https://www.furnituretoday.com/bedding-manufacturers/sleep-number-develops-data-driven-tech nology-to-offer-consumers-sleep-tips/

Sleep Number develops data-driven technology to offer consumers sleep tips

This article summarizes the new features added to Sleep Number beds, or rather to the app that collects data sent from beds. The new features analyze data such as heart rate and breath rate to deliver three new pieces of information -- duration, efficiency, and timing -- all in a color-coded and interactive dashboard via their mobile app. The company "has captured and tracked more than 11 billion hours of sleep data gathered from more than 1.4 billion sleep sessions."

I just hit my one-year mark as a Sleep Number bed owner. As I see it, the primary benefit of a Sleep Number stems from the ability to customize the firmness of the bed not just overall, but independently on each half. The added bonus of the embedded technology is their dashboard of sleep analysis. For the past year, I've occasionally glanced at my sleep session dashboard, which shows bed entry, time to fall asleep, restful/restless sleep, bed exits, and when my session ended. All of it is quantified in a single SleepIQ score.

My biggest concern with both the SleepIQ score as well as the new information such as "efficiency" is the various factors that are not accounted for which often skew the data. For example, I often sit up in bed and watch TV before going to sleep. The app allows me to manually adjust the start/end times to account for such activities. I did this for the first few weeks in an attempt to get a more accurate SleepIQ score, but eventually it was too cumbersome to be sustainable. Or sometimes my kids come snuggle in the bed, and I can feel the bed automatically adjust (dubbed "responsive air"), but how is that affecting my sleep data?

My father-in-law (who referred us) loves looking at his dashboard of SleepIQ scores over time. On the other end of the spectrum, my wife essentially never opens the app; she just wants the bed to adjust to her "sleep number" when she requests it. I'm somewhere in the middle: I find it interesting to make mental correlations between factors such as exercise, stress, food/alcohol intake, etc and objective sleep metrics such as heart rate and breath rate. Overall, I'm happy with my Sleep Number bed. But my concern is how this data is being analyzed and harvested. How exactly is the algorithm calculating my score or efficiency? Is the company selling the data from 11 billion hours of sleep data? (I cross-referenced this article, which leaves the question in the air). The lack of transparency is a bit concerning.