
Seven Basic Concepts of Design for Creating Collaborative Spaces

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Overview

Planning, design and strategizing have been separated from the daily work of companies for decades, despite many efforts to combine them. But the digitization of the economy, the dependence on intellectual capital for success, and the well-known increasing rate of change conspire to remove the boundary. We probably won't see the end of the business planning retreat as a tool, but many of its components will be replaced by capabilities that are built into the normal work environment and made accessible to the general workforce.

There are three basic types of collaborative spaces: war rooms, creativity centers, and collaboration centers. War rooms represent one successful attempt to improve the collaboration between people and real time information. The best examples provide a side-by-side presentation of current operating information and models of the business and its environment that facilitate decision-making. Creativity centers hold a position at the other end of the spectrum where play, visualization, and out-of-the-box activities create lateral shifts in thinking. Collaboration centers hold the middle ground, making a nod to both the need for creative thinking and access to strategic models and operational information.

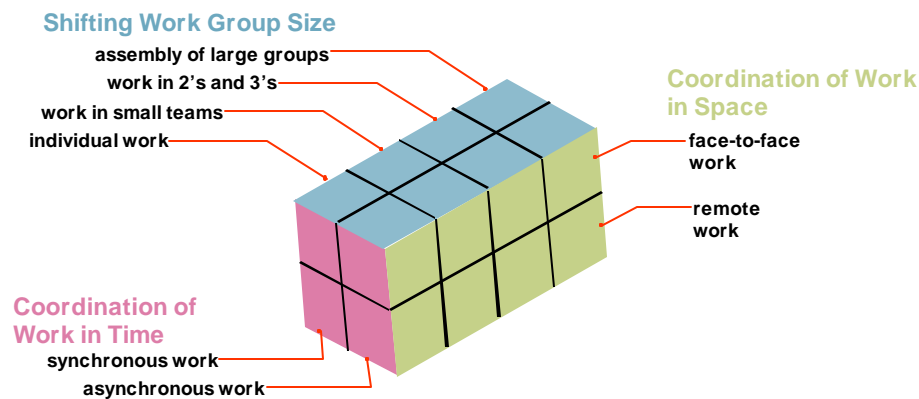
All of these examples are more or less removed from daily business activity and furthermore, their cost restricts access to only the upper echelons of senior management. New thinking in the field talks about combining these three approaches into a single capability that provides a team with soup-to-nuts services, but many of these approaches still rely upon expensive environments separated from daily work. Most of them also require dedicated teams to man-

age them. This approach to combination defeats attempts to provide distributed access to creativity, collaboration, operational, and strategic management tools across the organization.

A part of every organization's work is transactional in nature and a part is strategic. Between these two lies a realm of exception management and problem solving. In some firms, people who work in this realm are allowed to make strategic level decisions and in other firms, they are limited to the tactical level. Regardless, they find themselves in need of technologies, processes and work places that support a high-intensity, edge-of-chaos type workstyle. The solutions that are available, usually go only to the senior management team. Other, more affordable solutions can only be found piecemeal. Furniture manufacturers, interior designers, process consultants, creativity gurus, technology companies each solve a piece of the puzzle and some overlap with each other, but no one offers a comprehensive approach.

Seven Basic Design Criteria

In order to provide a more comprehensive approach, InnovationLabs has identified the following design criteria, based upon the nature of the work above the purely transactional level. There are seven basic capabilities that must be provided for. The first three form a matrix—shown below—of various requirements that



any creative, collaborative, operational management space must be flexible enough to meet in an instant, on demand.

Shifting Work Group Size

Individuals are usually first to identify challenges facing a business on the operational or strategic level. If the challenge won't yield readily to immediate resolution, the individual will likely engage others to assist. From that point on, the size of the project team will vary from only a single individual to small teams of two or three, to solution teams of four to ten. Occasionally, a larger group of stakeholders must be assembled in order to coordinate actions and bring certain aspects of the project in-sync (like rollout of solutions, or development of lateral thinking-style options).

Coordination of Work in Space

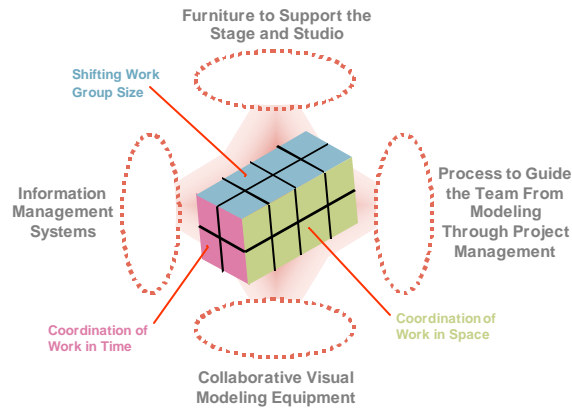
The digitization of companies may eventually replace the need for physical face-to-face interaction but for the time being, it simply adds options for the collaborative setting. Nearly all teams will include members who need to collaborate virtually during a project. Complex projects with many team members should be supported with ready access to facilities that support virtual interaction and face-to-face interaction

Coordination of Work in Time

Sometimes people work together on an issue in meetings (face-to-face and/or virtually). The rest of the time, they work asynchronously and communicate their results via voice mail, email, fax, database, or routing of physical files. In the quest for a resolution to a complex challenge, teams should be able to decide upon the mode they need to use.

Adding Capability to the Matrix

From within any position on the matrix just described, team members must be supported by ready access to four capabilities, described below. Work teams should not have to leave their floor or building, fight for scheduling, or waste inordinate amounts of time assembling furniture and equipment as they shift positions in the matrix. In particular, Rapid Insight events should not be manacled by the physical environment as people move from individual work to team work to large group assembly and back again in either a synchronous or asynchronous manner. Today's environments should be requisite with today's problem solving techniques.



Collaborative Visual Modeling Equipment

Every individual, team or large group needs to have ready access to three types of vertical surfaces: surfaces for sketching, displays for communication and computation, and surfaces for posting of large documents or complex images for reference. All of these surfaces can be electronic. Sketching surfaces are commonly marker boards. They require only markers as tools, can easily engage a group in design, and their erasability adds flexibility during the idea formulation stages of a project. Communications and computation displays should handle video conferencing (perhaps through the Internet) and display of files. A marker board is great for brainstorming, but manipulation of information (in spreadsheets, for example) requires a computer display. These displays should also be connected to the company's or work group's dashboards, intranets, and operational data so that no time is wasted when a team is at work and needs information.

Surfaces for posting are useful when a quantity of information is required as an adjunct to work on either of the other surfaces or when some information is too large to be viewed comfortably on a computer screen. Even a very large monitor is inadequate to reveal the overall pattern of a complex Gantt chart or process flow diagram.

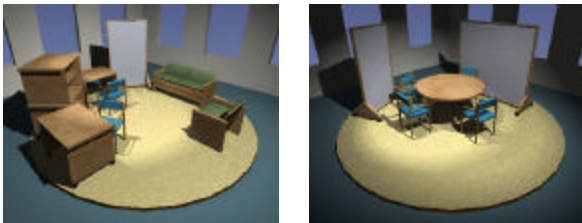
Furniture to Support the Stage and Studio

Stages are places for teams and large groups to work in. They're more than assembly areas, however. They should provide the teams and individuals with the ability to work together, to keep their computers connected to one another and the various display surfaces, and to parallel process on individual work while in large group mode. The U-shaped table configuration is inadequate to the demands of a dynamic session and so are the traditional theater-style and classroom set-



ups.

Studios are places for individuals, pairs and trios to work. A group of forty individuals ought to be able to move from a stage setting to a studio setting of teams and individuals in a matter of minutes so that no intellectual or creative momentum need be lost. Both studios and stages ought to have access to visual modeling equipment.



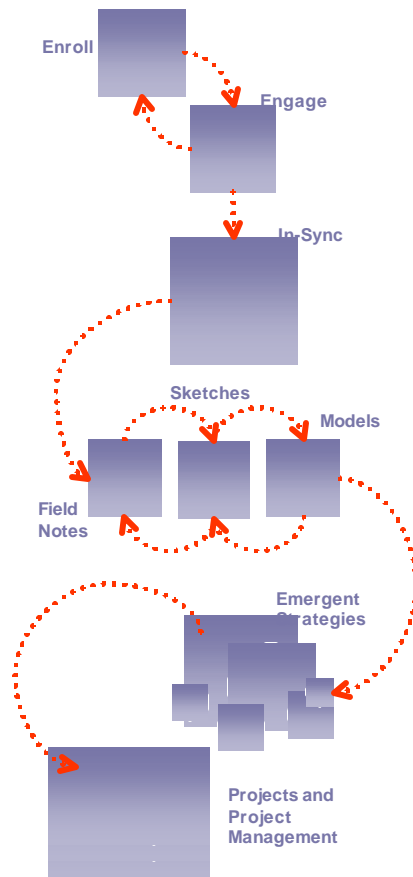
A variety of metaphors are available to aid in the design of studios and stages, beginning with these two titles. Studios are places where artists create things. All of their tools are available and the space is organized (in highly individualistic ways) to support all phases of the creative process. Stages are places where actors, directors, audiences and stage hands assemble to bring stories to life by creating simulated environments. For other lateral ways of thinking about collaborative work places, think about laboratories, work benches, workshops, and exchanges.

A Process To Guide the Team From Modeling to Project Management

Organizations should be trained in and have access to a range of process-oriented tools. InnovationLabs' model is based on its Strategic Modeling™ practice. It begins with helping individuals and teams assemble visual, verbal and quantitative models of the system in

focus. These models explain how the system works, and how it's configured. They also reveal insight into how the system can be improved, innovated, or recreated. Once the best model or model set emerges, the team can use it to discover and articulate a set of viable strategies. One or several of these are converted to plans and the plans are then managed as projects.

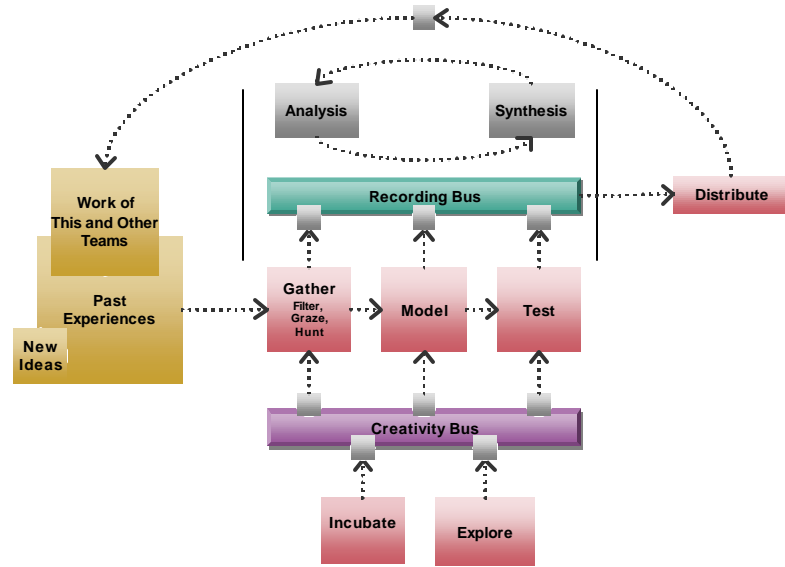
The work team should choose to use some process for following the path from idea to action, and not leave the design process to an unconscious application of past experience—most of which were invented long before the digital economy and all of its trappings of speed and reliance on intellectual capital became a reality.



*Model of the Strategic Modeling Process
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Information Management System

Given the increasing presence of technology in corporations, the influence of statistical quality control, the phenomenon of the networked economy and the digitization of work and work processes, it's surprising how little operational information and research is available to work teams to assist them in understanding, modeling and responding to complex challenges. Beyond such operational and strategic information, teams need help in managing the ideas, plans and project management information that they generate in the course of problem resolution or system innovation. Group decision support software falls into this category.



Model of the Collaborative Information Management System
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The Opportunity

Many companies employ complex systems to design the space and manage the processes by which individuals and teams conduct the transactional or repetitive design work of the firm. And some provide advanced tools for use at the senior management level.

Individuals other than senior managers typically rely upon the meeting rooms as crucibles for generating creative solutions to complex challenges. The prodigious creative powers of the human mind mask the handicap that traditional offices create for knowledge workers. There's nothing wrong with having meeting space, but whereas many companies differentiate themselves by their processes, factory and plant designs, products and brands, their work spaces remain relatively uniform. If the metaphor for knowledge work in the 21st century is an organic one that thrives on the unsettled edge of chaos, it remains unacknow-

ledged in most corporate office designs. If creative thinking and strategizing are indeed crucial to the continued success of a company, and if the physical environment plays any role at all, is it then not reasonable for an organization to seek a competitive advantage in the way that its associates create, strategize and learn? And is the built environment mute on this issue, or can it play a larger role? Can a space incite and support the need to create? Can it provide a refuge that systematically cultivates individual and collective insight?

In addition to the concepts, tools and methods described here, InnovationLabs has developed and offers detailed approaches concerning the management of R&D and innovation in both technical and non-technical settings. Additional White Papers on related topics, and more information on our services may be found on our web site, www.innovationlabs.com

