inside the buyer's brain



# the science of first impressions

creating a favorable presence on virtual sales calls

## the irresistible push and pull of first impressions

Forming first impressions is quick, ubiquitous, and irresistible. And even though it takes a fraction of a second to form a first impression, its influence can be long lasting. First impressions can impact whether people hire you, buy from you, marry you, or want anything to do with you in the future.

One of the main reasons people form first impressions is because they can quickly judge whether someone is trustworthy or threatening. So, first impressions are useful because they help people predict others' behaviors. It also conserves cognitive energy because people can apply the knowledge from first impressions to similar people and situations.

This adaptive nature of first impressions also suggests they are likely to be pulled toward the negative. Think of a smoke detector: it's better if it goes off and there is no fire than to not go off in case of a fire. Same with forming perceptions of others: It's more costly to misjudge a threat, so people tend toward negative first impressions, especially in zero-acquaintance encounters.

As you can imagine, this creates a challenge for your sales presentations, especially when others don't know you. And perhaps more so for virtual presentations, since your presence on screen is much smaller than in person. Without physical proximity, it's potentially more difficult to alter your buyer's first impressions.

So, how do you neutralize the brain's natural negative tendency in your virtual meetings?

This question sparked the neuroscience studies collected in this report. In partnership with Zoom, we studied how B2B buyers perceive sellers' delivery habits in a virtual environment. Based on those findings, here are several practical guidelines on how to build favorable first impressions.



**Dr. Carmen Simon** Chief Science Officer Corporate Visions and B2B DecisionLabs





When you meet someone else for the first time, there are some widely agreed-upon habits that convey confidence and make a positive first impression. Holding a power posture, using explanatory gestures, making eye contact, and more.

The more fluid and steady your movements, the more confident you appear. If your movements are jerky, mechanical, or you hesitate, people will perceive that you're less confident.

But do those same delivery skills matter in a virtual environment?

In a virtual meeting, your presence is already reduced to fit on your buyer's screen. And if you share slides during your presentation, you appear 18x smaller on that screen.

So, if you're smaller than a postage stamp on screen, how much will your virtual posture and gestures affect your buyer's experience?

It turns out, even small adjustments do make an impact.

#### a lasting first impression



Jessica Petrucci Pham Head of Sales Strategy & Operations Zoom

These studies were conducted using sales presentations, but the insights can be applied to a wide range of other business meetings.

Whether you're trying to make a positive first impression on a job interview, get buy-in from your colleagues during a team meeting, or if you just want to make your presence more memorable, your first impressions make a difference in how well people will remember your pitch.

The more intentional your choices, the better your chances of influencing your audience's first impressions of you on the call. And when you make a positive first impression, it can pave the way to strong, long-lasting business relationships.

As you read through this report, ask yourself how you can apply these tactics to your next business meeting—whether you're in sales or not.

# tailor your delivery for a virtual audience

In this report, you'll see how the slightest changes to your virtual delivery habits can affect your buyer's attention, motivation, and memory of your message. And you'll learn how to adapt your approach to make the most favorable first impression.

#### SIT OR STAND STRATEGICALLY

- **TURN ON YOUR CAMERA**
- **USE CAUTION WITH THE CHAT BOX**



Every B2B DecisionLabs neuroscience study is conducted with actual B2B professionals and real B2B content. Researchers used the following equipment:

- **EEG** (electroencephalogram) cap for recording brain waves.
- **ECG** (electrocardiogram) cable for recording heart rate.
- **Eye tracker** for recording the gaze and where the eyes fixate.
- **GSR** (galvanic skin response) for measuring peaks in arousal.

This combination of neuroscience tools provides a comprehensive and undiluted view into people's physiological and psychological reactions in real time.

**GSR** 

Eye tracker

EEG

**ECG** 

### what we Measure

After participants viewed the presentation, researchers analyzed the following variables:

#### Cognitive Variables:

- Attention a state of focused processing, concentration, or persistent focus across time.
- Motivation the desire to approach a stimulus to obtain something.
- Working memory (cognitive workload) the storing and manipulation of information in short-term memory until completion of a cognitive task.
- **Fatigue** a decrease in alertness that can impair efficiency, performance, and memory retrieval.
- Approach/Withdrawal the emotional response to positive or negative stimuli.
- **Memory** the process of encoding, storing, and retrieving information.

#### Affective Variables:

- **Valence** an emotional state within a pleasure-displeasure continuum that ranges from positive to negative.
- **Arousal** the general level of alertness and wakefulness of a person, ranging from calm to very intense.



Valence and Arousal are considered two independent neurophysiological systems at the foundation of all other affective states. Varying degrees of valence and arousal impact emotions, which are essential to memory and decisions. tailor your delivery for a virtual audience

sit or stand

strategically

# should you sit or **Stand**?

Some communication experts propose that standing while presenting in a virtual meeting makes you a more "dynamic speaker." They say that when you stand, you can present with more movement and energy. Your heart will pump faster, your voice will be more powerful, and your posture will inspire more confidence.

Other practitioners consider this advice awkward because attendees of a virtual presentation are typically sitting at a desk. In addition, some claim that if you stand up, you might come across as less intimate and more aggressive.

To learn which approach is most effective, 42 participants from B2B companies were divided into two groups to view a virtual sales presentation.



In the **Sitting group** (22 participants), the presenter sat down while delivering the presentation.



In the **Standing group** (20 participants), the presenter stood while delivering the presentation.

### an enjoyable difference

EEG and ECG data showed no statistically significant differences between the two groups for cognitive variables such as attention, working memory, fatigue, and motivation.

But in terms of affective variables, **participants** in the Sitting group enjoyed the presentation significantly more.

Participants in the Sitting group felt content and calm, while participants in the Standing group were in a neutral, slightly unpleasant state of mind.





There were no statistically significant differences between the two groups' cognitive states during the presentation.

#### Affective state during the presentation

Sitting Standing





Participants in the Sitting group enjoyed the presentation more than participants in the Standing group.



Qualitative eye-tracking data revealed that even though participants' attention was periodically pulled to the presenter in both groups, most of their attention was directed to the slides throughout the presentation.

The presenter in the Standing group received 21 percent more attention. But that didn't detract much from the presentation slides, as there was only a three percent increase in attention from the Standing group to the Sitting group.

You can watch how participants' eyes transition between presentation and presenter in these two examples:



▶ Watch eye tracking data from the Sitting group.

#### Visual attention during the presentation



The presenter in the Standing group received 21 percent more attention, but it did not detract much from the overall presentation.



▶ Watch eye tracking data from the Standing group.



Researchers noted a statistically significant difference in the long-term memory results.

Specifically, there were significant differences in the precision memory of the main message of the sales presentation and the three supporting points.

The **participants in the Standing group remembered the main message 37 percent better and the three supporting points 67 percent better**. There was also a statistically significant difference in overall memory of the main message, supported points, and nuanced details of the content.

#### Participants' memory test results



Participants in the Standing group remembered the content better and with more precision.

#### the choice is yours



Jessica Petrucci Pham Head of Sales Strategy & Operations Zoom

When people are asked to give a presentation in person, they typically stand up in front of the room. But on Zoom, most presenters tend to sit.

That's what makes this neuroscience study so fascinating—the shift from in-person to virtual resulted in a major shift in how most presenters behave. But until now, there hadn't been any scientific examination of whether their choice was beneficial to the audience.

Turns out, standing in front of a group—even during a virtual meeting — has significant benefits. Not only does standing draw people's attention to you. It also makes the content you share more memorable.

Should you always stand? Probably not. When the presenter was sitting, people felt content and calm. So, sitting down might be a better choice if your goal is to build rapport. Whether you choose to stand or sit, these counterintuitive findings are worth considering before your next meeting. tailor your delivery for a virtual audience

## turn on your Camera



At the beginning of the pandemic, only 33 percent of sellers said they shared their camera during virtual sales calls. But over time, cameras have become far more popular. In fact, **over 90 percent of B2B sellers now admit to sharing their camera during virtual meetings.** 

Advocates say that when people know they'll be on camera, they might take the call more seriously and prepare better. The camera might also provide some insight about the other attendees, thus allowing people to build rapport.

Opponents insist that turning the camera on can be taxing and stressful. There have also been the occasional faux pas from people who didn't realize their camera was on. But beyond these embarrassing gaffs, turning on the camera has been associated with heavier cognitive workload, increased self-evaluation, and constraints on physical mobility.

How important is your decision to use a camera in your virtual calls?

To find out, researchers observed 43 B2B professionals as they watched a virtual sales presentation. Participants were divided into two groups to watch a Zoom recording of a virtual sales presentation.



In the **Camera On group** (22 participants), the presenter's camera was on during the entire pitch.



In the **Camera Off group** (21 participants), the presenter's camera was off during the pitch. The participants in this group saw a still photo of the presenter displayed instead of a live video.

# similar on the

The EEG and ECG data, at first glance, showed no significant difference between the two groups' affective or cognitive variables.

Both groups were in a pleasant state, so **the presence or absence of the camera did not strongly influence the mood of the audience**. Participants in both groups also showed similar levels of attention, working memory, fatigue, and motivation overall.

#### Cognitive state during the presentation

📕 Camera On 🛛 📕 Camera Off

Camera On



There were no statistically significant differences between the two groups 'cognitive states during the presentation.

#### Affective state during the presentation

Camera Off



Valence Arousal

Both groups in a pleasant state during the presentation, so the presence or absence of the camera did not strongly influence the mood of the audience.



Researchers observed a combination of variables that's typically associated with trust from from participants in the Camera On group—low attention, high valence, and low arousal.

So, while both groups were generally in a positive state of mind while watching the presentation, **the participants who saw the presenter on camera tended to trust the content more.** 

Arousal (High)

(Low)

Excited

Нарру

Pleased

Annoying

Angry

Nervous

(Negative)

#### EEG results during the presentation



Participants in the Camera On group tended toward high valence, low arousal, and low attention, a combination of signals associated with the feeling of trust.

#### Sad Bored Sleepy Sleepy Calm Relaxed Peaceful Calm Relaxed Peaceful Calm Relaxed Peaceful Calm Relaxed Peaceful Calm Calm Peaceful Focused Attention



Researchers also analyzed four sections of the sales presentation: the Introduction, Trends, Solution, and Follow Up parts.

During these sections, participants in the Camera On group remained roughly in the same negative, slightly unexcited state. But participants' moods varied in the Camera Off group.

When the camera was off, participants moved from a pleasant, happy state during the Introduction to a negative, unexcited state during the Trends and Solution sections. Then they returned to a pleasant state during the Follow Up section.

The cognitive variables during these four sections indicate that **the Camera Off group experienced significantly more fatigue than the Camera On group during the Introduction and Solution sections**.

This might happen because participants can choose to watch the speaker instead of focusing only on the slides. But did less focus on the slides cause the Camera On group to remember less?

#### Cognitive state during presentation sections

Camera On 📕 Camera Off



When the camera was off, participants experienced significantly more fatigue during the Introduction and Solution sections.



Eye-tracking data confirms that the Camera Off group paid less attention to the presenter than the Camera On group. Participants' eyes frequently switched between the presenter and the speaker when the camera was on.

There was **a 10 percent increase in attention to the presentation** in the Camera Off group. Overall, participants in the Camera On group paid seven percent more attention.

But, in terms of long-term memory, there was no statistically significant difference between the two groups. **Memories of the main message and the supporting points were similar** for participants in both groups, and the same held true for memories of other details from the presentation.



▶ Watch eye tracking data from the Camera On group.

#### Visual attention during the presentation



Participants in the Camera Off group paid less attention to the speaker and more attention to the presentation.



▶ Watch eye tracking data from the Camera Off group.



Qualitative GSR data showed that there were slightly more peaks per minute (higher levels of arousal) for the Camera Off group, and the amplitude of those peaks was higher.

Why did participants find the presentation more exciting without seeing the speaker?

It's important to note that this slide deck included high-end design and slides that were delivered at a brisk pace, with a lot of animations and visual changes. For example, on average, there was a slide change every 22 seconds, and each slide contained an average of nine animations.

Given this highly dynamic presentation, participants had enough stimulation to maintain focus and engagement, even without the camera.

#### Cognitive state during the presentation





The Camera Off group experienced higher levels of excitement during the presentation.

#### the case for the camera



Michelle Dotson Head of GTM Enablement & Strategy Zoom

If you have a presentation packed with dynamic, visually appealing slides, those slides become the focal point. But what if you aren't showing slides or sharing your screen?

In these cases, it can still be beneficial to share your camera. Letting your audience see your facial expressions and gestures makes the experience more enjoyable and can help build your credibility as a presenter.

Notice too, that the two test conditions in this study both included a picture of the presenter. When the camera was on, participants saw a video feed from the presenter's webcam. But even with the camera off, they still saw the presenter's face as a static picture on the screen.

This is an important detail, because if you don't add a picture to your Zoom account, then your viewers will only see a black box on their screens.

Would that black box help you build a positive first impression? Probably not. And even less so if you don't have slides to share.

#### tailor your delivery for a virtual audience

## use caution with the chat box

# challenging the chat box

Virtual presenters are always searching for ways to keep their audience engaged. And one tool for potential engagement is the chat box.

Many thought leaders recommend using the chat box to interact with buyers during a virtual presentation. The idea is that continuous interaction will keep your audience alert and attentive. But there's little to no scientific evidence to support this claim.

How do buyers react to the chat box activity during an introductory call? Does it improve engagement and focus, as some claim, or does it detract from the presentation itself?

To find out, researchers invited 43 participants from B2B companies to view a recorded virtual sales presentation. They were divided into two groups to watch almost identical presentations, with one key difference.



In the **Chat Off group** (18 participants), the chat box was inactive during the presentation.



In the **Chat On group**, 25 participants viewed the presentation with an active chat box, which included a combination of the following entries, presented in randomized order to each participant:

- Asking a question that was immediately answered.
- Asking a question that was not answered.
- Sharing a comment related to the content.
- Sharing a link related to the content.
- Sharing an unrelated humorous/whimsical comment.

## a positive difference

There were no statistically significant differences between the two groups in terms of attention, working memory, fatigue, and motivation. However, **participants in the Chat Off group viewed the presentation in a significantly more pleased emotional state**.

Both groups were in a positive mood, but participants in the Chat On group felt more neutral, while the Chat Off group felt more content.

#### Cognitive state during the presentation

Chat Off Chat On



There were no statistically significant differences between the two groups' cognitive states during the presentation.

#### Affective state during the presentation

📕 Chat Off 📕 Chat On



## more engaged, less distracted

Researchers also analyzed the neural synchronization between the subjects within each group, using a metric called Inter Subject Correlation (ISC), which measured the synchronization between participants in terms of how engaged they were with the content.

The ISC data showed a significant difference between the two groups, with the Chat Off condition resulting in higher ISC values. In other words, **participants had a more similar experience engaging with the content when the chat box was not active**. Eye-tracking data indicated that participants spent 18 percent more time looking at the presentation in the Chat Off group. Participants in the Chat On group spent slightly more time looking at the presenter and the panel of other participants.

Taken together, the results so far suggest that virtual presenters should consider deactivating the chat box, if possible. **When the chat box was disabled, participants were more similarly engaged and less distracted**.



Engagement during the presentation

Chat Off Chat On



Participants in the Chat Off group showed more similar engagement with the content.





Participants in the Chat Off group spent more time looking at the presenter and the panel of other participants.



Beyond the overall results, researchers examined the emotional and cognitive effects of the different kinds of chat box entries.

The findings suggest that **an answered question leads to a significantly more positive and content state** than an unanswered question. The other chat entries were relatively neutral, showing a slightly unpleasant valence and slightly lower arousal.

In terms of cognitive variables, the more unexpected finding was that **the unrelated comment seemed to draw more motivation** than both the related comment and the related link. So, researchers set out to determine why.

#### Affective state during each chat box entry



#### Cognitive state during each chat box entry



Sharing an unrelated comment in the chat box seemed to draw more motivation then other entries.



Analysis of the topographic plots of the EEG alpha frequency also showed an approach behavior from participants following the unrelated comment.

When researchers examined the eye-tracking data, they saw that participants' eyes were drawn to the chat box after someone posted an unrelated comment—"Out of my mind. Back in five." After seeing this comment, participants searched for the commenter in the participant panel.

So, the motivation and approach attitude associated with the unrelated comment was not necessarily to act on the content but rather to make sense of who posted it. Participants might have felt some appreciation for its humorous/whimsical nature and curiosity when trying to figure out who posted it.

Scalp map of cognitive activity during each chat entry

#### ▶ Watch how participants react to an unrelated comment in this video.







EEG Alpha frequency activity indicates approach behavior only for the unrelated comment.

High intensity



In terms of visual attention to the different chat entries, **the related link received slightly more visual attention than the related comment**. The answered question received the least visual attention.

The link elicited higher focus and visual attention compared to other chat entries. Participants may have wondered whether the speaker would address the information included in the link.

Comparing the affective variables, researchers noted that participants were bothered when the related link was posted in the chat box. But this might be due to the context of the experiment. After all, participants couldn't open the link and the link was unsolicited.

#### Visual attention for chat entries during the presentation



The related link led to higher focused attention, while the answered question got the least amount of attention.

#### be intentional with chat



Michelle Dotson Head of GTM Enablement & Strategy Zoom

In-meeting chat is a great way to drive inclusion and collaboration, but also can become a distraction if not used in the right way.

In this study, people were presented with some chat box entries from people they didn't already know. Because you can't control how others use chat, be intentional about when and how you use the chat box with your intended audience.

If you're hosting a meeting where you meet people for the first time, consider turning off the chat feature. If you're meeting with people you know — even for the second time — relevant chat interactions can contribute to a positive experience.

So, when you use the chat box, answer your audience's questions right away. Ask questions that are relevant to the presentation. And add links that relate to the information you're sharing.

**Tailor your delivery** for a virtual audience

How are you making a positive first impression on virtual calls?

Are you trying to apply the same kinds of delivery skills as you use in person? Or are you tailoring your approach to fit a virtual audience?

First impressions can impact whether people hire you, buy from you, or want anything to do with you in the future. And as these studies show, even the smallest adjustments can affect your buyer's attention, engagement, enjoyment, and memory of your presentation.

SIT OR STAND STRATEGICALLY

Choose to stand if it's important that you get

more attention or you want your audience to

likely help you build better relationships.

remember specific details. Otherwise, sitting will

#### **TURN ON YOUR CAMERA**

Turning on your camera can help your audience trust the content they see. It also helps build rapport and leaves your buyers feeling less fatigued.

#### **USE CAUTION WITH THE CHAT BOX**

If possible, avoid using the public chat box during introductory virtual presentations. If you do use a chat box, answer your audience's questions right away instead of waiting until the end of the session.

#### about B2B DecisionLabs

B2B DecisionLabs is the only advisory firm and membership community dedicated to helping marketing, sales, and customer success departments improve seller and buyer interactions to drive better commercial outcomes. B2B DecisionLabs offers science-backed insights, expert guidance, and field-ready tools through four dedicated research laboratories:

- **Behavioral studies** to understand why buyers behave the way they do through fast, large-scale simulations.
- **Neuroscience research** to observe what's going on inside buyers' brains using EEG, ECG, GSR, eye tracking, and facial analysis tools.
- **Field trials** to optimize your digital selling initiatives by testing, tracking, and validating real-world customer interactions and outcomes.
- Machine learning & sales analytics to transform unstructured sales data into useful insights and coaching opportunities using AI-powered technology.

#### CONTACT US TO LEARN MORE





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Carmen Simon, Ph.D., is a cognitive neuroscientist and Chief Science Officer at Corporate Visions and B2B DecisionLabs. A Silicon Valley entrepreneur and keynote speaker, Carmen addresses a groundbreaking approach to creating memorable messages that are easy to process, hard to forget, and impossible to ignore—using the latest in brain science. Dr. Simon is the author of *Impossible to Ignore: Creating Memorable Content to Influence Decisions.* 

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