Call Center 2018 Declines

There has been softness in consumer calls to our DTC Call Center team after visiting our website. There was a small Year over Year (YOY) decline in January 2018 vs January 2017 but we’ve seen a steady downward trend in both YOY call change and Month over Month (MOM) call change throughout the year. The DTC team would like to know whether this is due to macro trends (Someone less likely to call to buy a mattress in 2018, national advertising, etc) or if it could be due to something more micro (type of traffic coming to the website, something changed on site that would decrease calls).

**For Dan Fines Team: Does this need to be a predictive model or just a view of the relationship between features for this snapshot in time?**

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# Initial Questions to Explore

* Are consumers more driven to shopping (different from buying) on online channels vs on the phone in 2018?
* Is this systemic decline or does it come from a certain few markets?
* Does call center volume have a relationship with various marketing channels?
* Are there certain events on the website that share a relationship with volume of call center data?
* Are consumers heading to competitive websites after visiting Tempurpedic.com and does this reduce calls?
* Does source of traffic correlate with # of phone calls (do direct/organic search users call more?)

# Data sources to be used

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| * Incontact Call Center Calls   + Initial calls   + User 2nd calls ( > 1 day later )   + Calls by area code * Marketing Data   + Online ad spend by website/medium (Video, carousel, shopping, brand, direct)   + Offline ad spend by channel   + Retailer advertising metrics * Hitwise Competitive Website Data   + Upstream/downstream from tempurpedic * Time series   + Daily (activities are closer to the time of phone calls, relationships will be tightest)   + Weekly   + Monthly | * GA Website Data   + Sessions   + Pageviews per session   + Session Duration   + Mattress Unique Page views   + Pillow Unique Page views   + Retail locator unique page views   + Add to cart events   + Cart views   + Size changes on product pages   + Unique Users in in 2017 vs 2018   + Source of visits (Organic Search/Direct vs paid sources) * ZS Survey data   + Online vs offline shopping preferences   + Consumer journey steps and change over time |

# Nice to Have Data If Existed

* User data that connects website visits to phone call (classification algorithms to solve)
* Dates different features on website goes live. Do we track dates features change on website?
* Mattress Distribution/Retailer distribution (Tempur showrooms by month, TSID/TSIO showrooms by month)
* Outcome of DTC phone call (did they buy?)

# Initial Data Exploration