

Benford's Law and Customer Retention

Here's an interesting perspective that could potentially help you be much more confident and have you producing results with amazing accuracy. Applying what's known as Benford's Law to understanding customer retention, not only tells you where you should be spending your marketing dollars, it also tells you when.

Benford's Law allows us to make some bold predictions with a pretty high level of accuracy.
Size Matters

Benford's Law basically says that, in any number, there is a 30% probability that the number will start with the number "1". This is nearly five times as much as the number starting with a "7".

So if you had all the numbers from 0 and 99 in a bag and were to randomly take one out, there is a 30% probability that the number will be between 10 and 20. And, there is only a 6% probability that it would be between 70 and 80.

This is likely to sound counterintuitive. Surely every number is equally likely to be picked? Not so, apparently.

Benford's Law was proposed in 1938 by Frank Bedford. It was also initially suggested in 1881 by Simon Newcombe (an astronomer and mathematician) and it wasn't until 1988 when a mathematician called Ted Hill offered a proof to the law and created a tool that is used to identify tax fraud.

Age Matters

The other thing that Benford's Law says is that the larger the magnitude, the longer it takes for the leftmost digit to switch over to the next consecutive one. I.e., it takes longer for the leftmost digit of a 5-digit number to shift from a "1" to a "2" than it does for a 3-digit number.

Benford's Law can be applied to durations with some powerful consequences.

Firstly, the law tells us that shorter durations are much more probable than longer ones. Secondly, it tells us that the longer the duration, the more likely it is to get even longer.

Benford's Law & Customer Relationships

The duration of a customer's relationship with a company fits nicely with the criteria for numbers which obey the Law. And when we explore what happens, we get some really interesting results.

If you could tell which of your customers were going to remain customers and which ones were likely to be a one-and-only sale, would that make a difference to how you perceived them?

- The first is that the customer attrition rate is effectively already predetermined. Somewhere around 30% of your

customers are more likely to be around for only a short time.

- The second major takeaway point from applying Benford's Law is that the longer a person remains a customer, the more likely they'll continue to remain a customer. Or put another way, the average customer lifetime for long-term customers, grows for long-term customers.

There's something interesting that comes out of all of this. And that's the question..."If you could tell which of your customers were going to remain customers and which ones were likely to be a one-and-only sale, would that make a difference to how you perceived them?"

And, if you could know things about them that let you distinguish your long-term customers from your short-term ones, in what way would you adjust the investment you make in retaining them?