## Neuro-architecture & Workplace Design How space can affect performance and well-being

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## I. ABSTRACT

Companies have been suffering great changes over the last decades. Especially due to the changes that technology brought, workers have to do more than just simple and mechanical tasks. Moreover, companies' strategies are not based on graphics and numbers only, but in a more holistic approach. Intangible assets like knowledge, creativity, problem solution and brand are becoming much more important. All such factors made the demand for new workplaces design increase.

On the other hand, neuro-architecture is a field that studies how the built space influences the brain. However, the challenge is to combine corporate contemporary needs with neuro-architecture. To apply neuro-architecture in a workspace is not a simple task. Architects need to consider not only the company's culture, but also what people will be doing in each space designed. A space for working on a routine task should be different from a space for brainstorming that is different from a space for meditating or learning.

The gap that this research intends to fill is that many of the studies related to neuro-business in general or neuro-architecture were never linked to workspace design, although their great potential in this field. Neuro-marketing and neuro-leadership, for instance, can be very helpful in understanding how the workspace can affect the brain. Concepts like SCARF (status, certainty, autonomy, relatedness and fairness) can also have an architectural implication. Therefore, companies will be able to associate neuro-business and neuro-architecture strategies with workspace design and have a whole mix of tools to improve group as well as individual performance.

Some of the questions raised are: What is the relation between workspace and well-being? How can biophilia affect performance? How can workspace influence the amygdala? Is the space able to activate the limbic system and, therefore, affect memory, creativity and emotions? How can workspace stimulate concentration and learning? Can workspace design improve sociability and collaboration? This work does not intend necessarily to answer all these questions, but to investigate, inspire and maybe suggest a few answers.

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