2˚ C above the national average, and there is no rain.

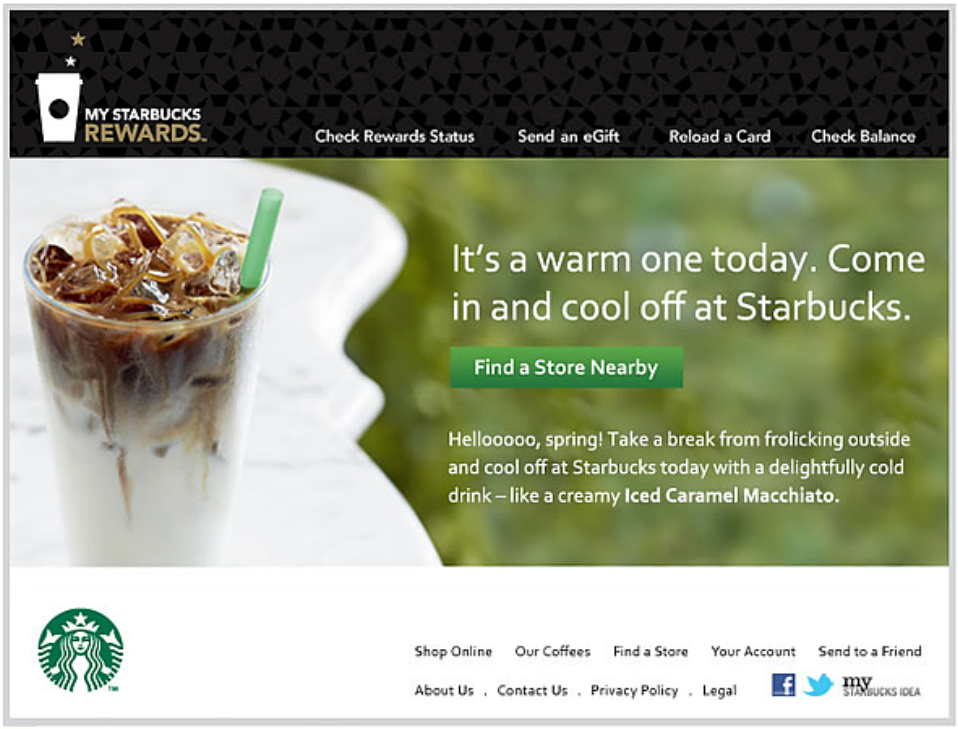
Weather-Based Marketing Strategies

"Showing an appreciation of your customer's context in your messaging will increase direct response."

Targeting by Signal + Contextualizing

Targeting based on past, current, or forecast weather signals and aligning the marketing message with the weather conditions to show appreciation of context and encourage the desired response.

Example - "It's cold, grab a coffee", or "Miserable isn't it? Imagine your perfect holiday, Book it now!"



- Starbucks send weather-triggered email promos which reference current weather conditions in the messaging.

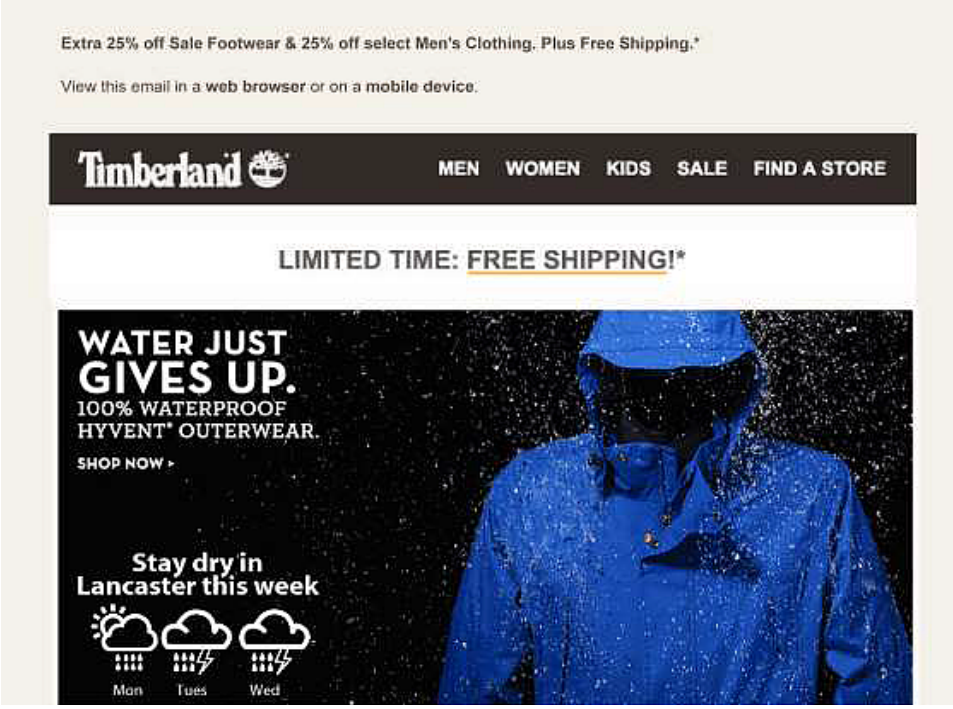
Weather-Based Marketing Strategies

"Timberland send weather-triggered emails which contain real-time personalized forecasts along with product suggestions"

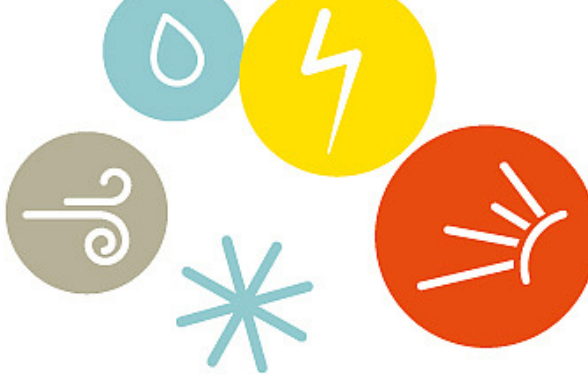
Targeting by Signal + Value Adding

This approach provides a reason for the communication along with dynamic, customized creative displaying value-added content. The content justifies the consumer's need for the product or service.

Example - "It's going to be wet, buy that raincoat now!" + [customized forecast]



- Timberland send email promos for the weatherproof range triggered by a 3-day forecast for heavy rain. They display a personalized forecast along with product suggestions.



Weather Analytics for Campaign Insights

"The same database of consumers will respond to an ad differently on different devices at different times "

Having highlighted just how weather-sensitive many products are, it is important that brands and marketers understand these precise correlations when devising a weather-triggered marketing campaign. Weather analytics enables you to measure weather-driven product trend variance, average order value (AOV), and revenue, whilst also taking into account seasonality, and thresholds for different locations.

These insights allow brands to identify which combinations of conditions, in which localities, generate peaks in demand for their products.

However, knowing when products sell and knowing when to market those products are two separate things. For example, the same database of people will respond to an ad differently on different devices at different times.

Marketers will benefit from understanding which consumer-brand touchpoints work best for different weather-based campaigns. For example – a campaign for a weather-proof jacket triggered by wet and windy weather might be best suited to desktop display advertising – as the consumer is likely to be indoors. Conversely, an ad for a soft drink triggered by hot and sunny weather may be most effectively delivered via mobile or DOOH channels – when the consumer is on the move.

Weather Analytics for Campaign Insights

"Running weather analytics on campaign data should be a critical component of the marketing strategy"

The timing of the ad is also a critical consideration. For some products, weather might 'prime' a consumer to be more receptive to a marketing message, meaning that ads should be targeted to those individuals retroactively after the weather event has occurred. For other products, ads may be most effective several days preceding the weather event.

For these reasons, running weather analytics on campaign data (not just sales data) should be a critical component of the marketing strategy.

- The crafts retailer Michaels traditionally increased their advertising on rainy days, when craft projects are a popular past-time. However, after running campaign analytics, they changed their strategy, advertising not on actual rainy days, but 3 days ahead of a rainy forecast. This tactic resulted in a significant sales lift.

Weather Analytics for Campaign Insights

"The process of measuring, optimizing, and iterating campaigns using weather analytics will result in consistently improved outcomes"

Weather analytics for campaign insights provides marketers the foundation for a strategy that delivers a relevant message to the right person, in the right location, at the right time, via the right channel - thereby maximizing returns.

Our actionable insights inform marketers when their optimum windows of opportunity are to maximize ad impact and elevate sales. This process of measuring, optimizing, and iterating campaigns through the use of weather analytics will result in consistently improved outcomes.

Analyze

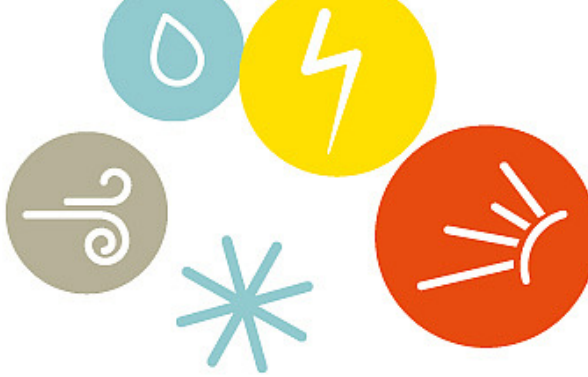
Analyze past sales or campaign data against normalized historical weather data to determine weather-driven trends and 'trigger' conditions.

Apply

Apply the insights gained from the analysis stage to create a weather responsive campaign based on the trigger conditions.

Execute

Execute the weather-triggered campaign. Return to the analysis stage in order to measure campaign KPIs, and continue to optimize campaign by refining creative and Calls to Action (CTA).



Conclusion

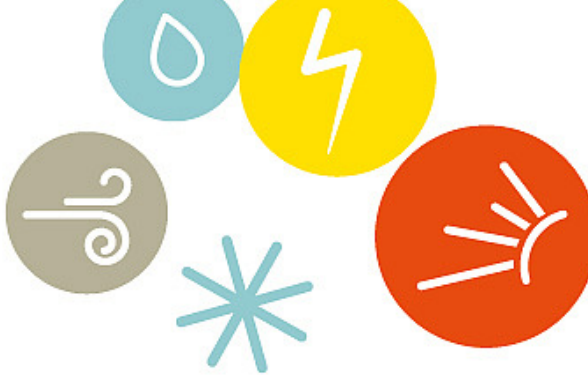
"Brands using weather targeted advertising are reporting outstanding results - both in the form of galvanized sales and increased mindshare"

By leveraging real time weather data, marketers can target consumers more effectively at the precise moment when they are most receptive to the marketing message. Marketers can also use weather data as an insight into the mood and attitude of an individual at any given moment.

Utilizing weather targeting to deliver timely and relevant messages, benefits all involved parties: Consumers receive more valuable and engaging information – which cuts through potential ad fatigue. For the media buyers there are fewer wasted impressions, as ads are only served when conditions are right for purchase - stretching their client's advertising dollar further. For the brands, sales are elevated because the ads are precisely timed and perfectly pitched to deliver maximum returns. Weather targeting is a win-win for everyone.

Many brands are already using weather data in intelligent ways to legitimize communications and contextualize ads. They are reporting outstanding results - both in the form of galvanized sales and increased mindshare.

Of course, some products and services will benefit more than others from weather responsive marketing - not all are directly affected by weather. However, a staggering scope of products and services across a gamut of industries are weather-sensitive – and these will unquestionably see enhanced ad performance and elevated sales through leveraging weather-targeting within their marketing approach.



About Weather Unlocked

Weather Unlocked leverage in-house expertise and highest quality weather data to create pioneering weather API services for the advertising, marketing and eCommerce industries.

Our flagship service is WeatherTrigger API - a platform-agnostic weather-targeting solution for digital advertising technologies. WeatherTrigger integrates into an advertising or marketing platform to enable audience segment-targeting by local weather conditions, and the deployment of real-time weather-driven ads and promotions.

Weather Unlocked also provides an advanced weather analytics service to marketers, brands, and merchandisers. Our analytics service measures the impact that weather has on the sales of a product, or the performance of a marketing campaign.

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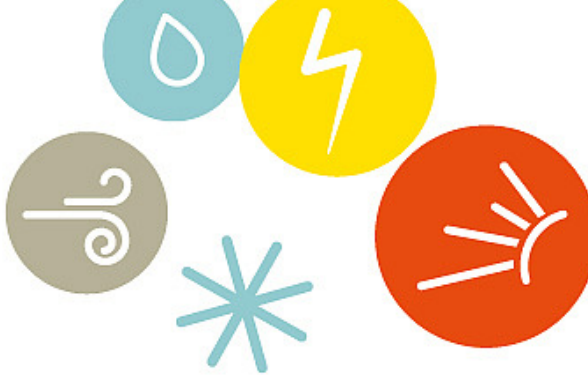

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