

Knoll Workplace Research

Shaping the Dynamic Workplace

An Overview of Recent Knoll Research

The Knoll logo is located in the bottom right corner of the page. It consists of the word "Knoll" in a bold, orange, sans-serif font. The background of the entire page is a dark grey gradient with a large, stylized illustration of a modern building with a grid of windows, a winding path, and two human silhouettes walking on the path. The overall aesthetic is clean and professional.

Shaping the Dynamic Workplace

An Overview of Recent Knoll Research

At Knoll our approach to research is grounded in seven decades of working with our clients. We seek to listen, share and apply what we learn to each client engagement. We *listen* to Knoll clients to gain additional insights. We *share* what we learn through publications and presentations. We *apply* what we learn to inform product development and help our customers shape their work environments.

Our research tracks three broad themes:

- ▶ Major drivers changing the way people work
- ▶ The evolving role of the workplace
- ▶ The need for an integrated approach to planning

1. Five Major Drivers Are Changing the Way People Work

Five drivers are rapidly changing the nature of work, including employee demographics, technology, collaboration, workstyle flexibility and choice, and sustainability. These trends affect how work gets done – which in turn will drive significant changes in the way the physical workspace is designed and managed. The trends also highlight how management practices, work policies, technology and physical workspaces will become increasingly interconnected to create a high performing work environment.

Employees come with a wide range of backgrounds



Driver 1: Shifting employee demographics are changing employee expectations. ^{1, 2, 3, 4}

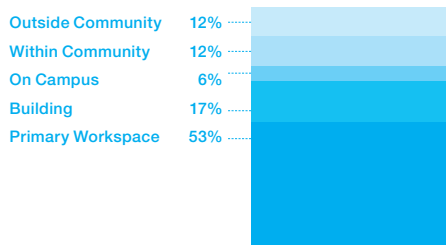
For the first time in US history:

- ▶ Women form the majority of professional workers.
- ▶ Four generations are at work simultaneously.
- ▶ Employees have an ever broadening range of cultural and ethnic backgrounds.

Companies are in a “war for talent” for business success:

- ▶ Key jobs depend on a complex set of skills: problem solving, judgment, listening, data analysis, relationship building, mobility and many forms of formal and informal collaboration.
- ▶ Occupations that require a college degree will account for one-half of new jobs, and one-third of all job openings between 2008 and 2018 (US Bureau of Labor Statistics, 2010).

Work now occurs in a broad range of locations



Driver 2: Technology has enabled employees to work in a wide range of onsite and offsite spaces and locations: ^{1, 5}

- ▶ Almost half all work occurs outside the primary workspace.
- ▶ About a quarter of work happens at other locations in the building or campus.
- ▶ About a quarter of work occurs at other locations within, or outside, the community.
- ▶ This range of locations varies depending on industry.

Collaboration is increasingly seen as the key to business success



Driver 3: Collaboration will increase, even as the breadth of work locations expands: ^{1,6}

- ▶ Social and informal modes of collaboration are predicted to increase by 25% over the next three years.
- ▶ Businesses are leveraging collaboration as the key to innovation.

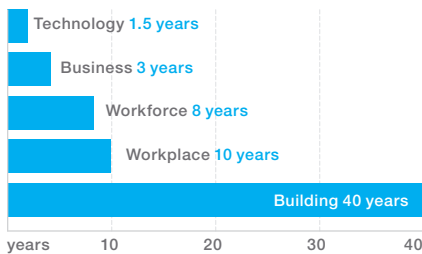
Driver 4: There is a growing need for choice over work location and workstyle: ^{1,7}

- ▶ Organizations are becoming more spatially and organizationally distributed.
- ▶ Work is less concentrated in individual, dedicated workspaces as collaborative activities—virtual and face to face—gain greater significance.
- ▶ In response to these demands and a desire to control costs, distributed work programs offer technology and a variety of workspace types, in a selection of locations that provide employees the choice and flexibility they desire.

Driver 5: The workspace will play an increasing role in sustainability programs ^{1,7}

- ▶ Sustainability has become smart business. Consulting firms are helping organizations analyze their carbon footprints, identify ways to decrease energy use, and realize the tax benefits of sustainability efforts.
- ▶ The future trend will be for companies to re-think where, when and how their employees work. Work programs that provide choice and flexibility can reduce the carbon footprint of employees and other energy-reduction benefits.

Buildings outlive the technology and workforce they are designed to serve



Adapted from Kasion Architecture

The nature of work is changing faster than the work space itself:

- ▶ The lifespan of a typical office space project is about 10 years.
- ▶ The average workforce turnover rate is 8 years.
- ▶ On average, substantial organizational changes occur every 3 years.
- ▶ Technology makes a major shift every 1.5 to 2 years.

Quicklinks to research (click for pdf):

- ¹ *Five Trends that Are Dramatically Changing Work and the Workplace*
- ² *Supporting Generation Y at Work: Implications for Business*
- ³ *Generation Y: Is the "Digital Native" a Myth?*
- ⁴ *A Map for the Emerging Workplace: The Y in the Road*
- ⁵ *Implementing Integrated Work*
- ⁶ *Design for Integrated Work*
- ⁷ *Environmental Control at Work*

2. The Workspace Is Now the Entire Workplace

The way the workspace is used has changed in the past 10 years — driven by demographic trends, wireless technology and resulting mobility, the shift to more informal and formal collaboration, and the complexity of knowledge work. Thus, work that used to occur within the individual work space now happens throughout the entire workplace.

A broad range of goals drive workplace strategy



1. Because of these trends, today's facilities must address a broad range of goals.^{8,9}

From a sample of 45 organizations in 9 industries, we found the top workspace goals span from the tactical, such as “minimize cost” to the strategic, “support innovation.”

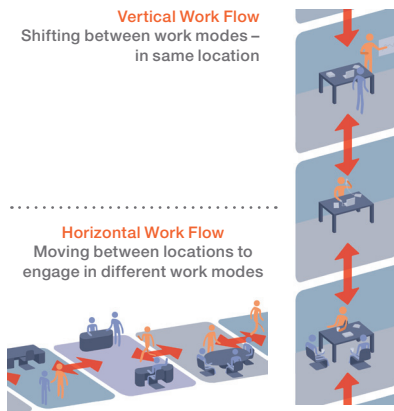
2. Office work occurs in one of three modes: “focus,” “share,” and “team”—and each of these work modes has a large social component.¹⁰

- ▶ **Focus** is a “heads down” individual work mode.
- ▶ **Share** work mode is a short term interaction—a casual exchange of information—between small numbers of people.
- ▶ **Team** mode is formal group work.
- ▶ Daily work includes **social activity**, informal behaviors that provide social connection—and opportunities for learning and mentoring.



Employees must transition between work modes at their desk and between locations

3. People are constantly shifting between these work modes. Furnishings and work space must seamlessly support transitions, between individual and group work modes.^{8,9}



4. There is a “facility disconnect”—collaborative work is viewed as having the biggest impact on business success—but organizations make the least investment in group space.¹⁰

- ▶ “Heads down” work makes an important, but relatively lower contribution to business effectiveness, than collaborative work.
- ▶ While individual spaces will continue to play an important and enduring role, we found an under-investment in collaborative workspaces.

5. Organizations are creating workspaces with greater openness to ease the transition between individual and group work modes.¹¹

- ▶ Furniture elements are being used to define personal boundaries, and manage visual access into the individual workspace. For space planning, furniture elements are used to define work zones and neighborhoods, defining the space and protecting boundaries.
- ▶ Better visual access into workspaces makes it easy to see when people are available for interaction, and thus actually reduces distractions and interruptions.
- ▶ In tandem, the private office is evolving from supporting one person, to being a resource for many people.

6. A variety of agile, casual meeting spaces are being embraced.¹¹

- ▶ Given the importance of collaboration, it is essential to design attractive magnet spaces that draw people together for different types of short term and long term, formal and informal meetings and interactions. Four magnet space settings include:
 - ▶ Impromptu open plan team spaces
 - ▶ Strategy rooms
 - ▶ Think spaces
 - ▶ Communication spaces

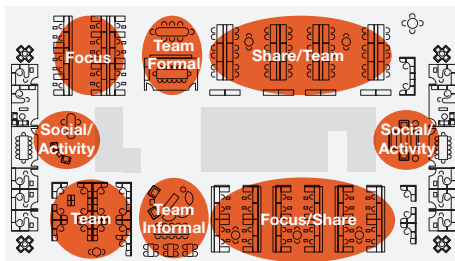
Quicklinks to research (click for pdf):

- ⁸ *Future Work and Work Trends*
- ⁹ *Implementing Integrated Work*
- ¹⁰ *Design for Integrated Work*
- ¹¹ *The Changing Private Office*

3. The Dynamic Workplace Requires an Integrated Approach

Workspace planning, furnishings, technology and workplace policies should support individual and interactive work modes and support the flow of people and work as they shift between modes.

Spaces should be zoned to support different work modes



1. **Proportional planning** can be used to determine the percentages of space that should be allocated to focus, group work, and social interaction.¹³

- ▶ These proportions vary based on the industry, organization, and the specific nature of work performed.
- ▶ Planning must occur at the “macro” scale (the overall layout of space) and the “micro” scale (design and furnishings within the individual workspace).

2. **A successful office plan provides choice:**^{12, 14, 15, 25}

Employees are more productive when given multiple workspace options, (focus, informal and formal group work, social interaction), and a choice of locations, on site or off site.

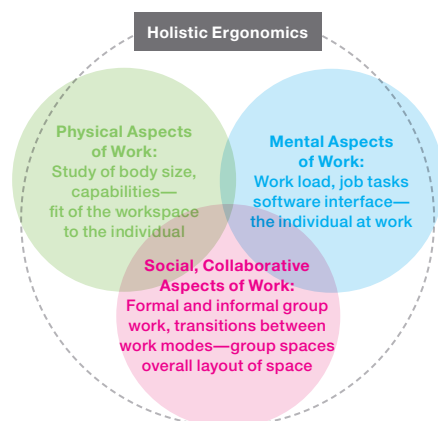
- ▶ A design solution should incorporate the right combination of informal and formal meeting spaces, furnishings and workplace policies that enhance choice.
- ▶ Choice can be a way of giving something back to employees who are “losing” private offices.

3. **Furnishings should provide flexibility through a minimal number of elements.**¹²

Design should be timeless both in terms of aesthetics and flexibility that anticipates ongoing change. Knoll products visually relate to each other when used together, and can physically integrate as well.

- ▶ An effective work environment does not require a complex solution.
- ▶ From a standard, minimum kit of parts, Knoll products can be combined to provide a customized solution to support private through public spaces, and any type of individual or group workspace.

Holistic ergonomics takes a broad perspective on work



4. **Holistic ergonomics recognizes that the physical, mental and social dimensions of work must be addressed together for a successful workplace solution.**^{16, 17, 18, 19, 20, 21, 22, 23}

- ▶ Office ergonomics remains a top priority for many companies and forward thinking ergonomists embrace the holistic perspective.
- ▶ Holistic ergonomics includes traditional concerns (preventing injuries to individuals in their workstation—the “micro” work environment), but expands to include the shift to more open spaces, issues such as group work, group spaces, employee retention and productivity, and ergonomics issues for a variety of place types (the “macro” work environment).

Quicklinks to research (click for pdf):

- ¹² *What to Consider When Planning With Antenna Workspaces*
- ¹³ *Proportional Planning for the Adaptable Workplace*

- ¹⁴ *A Model of Environmental Control and Effective Work*
- ¹⁵ *Managing the Transition to Antenna Workspaces*
- ¹⁶ *Holistic Ergonomics for the Evolving Nature of Work*
- ¹⁷ *Holistic Ergonomics – A New Approach*
- ¹⁸ *A New Way of Thinking about Seating*
- ¹⁹ *The Future of Ergonomic Office Seating*
- ²⁰ *New Ergonomics Standard Released: ANSI/HFES 100–2007*
- ²¹ *Open Plan and Enclosed Private Offices*
- ²² *Ergonomics for Healthcare Environments*
- ²³ *Research Case Study: Design for Learning Spaces in Higher Education*

Managing Change Is Key to a Successful Project

A plan is required to successfully manage employee transitions. The need is especially pronounced when a move involves significant change: eliminating or reducing private offices, reducing workstation enclosure or footprint, lowering internal horizons, etc.

Some considerations for managing change include:

1. Consider the “big picture” ²⁴

A successful design project must consider other issues which affect employee performance such as rewards, job tasks, work policies and technology. The workspace design, itself, is one element of the solution—it is not an end in itself. ²⁵

2. Anticipate conflicting perspectives ²⁴

When implementing a design or creating standards, clients should think about how their solution will be perceived by different constituents and potential reactions.

3. Communicate intentions ^{24, 25}

Clients should create a communication plan that includes the project goals and rationale, project logistics, and audience. The start of planning may also include a change readiness assessment.

Quicklinks to research (click for pdf):

²⁴ *What to Consider when Shifting from Private Offices to an Open Plan*

²⁵ *Rules for Etiquette in the Open Office*

Notes from Knoll Research Papers

- ¹ Ouye, J. (2011). Five Trends that Are Dramatically Changing Work and the Workplace. White Paper, Knoll, Inc., New York, NY.
- ² O’Neill, M. (2010). Supporting Generation Y at Work: Implications for Business. Topic Brief, Knoll, Inc., New York, NY.
- ³ O’Neill, M. (2010). Generation Y: Is the “Digital Native” a Myth? Topic Brief, Knoll, Inc., New York, NY.
- ⁴ Wymer, T. (2007). A Map for the Emerging Workplace: The Y in the Road. White Paper, Knoll, Inc., New York, NY.
- ⁵ O’Neill, M. and Wymer, T. (2010). Implementing Integrated Work. White Paper, Knoll, Inc., New York, NY.

- ⁶ O'Neill, M. and Wymer, T. (2009). Design for Integrated Work. White Paper, Knoll, Inc., New York, NY.
- ⁷ O'Neill, M. (2008). Environmental Control at Work. Topic Brief, Knoll, Inc., New York, NY.
- ⁸ O'Neill, M. (2009). Future Work and Work Trends. White Paper, Knoll, Inc., New York, NY.
- ⁹ O'Neill, M. and Wymer, T. (2010). Implementing Integrated Work. Topic Brief, Knoll, Inc., New York, NY.
- ¹⁰ O'Neill, M. and Wymer, T. (2009). Design for Integrated Work. White Paper, Knoll, Inc., New York, NY.
- ¹¹ Wymer, T. (2010). The Changing Private Office. White Paper, Knoll, Inc., New York, NY.
- ¹² O'Neill, M. (2011). What to Consider When Planning With Antenna Workspaces. Topic Brief, Knoll, Inc., New York, NY.
- ¹³ Wymer, T. (2010). Proportional Planning for the Adaptable Workplace. White Paper, Knoll, Inc., New York, NY.
- ¹⁴ O'Neill, M. (2010). A Model of Environmental Control and Effective Work. *Facilities*, 28(3/4), 118-136.
- ¹⁵ O'Neill, M. (2011). Managing the Transition to Antenna Workspaces. Topic Brief, Knoll, Inc., New York.
- ¹⁶ O'Neill, M. and Albin, T. (2011). Holistic Ergonomics for the Evolving Nature of Work. White Paper, Knoll, Inc., New York, NY.
- ¹⁷ O'Neill, M. (2008). Holistic Ergonomics—A New Approach. Topic Brief, Knoll, Inc., New York, NY.
- ¹⁸ O'Neill, M. (2010). A New Way of Thinking about Seating. Topic Brief, Knoll, Inc., New York, NY.
- ¹⁹ Springer, T. (2009). The Future of Ergonomic Office Seating. White Paper, Knoll, Inc., New York, NY.
- ²⁰ O'Neill, M. (2008). New Ergonomics Standard Released: ANSI/HFES 100–2007. Topic Brief, Knoll, Inc., New York, NY.
- ²¹ O'Neill, M. (2008). Open Plan and Enclosed Private Offices. White Paper, Knoll, Inc., New York, NY.
- ²² Springer, T. (2009). Ergonomics for Healthcare Environments. White Paper, Knoll, Inc., New York, NY.
- ²³ O'Neill, M. (2009). Research Case Study: Design for Learning Spaces in Higher Education. White Paper, Knoll, Inc., New York, NY.
- ²⁴ O'Neill, M. (2011). What to Consider When Shifting from Private Offices to an Open Plan. White Paper, Knoll, Inc., New York, NY.
- ²⁵ O'Neill, M. (2010). Rules for Etiquette in the Open Office. Topic Brief. Knoll, Inc., New York, NY.