Sensing the Vocal Age
Managing Voice Touchpoints on Alexa

Creating strong customer experiences by actively managing touchpoints is an executive's top priority. The vocal age, manifested in the rise of AI-enabled voice assistants and platforms, offers new forms of touchpoints, so-called voice touchpoints. This paper conceptualizes voice touchpoints and develops managerial recommendations.

Johanna Franziska Gollnhofer, Sophie Schüller
Google followed with its Google Home Speaker and the corresponding software Google Assistant in 2016, which is now also available for Android smartphones. Early 2018, Apple also launched a smart speaker, the HomePod. As of January 2018, the market share split in the U.S. is as follows: Amazon 69%, Google 25%, and Others: 6% (Kinsella 2018). The following table provides an overview of the main voice assistants.

These voice assistants have distinct characteristics (such as design, software etc.) but share similar functions such as controlling smart home devices, reading out the news, podcasts or playing music, to name a few. To this end, voice assistants connect to other brands that provide services or products to consumers. On Alexa, this is realized through so-called skills. Skills could be imagined as apps. Similar to mobile apps, these can be created externally and then connected to the Alexa eco-system. For instance, Deutsche Bahn has an Alexa skill that allows consumers to inquire about timetables, delays and connection (yet, so far it is not possible to purchase tickets through this voice touchpoint).

<table>
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<tr>
<th>Company</th>
<th>Devices</th>
<th>Assistant System</th>
<th>Release</th>
<th>Price (US)</th>
<th>Name of “app”</th>
<th>Market share of devices</th>
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<tbody>
<tr>
<td>Amazon</td>
<td>Echo (Dot, Plus etc.)</td>
<td>Alexa</td>
<td>July 2015</td>
<td>Echo Dot: $49.99</td>
<td>Skills</td>
<td>69%</td>
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<td></td>
<td>Google Home (Mini)</td>
<td>Google Assistant</td>
<td>Google Assistant: May 2016</td>
<td>Google Home Mini: $49</td>
<td>Actions</td>
<td>25%</td>
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<td></td>
<td>Apple HomePod</td>
<td>Siri</td>
<td>Siri: October 2011 HomePod: February 2018</td>
<td>$349</td>
<td>n.a. – not open for external programmers</td>
<td></td>
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<tr>
<td></td>
<td>Microsoft</td>
<td>Cortana</td>
<td>April 2014</td>
<td>n.a.</td>
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Management Summary

1. AI-enabled voice assistants such as Amazon Alexa and the Google Assistant offer new touchpoints – voice touchpoints – that allow for new interactions and connection between consumers and brands.
2. Voice touchpoints differ from offline, desktop, and mobile touchpoints as they mainly appeal to the auditory sense.
3. Voice touchpoints and respectively AI-enabled platforms challenge the role of brands in consumer-decision making, service encounters, and in the creation of a strong customer experience.
4. Managers should carefully create a strong customer experience by relying on sense mapping, “owning” the experience, and thinking in voice content.

This implies a significant change in consumer-brand interactions: Whereas brands spent large amounts of (financial) resources on visual communications (such as product packaging, brand logos or physical shopping experiences) in order to create customer experiences, AI-powered voice assistants change how consumers interact with brands and shop (Grewal/Rugge-geven/Nordfält 2017). In other words: Billions of dollars have been spent to stand out on the physical shelf or in online stores. Now managers need to find solutions for the vocal age.

Use Case – Doing Sports with Alexa

In order to illustrate the working of voice touchpoints, we chose the example of doing gym exercises. Gym exercises are often done in a gym where an instructor shows a group of people how to do these exercises. In the digital age, consumers were provided with online formats that allowed following instructions on a screen while being in their living room. In the vocal age, doing gym exercises unfolded as follows:

Gymondo is an online fitness studio that offers training programs through video instructions that can then be done at home. In December 2017, Gymondo.de launched a skill for Alexa that allows individuals to follow workout instructions on Alexa. As this example of physical exercises illustrates, vocal touchpoints mainly work through voice and sound interactions. Other senses such as sight (in the case of video), or even smell (in a physical gym) are absent, not in the influence sphere of the brand or can be “mentally imagined” by consumers only to a limited extent. We argue that touchpoints are characterized to a different degree by senses (namely sight, smell, touch, taste, and hearing) and that managers should take into account these senses when creating, designing and managing customer experiences in the vocal age.

Conceptualizing Senses in Customer Experiences

Prior research has pointed to the relevant role of senses in customer experiences (Spence/Purcelli/Grewal et al. 2014). Besides emotional, cognitive, social, spiritual and physical elements (De Keyser/Lemon/Keiningham et al. 2013), senses mark the direct interaction with brands and thus lie at the heart of customer experience. As Dewey (1934) writes: “It is through sense organs that living creatures participate directly in the world around them.” The importance of senses has also been highlighted in human interaction: “The same words spoken in the same way...
carry different weight when accompa-
nied supportively holding the other
person’s hand or touching him on the
shoulder” (Thatcher/Wright 2004, p.
81). These examples underline the im-
portance of senses in interactions. In
order to explore and conceptualize voice touchpoints, we analyze four
touchpoints (namely offline, desktop,
mobile and voice) regarding their sen-
sory characteristics. For this analysis,
we break down senses into sight, smell,
touch, taste, and hearing. The follow-
ing table gives an overview of our con-
ceptualization: Rows refers to touch-
points, columns to senses.

### Offline Touchpoints

A classic example for an offline touch-
point would be a retail store, where pa-
ckaged products are presented on shelf
and help the consumer to navigate
through the jungle of choice (Amupura/
Vila 2006; Underwood 2003). Scents are
being used in order to increase time
spent in-store (Knasko 1989) or the pur-
chase intention (Spanenberg/
Crowley/Henderson 1996), or stimulate
the overall positive and enjoyable shop-
ing experience (Bone/Ellen 1999; Gu-
la/Bloch 1995). A common example is
for instance, the smell of freshly baked bread in front of a bakery. Tasting or
giving out samples is also an often used
tactic in order to stimulate sales (Lam-
mers 1991). Further, the possibility to
touch an object in the retail environ-
ment results in an increased feeling of
ownership of the object (Peck/Shu
2008) with important implications for
purchase intentions (Gebrohn/Span-
enberg/Sprott, 2007; Hultin 2012;
Peck/Children, 2006; Space/Gallace,
2013) and willingness to pay (Martin
2013). Lastly, studies on auditory cues,
especially music, have shown that back-
ground music can for example in-
crease purchase intentions (Baker/Pa-
rasuraman/Grewal et al. 2002), sales
(Martila/Wirtz 2003), or reduce perci-
eved waiting time (McDonnell 2007).

### Desktop Touchpoints

By desktop touchpoints, the authors
refer to all kinds of personal comput-
ers, including laptops. When using
desktop touchpoints, consumers are
bound to a 2D experience on the screen
of their personal computer (compared
to a 3D experience in the retail store)
that hinders tasting, smelling, and tou-
ching experiences. Videos that trans-
port visual and sound cues gain impor-
tance in this setting. Personal interaction
between consumers and sales agent is re-
duced to a desktop interface or mediated
through call-center.

### Mobile Touchpoints

Regarding the sensorial consumer ex-
perience, mobile touchpoints are
more sensorial rich as they mainly rely on voice inter-
action and between consumers and tech-
nology. For instance, the gymbono
Alexa skill provides no pictures or
videos on how to exert the physical
exercises. Consumers are asked to
draw on their prior experience while
following the instructions. For in-
stance, they need to activate prior
knowledge of how to perform a c-
 crunch. Further, voice only allows for
a limited amount of information due
to complexity: When browsing on
Amazon for new products through
Alexa, the consumer is only offered
two to three items for each product
category. Comparisons across pro-
ducts are made difficult as consumers
lack reviews, visual comparisons, and
written product descriptions.

However, voice touchpoints might
be combined with other touchpoints.
On Alexa for instance, more specific
information is sent to the consumer via
the Alexa app. This means that con-
sumers can scroll down in their Alexa
app and access more products in the
same product category with pictures
and short product descriptions. Fur-
ther, recent technological advance-
ments complement voice touchpoints
with a small screen that is able to show
pictures or videos while voice brows-
ing (e.g. the Amazon Echo Show).

Overall, touchpoints are character-
ized through different senses. While
certain touchpoints are able to evoke
a more sensorial experience, other
touchpoints such as voice touchpoints
are more restricted. Based on this in-
sight, we will develop managerial rec-
ommendations.

### Lessons Learned

1. Analyze how “sensorial” the interaction between a service or product and consumers is by mapping the interaction of your brand with the consumer. Identify the evoked senses, evaluate the importance of the sensorial experience and design a strong customer experience.

2. Instead of using the default voice assistant voice for your brand, create your own, specific voice for Alexa, Google Assistant etc. in order to differentiate your brand from competi-
tors (similar to jingles or sound branding) and to “own” the experience.

3. Think in voice content for a strong customer experience, since voice search behavior and current advancements in natural language processing are significantly different from search behavior on computers or mobile devices.

### Managerial Recommendations

Voice touchpoints present new oppor-
tunities to marketers and managers.
Based on our above analysis, we offer
three managerial recommendations for
creating, designing, and managing
customer experience on Alexa (or other
voice-enabled digital assistants).

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**Table 2: Sensorial experience across different touchpoints**

<table>
<thead>
<tr>
<th>Sight</th>
<th>Smell</th>
<th>Taste</th>
<th>Touch</th>
<th>Hearing</th>
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</thead>
<tbody>
<tr>
<td>Offline Touchpoints</td>
<td>e.g., enhanced through packaging, retail store design (3D) and/or brand logo</td>
<td>e.g., scents in retail environments</td>
<td>e.g., tasting is used to trigger buying behavior</td>
<td>e.g., music enhances, browsing time</td>
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<tr>
<td>Desktop Touchpoints</td>
<td>e.g., delivered through videos (2D)</td>
<td>No smell</td>
<td>No taste</td>
<td>Usage of touchpad or mouse for navigation on screen</td>
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<tr>
<td>Online Touchpoints</td>
<td>e.g., delivered through videos, adapted to mobile (2D)</td>
<td>No smell</td>
<td>No taste</td>
<td>touchscreen, e.g., jingles create brand recognition</td>
</tr>
<tr>
<td>Voice Touchpoints</td>
<td>e.g., delivered through videos, adapted to mobile (2D)</td>
<td>No smell</td>
<td>No taste</td>
<td>No touch, e.g., Amazon Echo Show has a display</td>
</tr>
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Source: Own Illustration.
Recommendaion 1: Design the Customer Experience Through Sensor Mapping

We recommend a sensor mapping exercise for creating voice touchpoints. This sensor mapping exercise allows analyzing how “sensorial” the interaction between a service or product and consumers should be designed for an optimal customer experience. Sensor mapping can be done in three steps. First, map the interaction of your brand with the consumer and identify the evoked senses. For instance, when offering a weather forecast service to consumers the following senses might be evoked: sight (through displaying the temperature by a number and adding a pictorial visualization of clouds and sun), hearing (telling the temperature and weather forecasts via consumer device through video or voice channel), and touch (in case the consumers directly access the service). Second, evaluate how important sensorial experience for this product or service is to consumers. For instance, consumers might not need a visual component when inquiring about the weather. However, a visual component might be quite relevant when following a cooking recipe or organizing the personal calendar. Third, compare your sensorial assessments from the first two steps. Which senses are essential to your products or service experience and how can you translate them into voice interaction? Linking different touchpoints (for instance a mobile app with a voice touchpoint) or technological advancements (such as the Amazon Echo Show with an integrated screen) might facilitate this task. Further, it might be possible to appeal to other senses (such as touch or sight) through other touchpoints.

Recommendaion 2: “Own” the Experience

With the rise of AI-enabled platforms and voice assistance, the question arises about the position of branded products on such AI-enabled platforms. As users of voice assistants become more familiar with this technology, companies need to adjust their strategies accordingly. For instance, Amazon and Google have set up direct advertising platforms for various industries, which has led to a rise in voice-activated advertising.


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