LiveMind Open Space Design

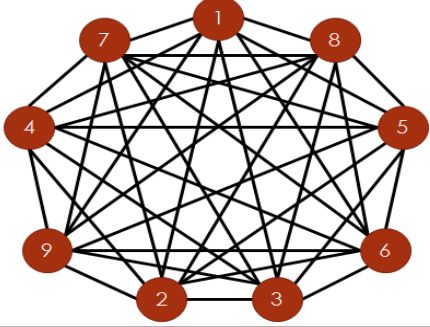|	
The Six S's	When reshaping work environments, there are six elements that must be considered, with varying rates of change (ROC). The higher up you go in the Six S's, the higher the price tag for the redesign effort.
Site	Location. ROC: extremely low.
Structure	The foundation and load-bearing elements. ROC: 20 to 60 years.
Skin	Exterior surfaces. ROC: 20 years.
Services	Electrical/communications wiring, plumbing, sprinkler system, HVAC. ROC: 7 to 15 years.
Space Plan	Interior layout -- where walls, ceilings, floors and doors go. ROC: Every 3 years or so.
Stuff	Furniture. ROC: daily to monthly.
The Four Quadrants	Workspaces should be designed with the following four quadrants in mind.
I/Shared	Private temporary personal space. Open temporary personal space.
I/Owned	Individual workspace. Semi-private permanent space.
We/Shared	Private collaboration. Open collaboration.
We/Owned	Team workspace.
Palettes and Postures	Different palettes and postures should be used to create a space that will conform to a wide variety of individual preferences.
Palettes	Colors, and design patterns.
Postures	Furniture of various types adjusted at different heights.
Universal Design Principles	These principles should be incorporated whenever possible in order to create an inclusive design.
Equitable Use	The design is useful and marketable to people with diverse abilities.
Flexibility in Use	The design accommodates a wide range of individual preferences and abilities.
Simple and Intuitive	Use of design is easy to understand, regardless of experience, knowledge, language skills, or current concentration level.
Perceptible Information	The design communicates necessary information, regardless of ambient conditions or the user's sensory abilities.
Tolerance for Error	The design minimizes hazards and the adverse consequences of accidental or unintended actions.
Low Physical Effort	The design can be used efficiently and comfortably and with a minimum of fatigue.
Size & Space for Approach & Use	Appropriate size/space is provided for approach and use regardless of body size, posture, or mobility.
Space = Culture	Our values define our brand, both internally and externally. Space design should be a reflection of our values. The organization values openness and transparency, then the space design should serve to augment that type of behavior.

LiveMind Co-location

Team Size and Communication

Ideal team size is often denoted as 7 plus or minus 2 (i.e., 5 to 9 people per team), though teams of 3 to 9 have proven effective.

Miller's Law	The magical number 7,+ or - 2: our limits on processing information.
Richard Hackman	Harvard professor's research showing 4.6 members as the ideal size.
Communication Channels	N > 36 channels = Communication breakdowns
QSM	Variation decreases and productivity increases as team sizes reduce.
Brook's Law	Adding more people to a late project only makes it later.
Dunbar's Number	A person only maintains 150 social (not collaborative) relationships.
Conway's Law	Teams produce designs that mirror the communication structures of their organizations (e.g., distributed teams create modular products.)
Weinberg's Law of Raspberry Jam	The wider you spread it, the thinner it gets.

Communication Channels

Formula: N(N-1)/2

Formula	Value
1(1-1)/2	0
2(2-1)/2	1
3(3-1)/2	3
4(4-1)/2	6
5(5-1)/2	10
6(6-1)/2	15
7(7-1)/2	21
8(8-1)/2	28
9(9-1)/2	36

Considerations for Open Office Designs

The following factors should be taken into consideration when teams move into a colocated workspace.

Physical environment	Amount of storage space, work surface area.
Physical stressors	Lighting levels, noise.
Team member relations	Inclusion, approachability.
Performance	Ability to focus, ability to stay on task.
Protocols	Have office protocols been established, and are they being followed?

Context Switching

# Projects	Percent Allocated	Efficiency Loss
1	100	0
2	40	20
3	20	40
4	10	60
5	5	75

Organic Design Using a Team-Centric Model

To increase productivity, focus the design on the workflow between teams, taking an organic approach that evolves over time.

Space design should grow organically. For a flexible, adaptive space that also promotes a shift in culture (i.e., induces changes in behavior), the focus should be on team-specific needs. What may appear efficient for management may not be ideal for the team, and vice versa. The team should be the primary concern: who they interact with, how they work together, and in what capacity. The goal is to promote self-organizing behavior, to let the teams reorganize to build in their own efficient work flows. This promotes collective ownership. It also contributes to producing a "culture of innovation."

Multi-Tasking Decreases Productivity