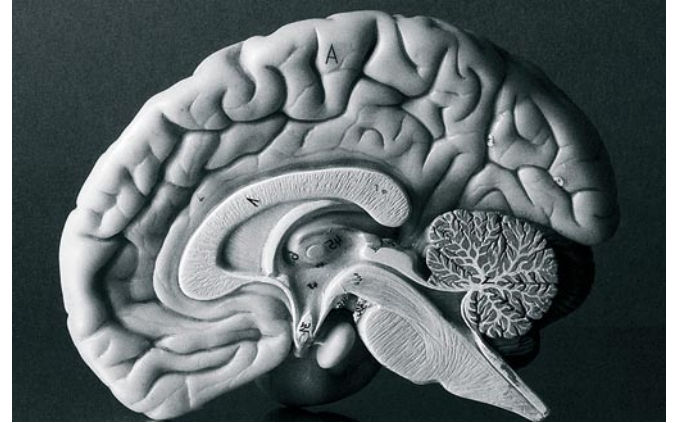


LEFT BRAIN



RIGHT BRAIN. SEE THE DIFFERENCE?

Hum! Minds at Work

Perception and Filtration Shape How the Brain Processes Information

by Terry Carroll, Kent Reyling, and Jay Henriott

While the idea of cognitive ergonomics is relatively new, it's a concept that Kimball® Office has spent years studying. In order to fully understand how the mind works at work, we must first recognize the office environment in which we work, and how such dynamics complement the mind. This column aims to identify the variables in an office setting, and the impact they can have on how the mind works.

As we enter into the world of cognitive thinking, we will analyze how we perceive information, make decisions and process knowledge. Without cognition, we would wander aimlessly with no idea what was occurring in our surroundings. Through practice and training, our brains learn skills and perform simple tasks to help explain the environment. Sometimes, there is too much information to process and perception comes into play. Perception is the ability to digest data collected from these senses and channel it into meaning.

Office dynamics are greatly shaped by the five senses (touch, sight, smell, sound and taste). Throughout the day, the mind is inundated with stimuli, and the brain must learn to identify and process what is and is not relevant. If there's a loud noise in the office, chances are almost everyone will react; however, if one person's name is called, generally that person will be the only one to react. Think about everything happening around you that you do see, and around the rest of the office that, although you don't witness first-hand, you know is happening. Perception helps the mind take in only the information you need to know.

The following video demonstrates how the brain is trained

to identify only what information is needed or requested. Based on a famous University of Illinois, Urbana-Champaign, experiment, the brain automatically filters unnecessary or unproductive distractions. Click [here](http://www.youtube.com/watch?v=Ahg6qcgoay4) (<http://www.youtube.com/watch?v=Ahg6qcgoay4>) to start the demonstration.

Office furniture and interior design interact with most senses (sight, sound, smell and touch), which is why the type of work being produced and the company's culture help determine the appropriate office solution. For a growing number of businesses, collaborative environments are becoming a dominant feature, and in these cases the key is finding a balance so the mind processes only relevant information, while ignoring distractions — like the moon-walking bear. Understanding the role of perception in the workspace can help lead to added productivity and flexibility.

When designing a successful office environment, for an open plan or otherwise, designers, manufacturers and clients should be aware of what key behaviors need harnessed and funneled into the new space. Perception plays a large role in this process by helping identify and filter distractions.

In the next installment, learn how the mind breaks up tasks to help us organize.

The series is produced in cooperation with Kimball Office Group, capitalizing on its work in developing its product, *HUM! Minds at Work*. This piece was created by the following Kimball Office Group officers: Terry Carroll, market intelligence manager, Kent Reyling, director of market education, and Jay Henriott, market requirements designer. ■