

# More than Words

## Revealing unconscious emotions by means of physiological measurement

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There are those moments when traditional surveys simply hit the brick wall. For example, when the consumer is affected by something beyond words or that he does not want to put into words. Or when he cannot recall the feeling anymore, because the situation occurred a while ago. **Jessica Schomberg** and **Michael Koch** explain how one can get on the track of the consumers' underlying sentiments by means of implicit measurements.

Everybody is talking about Customer Experience and Customer Journey. In order to map the customer's individual journey across the different touch points, one cannot simply rely on the customer's reported experience. The customer's emotional experience is of particular interest. Explicit utterances by the customers do not suffice to uncover their underlying sentiments. Instead, it takes implicit measures to reveal those unconscious emotions.

### Implicit Measurements in Mobile Surveys

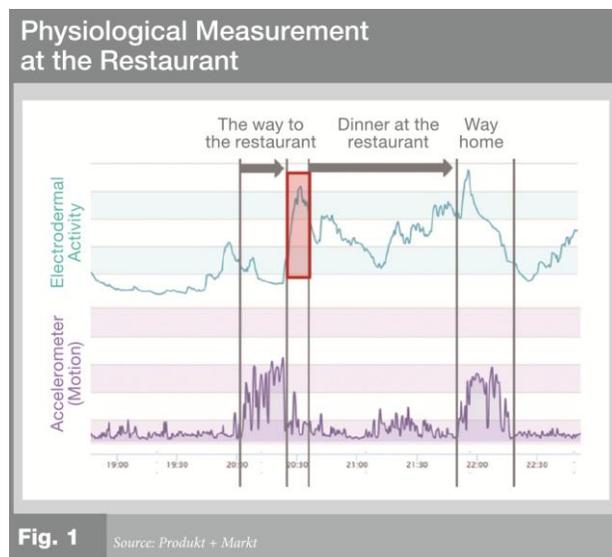
Suitable means for this are for example physiological measurements like skin conductance (or: electrodermal activity, short EDA). Physiological research shows that the EDA increases when the subject feels excitation. This excitation may be positive excitement just as well as negative agitation; for example from a stressful incident (missing a train) or a pleasant event (seeing the significant other again after a long time). In order to measure the EDA, Produkt + Markt utilises a bracelet, which is additionally capable of motion detection (accelerometer) and also measures the heart rate and body temperature. Just like skin conductance, the latter two may also be interpreted from a physiological point of view. Nevertheless, this article will focus first and foremost on the internal study's results based on the measurement of skin conductance. Produkt + Markt will examine the other physiological measures in future studies.

A first set of internal studies has shown that the bracelet may indicate situations that excited the person in the course of the day. As an example we will present the physiological measurements of two different bracelet wearers: One of them wore the bracelet at night while eating at a restaurant, the other one wore it while shopping at a

DIY warehouse and at an electronics store. In the process we will depict the progression of the EDA as well as the readings of the accelerometer (motion detection).

## At the Restaurant

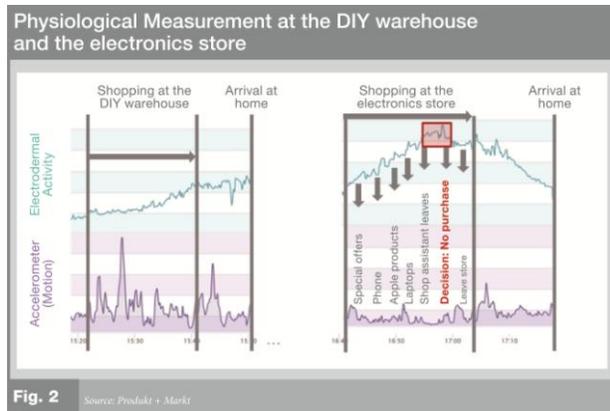
During a business trip, our bracelet wearer intended to have a nice meal at a famous restaurant in a European metropolitan city. Despite having a reservation for 8.30 p.m., there was a big queue in front of the entrance of the restaurant, since numerous people were demanding tables, even though they had not made reservations. This caused our subject to feel stressed, since he was not sure if his reservation was going to be honoured or if his table was going to be given to other patrons. This increase in stress clearly becomes apparent through an increased level in electrodermal activity (fig. 1).



The excitement of our wearer eventually subsided when he was seated at the reserved table; his EDA level decreased as well. At around 9.45 p.m., the stress level rose again, since leaving the restaurant turned out to be rather difficult due to the large number of patrons. Squeezing past so many unfamiliar faces caused the EDA level to increase significantly. On the way back to the hotel the electrodermal activity decreased noticeably, even though the subject moved quite a bit according to the accelerometer.

## At the DIY Warehouse and the Electronics Store

When comparing a trip to the DIY warehouse to a visit an electronics store, it is striking that the measured levels of excitation (EDA levels) actually differed greatly from each other. The wearer was significantly less involved at the DIY warehouse, since he had to purchase products on behalf of others. However, at the electronics store he intended to buy a laptop for himself. After entering the shop, he checked the special offers of the week again. Afterwards our subject went to the telephone section in order to choose a new, cheap phone. Subsequently he reached the laptop section, after crossing the store's section that featured the newest Apple products.



At the laptop section he asked a shop assistant for help. To the subject's inconvenience, the shop assistant disappeared without indicating when he would be available again. Being annoyed by the wait and defiance, our wearer decided after a few minutes not buy the laptop at this particular shop – despite a prior firm purchase intention. While visiting the electronics store, the subject's excitement increased continuously; probably

also because he was looking forward to his new laptop (fig. 2). The highest stress level of the day was detected during the annoying wait for the shop assistant. The excitement already decreased significantly shortly after deciding against a purchase at that store, and subsided even more on the drive home.

## Interpretation and Prospect

When having subjects recount their experience, i.e. in terms of touch points, they often only mention the situations that are still relevant to them at the time of reporting. For example: late at night, our patron from the restaurant talked about the delicious food and the atmosphere at the restaurant. Meanwhile he had already forgotten that he had to wait a few minutes when entering the restaurant – even though the situation had put significant stress on him at the time. The positive memories have outweighed the negative experience. However, when the respondent views his physiological measures together with a market researcher, he is confronted with his increased stress levels during the wait. This anchor point allows the market researcher to take a closer look at this particular point in time and to scrutinise this discomfort. As a consequence the subject is able to reminisce about his emotional situation and to remember how he felt at the time.

During the conversation with our customer from the DIY warehouse and electronics store, it also appeared that the physiological measures are a helpful means to jog the subject's memory. For example, the two drives home, as compared in fig. 2, show distinctly different EDA patterns, even though, according to the subject, there had not been any unusual occurrences during neither one of the drives. The main difference was that his family was with him during the first drive, while he was by himself during the second one; a fact that only became clear after the subject was able to examine the graphs of his EDA.

Over all, the internal studies with the bracelet allow Produkt + Markt to draw the following conclusion: The device may provide the market researcher with additional information, which can be utilised to reach the consumer's underlying sentiments and emotions.

## The Authors



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