DEGW Report The Impact of Change
DEGW is a leading strategic design consultancy, operating from twelve offices in Europe, Asia Pacific and North America. DEGW understands the changing nature of work at every scale from the workplace to the city. DEGW’s knowledge helps clients use space more productively over time, to enhance organisational performance and to future-proof their projects. DEGW’s focus is on ‘design for change’.

DEGW provided Haworth with a forecast to the future workspace and the Haworth Product Development Team designed AllWays™ around the future space.
The impact of change

DEGW has been exploring workplace innovation with commercial and public sector clients from around the world for over thirty years. During that time the challenges clients face, and the workplace responses to them, have changed enormously.

DEGW, as workplace strategists, are witness to the struggles that our clients face in identifying the nature and direction of change in their markets. Whereas once organisational growth followed predictable and carefully charted product and process development strategies, rapidly changing technology and increasingly sophisticated competition makes the future less easy to ascertain. The volatility and uncertainty, characteristic of the new millennium, limit corporate strategic planning to the short and medium term. Furthermore, we are seeing businesses becoming increasingly complex; evolving away from “straight line transactional” processes to become dependent on multi-lateral relationships with clients and suppliers. This phenomenon induces yet more uncertainty, exposing organisations to increasingly remote market forces. Change is becoming the norm and we are living in a time of continuous flux.

These changes have profoundly affected the workplace. In the eighties, office automation was the dominant driver of change. In the nineties, competitive advantage through cost containment became the dominant consideration. In the new millennium, globalised commerce has transcended geographic and political boundaries. Simultaneously technology has enabled mobility and information exchange on an unprecedented scale. Collectively these changes are characteristic of the knowledge economy.

The dominant characteristic of “knowledge work”, which now accounts for approximately 60% of GDP in North America, in the new economic environment is the increased demand for innovation, knowledge sharing and speed to market. In our role as workplace strategists, DEGW perceives collaboration and interaction as the fundamental hallmarks of organisations who are successfully responding to these changing market conditions. The age of the individual working in “splendid isolation” is rapidly disappearing (see Figure 1).

Our conclusion from observing these shifts is that the workplace must change if it is to continue to support the modern organisation. Research by DEGW across the globe indicates that time spent by individuals at the desk is declining. On average, individuals in most organisations are only spending between 35-40% of their time at the desk (see Figure 2). Increasingly, people are spending more time undertaking team and project work (see Figure 3). Staff are working longer / different hours and with ever increasing mobility. There is a significant shift to activity-based rather than hierarchically-allocated worksettings. We perceive an increasing need for workplace diversity and worksetting choice. Rapid deployment of resources is essential and the increasing involvement of partners and external collaborators is making workplace populations volatile. At the same time, unrelenting cost pressures are increasing the need to monitor workplace efficiency and effectiveness on an ongoing basis to optimise support of the business within acceptable financial parameters. However cost in this context is not just capital cost or cost of occupancy. Cost and ease of workplace reconfigurations (churn) are becoming increasingly important. The average cost of moving a fixed workstation has been estimated at around USD$2000–4000. Many businesses have an annual churn rate of 50%. Throughout, there is a growing recognition amongst our clients that workplace needs to be a business tool, not just a container of activities. A recent CoreNet Global survey of corporate real estate professionals indicated that over 90% of respondents believe the workplace can have at least a moderate influence on business drivers. Similarly, a Colliers International Office Tenant survey found that 91% of tenants believe that workplace design impacts on their business success.

Figure 1: Changing work patterns, Source: DEGW

<table>
<thead>
<tr>
<th>Conventional Working</th>
<th>New Way of Working</th>
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</thead>
<tbody>
<tr>
<td>• Routine processes</td>
<td>• Creative knowledge work</td>
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<tr>
<td>• Individual tasks</td>
<td>• Groups, teams, projects</td>
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<tr>
<td>• Isolated work</td>
<td>• Interactive, parallel working</td>
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5 Colliers International. 2006. Office Tenant Survey
DEGW Research in multiple client sites across the globe has indicated that individual time spent at the desk, and time spent generally in the workplace is declining. Whereas once “office work” was predominantly process work undertaken at individual worksettings, the workplace today is as much mobile / collaborative working as it is individual, and this trend is predicted to increase.

![Figure 2: Activities in workspaces](image)

Professionals anticipate that compared to today, by 2010 the following shifts will occur in the types of spaces where staff work. From CoreNet Global & DEGW (2006). CoreNet Corporate Real Estate 2010 Survey: Australia and New Zealand.
Notwithstanding that the future is becoming increasingly difficult to predict, certain trends are apparent to us. Process-based work will continue to decline. As a result, “standardised” workplaces will evolve into dynamic environments with a range of different worksetting types, permitting greater expression of corporate culture and personality in workspace design. Workplace mobility will simultaneously increase and decrease. Within the office and proximate localities, mobility will increase as technology provides greater sophistication and security of wireless networks. People will choose to work in settings that best support their workstyle, be this outside the office at the local café or within the office at various workplace settings. Mobility will decrease at the same time as the increasing sophistication of digital transmission enables translational collaboration via videoconferencing of a quality, reliability, and cost that is currently unavailable. This, and the increasing concern about sustainability, will mitigate the current reliance on physical travel. Advances in information technology and knowledge management, and the impact of generational change, will also significantly alter attitudes to hard copy storage (although the “paperless environment” will continue to elude us). The current shift from individual space to collaborative and interactive space will continue, albeit with a reduced space requirement as increasing mobility enables “anywhere, anytime” working.

In this context, traditional approaches to workplace will start to lose relevance. The emphasis on individual space and traditional worksettings that reinforce “old” process-based ways of working will diminish. Status and hierarchy based worksetting allocations, which impede the rapid deployment of teams and collaboration, are not sustainable in the new economy. It will be increasingly recognised that interconnected desking systems prevent diversity and choice, impeding the provision of activity-based settings. Business is no longer “one size fits all.”

In their place, a “new generation” workplace system will emerge. A broad number of configurations will provide diversity and choice with minimum componentry (and an inventory of “spares”). Desking systems will have variable capacity to accommodate rapid changes in workplace populations and will incorporate rapid and easy reconfigurability. Worksetting footprints will reduce in size. The need for extensive cable ducting through furniture components will reduce, although integrated services docking points will continue to be required. Storage systems will become modular, achieving a high degree of flexibility and interchangeability. Constant re-arrangement of worksettings will require robust, durable engineering, materials and finishes, capable of easy user rearrangement with a minimum of spare componentry.

Organisations recognise the importance of flexibility and are increasingly willing to pay for it. A recent CoreNet Global Survey highlighted that approximately 40% of respondents believe that by 2010 their organisations will be willing to pay a premium over 5% for flexible workplace design. The workplaces that incorporate a ‘new generation’ approach to worksettings will be highly distinctive and in demand. They will at once be highly efficient and functional, capable of rapid re-arrangement to respond to changing business demand, and at the same time will express the values and culture of the organisations they support.

Just as the physical workplace environment will need to change, so too will the way in which the workplace is used and managed. Individual space ownership will need to make way for more communal and shared approaches. Furthermore, people will need to think differently about the role of the workplace in supporting their businesses. The traditional view of workplace has been an entirely static one. Once installation is complete, settings are rarely changed, often not until the building lease expires and the organisation moves. In service use can be as long as 10–15 years without any adjustment to the workplace configuration, particularly in open workstation areas. This is inconsistent with the pace of change within businesses and the markets they serve. In an age where key performance indicators are extensively utilised to measure business performance, it is an anomaly that workplace performance is not similarly assessed. Were this to take place, it is highly likely that the need to regularly adjust the workplace would be revealed. Such adjustment could include the range of worksettings provided, their quantity and location, their configuration, the services the incorporate and the functions they serve. This will place additional demands on the versatility and adaptability of workplace systems.

It is clear to us that generational change in the attitude to and use of workplace is occurring and that the pace of such change will accelerate. Flexibility and adaptability will be the hallmarks of the new environments, not only in the design of the elements that comprise the workplace but also in attitudes to how they are managed. This will be a significant shift from the static infrastructure that has dominated workplace for the past 100 years.
The most common form of workstation typology in traditional process-based workplaces has been the orthogonal “cellular” workstation. This setting typically comprises a pair of worksurfaces arrayed at 90 degrees to each other, bounded by screen panels on two sides. The worksurfaces may be freestanding but are more commonly supported from the screens for economy of structure and to minimise below-desk obstructions. These types of workstations are best suited to individual work, with a good sense of enclosure (depending upon screen panel height). They provide a regular desking infrastructure with defined individual workpoints in an orthogonal array that maximises workspace density whilst providing maximum desktop area and integrated storage and services.

The “new cellular” workstation preserves the 90 degree configuration and the worksurface and screen elements but provides them as freestanding elements, with the worksurfaces capable of being mobile.

Applications:
- High density, low volatility, medium flexibility
- Caters for individual or small team work
- Capable of significant storage capacity at the workpoint
- Capable of affording individual privacy

Key attributes:
- Central spine provides desktop support with integrated services reticulation
- A variety of options for privacy / acoustic attenuation screens at varying heights / lengths / locations
- Engaged desktops supported off central spine to minimise below-desk infrastructure
- Option for freestanding (mobile) desktops, with services umbilical to main spine
- Height adjustability to all primary worksurfaces
- A variety of storage components located within desktop footprint – suspended files, lateral files, binders and books
- Ergonomic height adjustability to all primary worksurfaces
- Height adjustability for self-levelling
- Ability to vary finishes materials and colors
- Minimum of operable parts / components
- User operability

Desirable attributes:
- Variable workstation footprint width in a ganged array
- Spine can be freestanding (i.e. independent of side screens or desktops)
The bench workstation has evolved to respond to the need for variable capacity workspaces by removing the side boundaries between workstations. The resultant long rectangular worksurface can then be used by a variable number of people by varying the distance between them. It can also be used for a variety of tasks (e.g. layout, project work, collaborative work). The below-desk structure is important to achieving this objective, as perimeter legs will prevent the occupancy from being varied. In early applications this meant a large fixed structure, often bolted to the floor, which, whilst it accommodates a variable number of people, was in itself inherently inflexible.

The “new bench” workstation achieves the unobstructed benching but is assembled using modular worksurfaces with an offset supporting structure. This provides the dual advantages of population variability and locational flexibility.

Applications:
- Highly variable density, moderate volatility, low flexibility
- Caters for individual or group team work
- Minimal storage capacity at the workpoint
- Minimal individual privacy

Key attributes:
- Services reticulation integrated in desking
- Variable definition of individual workspace: can accommodate extremely high or very low density by varying linear desktop allocations
- Inboard desktop structure allows variable workspace definition – no perimeter support structure to define seating positions
- Storage components are freestanding or mobile
- Acoustic / visual privacy capability through desktop screening
- Capability for ergonomic task-based adjustment
- Height adjustability for self-levelling
- Ability to vary finishes materials and colors
- Minimum of operable parts / components

Desirable attributes:
- Capability to reconfigure desktops to other applications (i.e. convert from benching to cellular or mobile / freestanding)
The mobile workstation, evolved from the cellular approach, is completely comprised of free standing elements, including the screen panels, which enables highly flexible user desk orientations. As such, it provides a desking solution that can be arrayed by users as individual units or grouped in a wide variety of combinations and configurations.

The “new mobile” workstation incorporates worksurface and other elements that are interchangeable with other configurations, allowing them to be used in cellular or benching applications.

**Applications:**
- Variable density, high volatility, high flexibility
- Caters for individual or group team work (by aggregating individual workpoints)
- Capable of varying storage capacity at the workpoint
- Moderate individual privacy (freestanding screens reduce density)
- Desk orientations flexibility (mobile desks plugged to power and data at varying orientations)

**Key attributes:**
- Central spine provides integrated services and cable reticulation
- Individual workspace is defined but is highly flexible – desks orientations are defined by user
- Some flexibility in density from moderate to low
- Mobility offers maximum choice in configurations
- Storage components are mobile - capacity can be varied
- Acoustic / visual privacy capability through mobile screening
- Capability for ergonomic task-based height adjustment
- Height adjustability for self-leveling
- Ability to vary finishes materials and colors
- Minimum of operable parts / components
- User operability

**Desirable attributes:**
- Maximum diversity in user defined configuration achieved with a minimum number of components
- Connection to power and data services while maintaining mobility and flexibility in desk orientation
- Capability of conversion to cellular / bench applications
The freestanding workstation evolved from the cellular approach by providing all elements, including the screen panels, as free-standing elements. As such, it provides a desksing solution that can be arrayed by users as individual units or grouped in a wide variety of combinations and configurations.

The “new freestanding” workstation incorporates worksurface and other elements that are interchangeable with other configurations, allowing them to be used in cellular or benching applications.

Applications:
– Variable density, high volatility, high flexibility
– Caters for individual or group team work (by aggregating individual workpoints)
– Capable of varying storage capacity at the workpoint
– Moderate individual privacy (freestanding screens reduce density)

Key attributes:
– Independent (umbilical) services reticulation
– Individual workspace is defined but is highly flexible in how it is arrayed: some flexibility in density from moderate to low
– Mobility offers maximum choice in configurations
– Storage components are freestanding – capacity can be varied
– Acoustic / visual privacy capability through freestanding screening
– Capability for ergonomic task-based adjustment
– Height adjustability for self-levelling
– Ability to vary finishes materials and colors
– Minimum of operable parts / components

Desirable attributes:
– Maximum diversity in configuration and aesthetics achieved with a minimum number of components
– Capability of conversion to cellular / bench applications
Workstation storage elements traditionally have been configured as stand alone elements, sometimes designed to suit a variety of media but usually only efficiently accommodating one.

The “new storage” will be modular and convertible, not only housing different media but capable of being integrated with other workstation elements and cable reticulation. Alternatively they can be configured as stand alone elements.

This approach has a number of significant advantages. Storage elements can be created or broken down within the workstation footprint. When not required, they can be packed flat and stored for later redeployment. An inventory of spares can also be maintained to provide “on demand” storage for project work or other short-term uses.

The storage spine workstation incorporates worksurface and other elements that are interchangeable with new freestanding configuration.

Applications:
- Medium density, medium volatility, high flexibility
- Caters for individual or small team work
- Capable of varying storage to very high capacity at the workpoint
- Capable of affording individual privacy (using storage elements)

Key attributes:
- Storage components are modular and capacity be varied in accordance to need
- Worksurfaces are supported from central storage spine to minimize underdesk structure
- Storage spine provide lateral cable reticulation and vertically to other elements
- Acoustic / visual privacy capability through storage elements
- Height adjustability for self-levelling
- Ability to vary finishes materials and colors
- Minimum of operable parts / components

Desirable attributes:
- Maximum diversity in configuration and storage capacity achieved with a minimum number of components
- Capability of conversion to new freestanding application