Space Planning for Your Office:
Designing for Optimum Workflow

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Office furniture is designed to solve problems, not create them. But haphazard planning and execution can make the office space planning process unnecessarily grueling and expensive. The problems that crop up when office layouts interfere with worker efficiency show that there are many more ways to get it wrong than right.

Such problems appear whenever facilities managers fail to plan sufficiently for their particular workplace. Much of this comes down to a gap between a facility manager's need to create a workable work space and the needs of the occupants of said work space: accountants will have completely different requirements from call center agents, for instance.

So the key rule for facility managers is to recognize that there is no such thing as a generic, one-size-fits-all office. What's right for an accounting firm might not be right for an advertising firm. Even different departments *in the same company* may have diametrically different requirements - just try moving an advertising art director down the hall to an account executive's cubicle, and you'll see what we mean.

In the next few pages, we will describe design issues that may crop up when another variable is introduced into the mix, one that varies from office to office - that of workflow.

Does the Office Layout Help Workflow - or Hinder It?

No two companies share the same workflow, which often evolves organically from a given company's business operations and office culture.

Strictly speaking, "workflow" is defined as the coordinated efforts of individuals working to the benefit of the group. The layout of the office should facilitate workflow, not hinder it – office space planning should help workers accomplish their jobs for the greater good of the whole.

Because an office setting implies collaboration between individuals, creating an office workflow involves walking a tightrope between encouraging individual achievement and facilitating collaboration. Current trends towards telecommuting and open office layouts impinge on such delicate balancing acts: telecommuters work in a home environment that encourages individual busywork while minimizing collaboration with colleagues, while the open office encourages collaboration but minimizes the privacy some individuals require to get the job done.

Worst Case Scenario. When upper management imposes an office layout that gets the balance wrong, the results can be disastrous. Ad agency Chiat/Day in the 1990s represents an extreme example.

Chiat/Day Chairman Jay Chiat decided his office needed to go "virtual": using a combination of technology and a revamped office layout, staffers were kicked out of their cubicles and set to work without assigned workspaces.[1] Chiat envisioned a college campus type of workplace - "you go to lectures, gather information, but you do your work wherever you like," Chiat recalled.

Private offices and cubicles were removed - instead, agency creatives had to content themselves with open areas filled with couches and tabletops. Every morning, employees would line up at a "concierge" to check out a Powerbook and a portable phone, which they had to turn in at the end of the day. The only concession to private property was a row of lockers for people to "put their dog pictures, or whatever," as Chiat dismissively put it.

What Went Wrong. Things quickly went downhill. There were more employees than Powerbooks to go around - Chiat believed that there would always be employees working out of the office, so he intentionally bought less equipment. Employees began to hoard laptops and phones, coming in at 6 in the morning to check out a Powerbook before everyone else. And the lack of assigned spaces meant that people were hard to track down in the huge common office space - people were either "working virtually" outside the office, or weren't answering their mobile phones.

The experiment didn't last - after a merger with the TBWA ad agency, the new top brass began to tear down Jay Chiat's open office experiment and carved offices and cubicles out of the wilderness. When TBWA/Chiat/Day finally ditched the virtual office for good, associate creative director Shalom Auslander left a wry parting shot: "It was the best possible way a very bad idea could be done."[2]

What went wrong? Jay Chiat completely failed to take existing office culture into account. Personal space, far from being optional, is a requirement for productivity. And an office layout creates a physical map of office interrelationships; the absence of such a physical map also screwed up workflow.

> *Creative directors couldn't find their copywriters. Calls to portable phones were answered by voicemail; by the time the calls were returned, the original inspiration had passed. Even if people were in the office, "the simple processes of finding a human being were gone,"* [creative director Marty] *Cooke says. "Where would an art director be? One wouldn't know. I can remember coming back from a presentation and being unable to find my creative department for two days."*[3]

Arriving at a Layout that Encourages Workflow

Chiat's firm convictions aside, a certain structure is necessary in a workspace - an effective layout that encourages productivity, promotes a sense of ownership, and facilitates collaboration. "Workers like to have control, and both a sense of privacy and collaboration," says Herman Miller's corporate communications chief Mark Schurman. "The idea of 'permeable privacy' is that you can create a level of privacy that workers can open up when they need to."[4]

Office design consultants, when called in by facility managers to sort out their workplace's optimal layout, embark on an involved discovery process that requires input from all levels of the organizational chart and visualization of how the current space is used.

Asking Questions. The best way to go about this is to ask the right questions - not just from the higher-ups, but from the guys on the ground as well. The right questions find out what workers need from their spaces, without generating unrealistic demands. A good space planning consultant will be clear that while important concerns are being addressed, there's no guarantee that the resulting plan will be perfect for everyone![5]

Here are a few questions typical of the discovery process:

- *What does your company do?*
- *What do each of your individual work groups try to accomplish for your company?*
- *What are the needs of your clients in respect to the space you occupy?*
- *How can your furniture plan contribute to a better exchange of information and services between managers, staffers and customers?*

Gathering and analyzing feedback can take a long time - before redesigning their office to accommodate more employees, U.S. financial concern Trust Company of the West (TCW) spent up to eight months conducting interviews up and down the chain of command, taking note of concerns ranging from temperature, resource storage, technology preferences, and interaction between teams.

To address employee fears that the more compact work spaces would be noisier and less hygienic, the new office design incorporated improved acoustics and ultraviolet lights in the air conditioning ducts to kill airborne germs.[6]

Matching workflow with work environment. Certain work patterns call for an open office layout, while others seem to call for office spaces that favor solo work. How do office design consultants strike a balance between the two? As an aid in decision making, Jorge Aranda synthesizes a taxonomy of work patterns that may help facility managers determine the most suitable office plan for their workspace, depending on the levels of interaction that each team's members must engage in:[7]

- **Pooled workflow: "**Involves tasks that aggregate individual performances to the group level. No interactions or exchanges between group members are required in this pattern." The diametric opposite of the open office, a pooled workflow works well with a telecommuting work force.
- **Sequential workflow: "**Describes tasks that move from one member of the team to another but not in a back-and-forth manner."
- **Reciprocal workflow: "**Similar to sequential workflow in that work flows only from one member to another, but the flow is now bidirectional." Either sequential or reciprocal workflow may call for a modicum of privacy, such as high-walled cubicles.
- **Intensive workflow: "**Work has the opportunity to flow between all members of the group, and the entire group must collaborate to accomplish the task." This workflow calls for an open office plan.

"To the best of our knowledge, the need to coordinate on the spot is particularly present in teams with more intensive workflow patterns," Aranda explains. "If you are committed to an intensive workflow (or if your context demands it), you should allow for intensive coordination, and if you prefer sequential or reciprocal workflows, you should enable developers to concentrate and depend on each other only through the necessary interfaces."[8]

In other words, workforces that rely on pooled workflow and those with more intensive workflow processes have completely different workspace requirements, with non-interchangeable environments. Jay Chiat could have saved himself a load of trouble had this sunk in.

Visualizing a Workflow that Works

For Gensler's Gervais Tompkin, one of the most effective space planning tools in their design arsenal is the "activity portrait", a graph of traffic patterns in any given office. The process helps Tompkin and his client find inefficiencies in three key areas -

- **Space Layout:** is the present layout preventing employees from getting work done? Yes, if people spend too much time moving between printers, copiers, and meeting rooms; or if collaboration is hindered by distant meeting areas, or by desk placements separating teammates.
- **Space Usage:** Is existing space used wisely by everyone concerned? If certain areas are always empty or overcrowded, or if too much energy is used up competing for office resources, then you have a problem.
- **Workarounds:** Does the office layout help workers get their job done, or do workers have to circumvent the environment to work efficiently? Some examples of the latter include employees meeting outside the office, or bringing lighting from home because the office lighting is either too dark or too harsh.

To gather information, Tompkin and his associates get feedback from employees in three different ways: by shadowing them as they walk through the office; by checking in on conference rooms and work areas every half hour; and by asking employees to report on their own movements.[9]

Computer-Aided Design. Building on the findings of the "activity portrait" and the rest of the discovery process, design consultants then produce a design that fits the particular needs of the client. As the discovery process unearths different requirements per client, the outcome is correspondingly unique to each client's own needs.

The final design can come together in a number of ways; companies like Cubicles.com rely on design professionals with a solid command of computer-aided design (CAD) software to churn out an approximation of the desired design.

3D design modeling techniques using CAD offers a quantum leap's worth of advantages over traditional 2-dimensional design techniques. With CAD, parts and individual components are easier to quantify, accuracy is greatly improved, and the final result is more easily communicated to laypeople (which includes most clients of design consultants).

The last point is especially significant - CAD software has made it easier for facility managers to present office design changes to the laypeople they serve, the executives and the co-workers whose environments are most affected by the impending redesigns. These laypeople, for whom 2-D floor plans may be as opaque as a physics paper, need a more dynamic way to visualize changes.

With CAD software, office revisions can be presented as 3D virtual tours, allowing workers to "fly through" the new facilities they will be asked to move into, and selling a redesign in a way that no physical blueprint can do.[10]

Conclusion

Facility planning often requires that one strike a delicate balance between competing factors. Short-term cost or long term value? Open office or private spaces? Present-day utility or ability to accommodate future uses? "We are at an interesting point in workplace evolution," says Kimball Office systems product line manager Richard Henson. "There are a lot of dichotomies."[11]

 "Finding an ideal balance between factors will require plenty of careful thought from facility managers", says Mitchell Kirsch of Cubicles.com, "along with thoughtful consideration of the individual circumstances found in each workplace. We've seen this a lot with different clients - there's no such thing as an ideal solution that works with everyone, so we try to give each client one solution that works just for them."

It may turn out that optimum workflow represents a possible fulcrum upon which a balance may be found; an intelligent facility manager will have no difficulty leveraging the search for improved workflow into a practical yet efficient office solution that works out in the long term.

Endnotes

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