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Comment

This issue of Work&Place bookends with the previous edition which was published ahead of the IFMA Foundation Workplace Strategy Summit which took place in Berkshire, just outside London, in June. Not only does this give us a chance to explore in more depth the themes that defined the summit – an event that was a great success in terms of numbers and the quality of the content, speakers and attendees – we are also able to look back and assess the conference.

So it's right that this issue kicks off with the inestimable **Ian Ellison**'s review of the conference. His summary of the content not only gives an overview of the ideas and information that were explored, but also raises important questions about what they lead on to. It is one of the features and strengths of the workplace scene that every hill and mountain scaled only reveals a new vista. There is no final destination, just stopping points on a long and fruitful journey.

Jim Ware of Occupiers Journal identifies one of these stopping points in his case study of workplace transformation NEF as intriguingly described by the firm's CEO. Not only does this tie in the supposedly parochial issue of facilities design and management to wider business objectives, it also allows those of us on the inside of the sector to share the thoughts of somebody with a different perspective.

These wider organisational concerns are also evident in other features in this issue. **Agustin Chavez** and **Laurie Aznavoorian** consider how the workplace can help firms meet their objectives with regard to that thorny, evolving and very modern issue of how to manage knowledge. **David Karpook** meanwhile characterises the role of the facilities manager as akin to that of a stage manager, creating the setting in which the main action of the organisation can play out.

Wim Pullen explores the way different generations of workers respond to specific features of the workplace and challenges stereotypes and assumptions about the kinds of spaces we must create to meet the demands of a multi-generational workforce.

Elsewhere, **Erik Jaspers** picks up one of the themes from the last issue by considering how modern workers are colonising the urban environment and the consequences for both organisations and city planners. While **Pawel Lenart** and **Dominika Kowalska** report on how one specific country – Poland – has seen a transformation in the way it creates and uses workplaces over the past 20 years. Finally, on related themes **Nancy Sanquist** explains how IFMA is driving the agenda on urban FM and **Charles Marks** looks at how the UK's regions are looking to capitalise on the smart cities movement.

You can now join the discussion, with the **Work&Place** contributors, and many others. We hope that you will take up this opportunity, to ask questions, challenge the writers, or to make a related point. The link is: http://www.linkedin.com/groups/WORK-PLACE-Occupiers-Journal-4460089

We look forward to hearing from you!

Mark Eltringham
Managing Editor
@WorkAndPlace

Scope

Event review

Ian Ellison reviews the IFMA Workplace Strategy Summit, which took place in June at the Wokefield Park Conference Centre in Berkshire

On June 10th I found myself with the privileged 'final word' at the IFMA Foundation's Workplace Strategy Summit 2014, having been invited to offer closing remarks at the conference. It was an exciting, humbling experience, given the workplace heavyweights in the room. This is a re-working of my closing remarks.

As part of the introduction, Alexi Marmot, of AMA and UCL called for "a bit more breadth with a bit more depth", with concerted peer-to-peer exchange. This aspiration was embodied at the conference dinner and breakfast tables. With attendees from Europe, North America and beyond, some began to reflect on the impact that different surroundings can have to help powerfully reframe perspectives. This was food for thought for an industry striving to demonstrate the value of its organisational contribution.

"We know about zero"... Frank Becker

Keynote Franklin Becker, of Cornell University, was keen to provoke debate about workplace data and innovation. Despite many anecdotes, stories and hype, we still have little actual workplace performance data. Or as Frank put it, "we know about zero."

Bold words indeed, in a world obsessed with workplace productivity. Could we commit, mused Frank, to ditching the 'P' word and thinking more creatively about data, including its value as an educational rather than performance measurement tool? To really make headway might involve
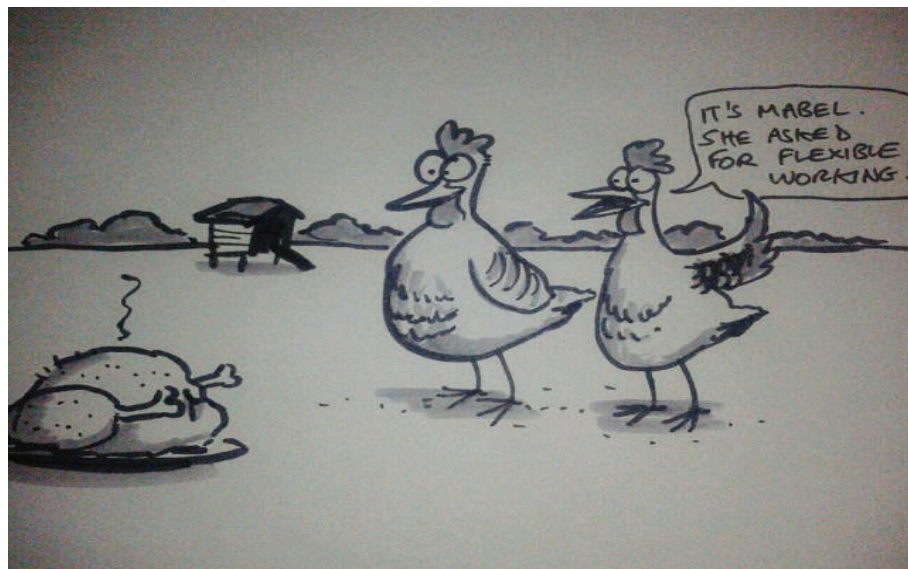
specific, practice-based research "not instead of, but in addition to" more traditional research models. Businesses are calling for practical, timely "good enough" research; "quick and not-so-dirty", perhaps? This is easy, to say, for an established FM academic with a bookshelf of publications spanning four decades. But it is a relevant point. In a world where knowledge creation and exchange can happen faster than ever (Simon Heath's illustration was doodled at his kitchen table in response to an analogy that I tweeted) what is the genuine, pragmatic value of the traditional rules of research? For Becker, timely "white paper" output has more genuine utility than peer-reviewed publications. So how do we simultaneously play the rules of different games?

"The irony of persistent place" ... Ziona Strelitz

Ziona Strelitz, founder of ZZA, invited us to consider "the irony of persistent place", asking "with the freedom to disconnect from place, why is it that people work where we find them?" A typical 'industry' response to this question would emphasise the value and

purpose of our organisational locations as social hubs. But is this an example of poorly founded rhetoric worth debunking? For Ziona, whilst workplaces might offer community and stimulation, they also afford the preservation of non-workplaces, including our homes, which for some are becoming invaded as "the 'unchosen' workplace". Whilst technology is readily acknowledged to be a great work enabler, we must never lose sight of unintended outcomes.

"Tales of the unexpected within a building" ... Simon Allford

Simon Allford, director at AHMM launched a confident, intellectual wide-ranging diatribe, asserting that at best we recycle the design ideas of the last fifty years with slightly more gloss. "Work is an activity, not somewhere you go? It is. It is somewhere you go to interact with and meet people." And it's not all about crusty Chesterfields and ping-pong tables. It's about thinking about difficult challenges. Perhaps learning is the most important element of this endeavour? We congregate to civilise and engage. Our buildings need to mimic this. Efficiency can

lead us toward the most awful, vanilla solutions. If we are bringing people together we need to create a place where there is something memorable. Space with awkward moments can be used in in creative, delightful ways. You can't design in the unexpected. But you can consider for it, and it certainly isn't about efficiency. The "tales of the unexpected within a building" will afford a creative and productive place. So what would data representing these notions look like? Not actual or perceived productivity measures, I suspect.

"What makes a great place to work?" ... Alexi Marmot

Different speakers considered the role of place from different perspectives, alluding to its value beyond utility and functionality, toward the more nebulous notion of meaning. Is this one way to make a distinction between quantitative space and qualitative place, perhaps? Is this on our agenda? What makes a great place to work? Alexi Marmot observed that the Great Place to Work® Institute recognises pride, camaraderie, credibility, respect and fairness as key attributes to the very best workplaces they are aware of. What of the role of physical space then in this complex socio-spatial milieu?

Hints toward an answer might lie in the 'equation': workspace + culture = workplace. Christina Danielsson, from the Stockholm Stress Research Institute, referenced the enduring legacy of Sweden's 1938 co-determination treaty on Swedish workplaces, where employees have to be, by law, involved in the organisation of their businesses, and a 'win-win' perspective is emphasised.

Wim Pullen, co-founder of the Centre for People and Buildings at Delft, seconded that context and history matter, perhaps both regarding organisational and more personal life events. Just what is the relationship between our innate, human spatial needs and the sorts of spaces we are currently designing? Are we in danger of trying to rewire too much too quickly? What might the intended and unintended outcomes be?

"I am not charismatic. I have wonderful people" Frank Van Messenhove

For many, the highlight was Frank Van Massenhove's cultural case study,

in his role as president of the Belgian Federal Social Security Service. Modestly rebuffing any idea of inspirational leadership, Frank told a story of people rather than space; of a high performing culture enabledthrough its workplace, resulting in a "sexy" public service department with an honest, transparent, collaborative approach. Walking, not just talking a great, desirable place to work, by way of value and mission statements. Where performance metrics followed business outcomes as opposed to driving them myopically, and where his positive, visionary, and downright maverick behaviour took decisive steps, seeking forgiveness rather than asking permission, creating unprecedented performance improvements.

Is this the organisational "cunning" that Boris Johnson talked about recently or something more altruistic? "Get under the radar. Become invisible. Or you kill the creativity of someone else. And then the organisation dies. Steal [workspace ideas] from everyone, but do not copy. You have to change. Changing is like breathing, and if you don't do it, you die."

Frank's story also took the conference back to the reason people seek offices. At the BFSSS, 92% could work from home, yet only 69% chose to. Why? In Belgium, "they come to the office because it is very silent. You must feel at home when you work for an organisation." To step beyond family commitments and focus properly on Simon Allford's "difficult challenges". Clearly, future-orientated workplaces may need to be more than the energetic social hubs some predict. This reminds me of Herman Miller's perspective in 1948, "the ideal working environment being "a daytime living room" that would be welcoming and humane" and a declaration by their first design director in 1930: "the most important thing in the room is not the furniture – it's the people."

So does space transform culture or reflect it? I know what our industry prefers to claim, but what did Winston Churchill say in the 1940s? "We shape our dwellings, and thereafter they shape us."

Personally, it's this interplay between trying to change yet stay the same, which lies at the heart of our challenge to create better workplaces. In the 1970s Anthony Giddens framed this conundrum in terms of structure and agency, which was rather nicely reflected

at the conference by Simon Allford: "the more specialised you are the more you create a set of rules that become your own support network." We are caught between evidence and possibility. What are we going to do about it?

We already have a huge legacy from the likes of Frank Duffy, Frank Becker, Alexi Marmot, Wim Pullen, and Andrew Laing (etc), who have been saying powerful things for a long time. And yet, how many genuinely 'great' workplaces do we have? Is this where the "beyond the workplace conversation" (#BtWC) comes in, courtesy of Chris Kane, CEO of BBC Commercial Projects, et al? Is the time right to create a groundswell of awareness through new conversations about the production and consumption of workplaces? It's about "FM and the language of business. We are all either numbers or words people, but you have to understand what the organisation is about. You have to get over the hump of credibility."

For Marie Puybaraud of Johnson Controls, place and space are finally on the customer agenda. They are listening, demanding and driving collaboration and innovation. So will we finally get beyond dominant customer cost-reduction spatial drivers? We shall see.

As the conference drew to its close, Alexi Marmot offered a captivating, conscientious, humane perspective, gently reminding us of the broader environmental and human-capital challenges surrounding our often insular concerns. For sure, any organisation failing to consider the multiple facets of sustainability and corporate social responsibility for ethically robust reasons will struggle to achieve genuine workplace innovation.

Beyond all of these fascinating perspectives, one stood out for me. Melissa Marsh, of Plastarc, articulated the future of FM in one simple premise. This is not about managing facilities. This is about enabling communities. And as far as I am concerned, that is an aspiration a world away from our current collective capability; from any perspective. The greatest productivity measure of all? Perhaps it's the smiles on people's faces. **W&P**

Ian Ellison[MBA in FM, BSc(Hons), CBIFM, FHEA] is Senior Lecturer in FM; Undergraduate Course LeaderSheffield Hallam University.

Those in the know understand the strategic role of facilities management in the workplace. But how does the message spread beyond the sphere of workplace professionals?

Jim Ware PhD   BUSINESS STRATEGY • CASE STUDY • FACILITIES MANAGEMENT

The strategic workplace: a CEO's perspective

Raise your hand if you agree: "The workplace is obviously a strategic resource." We facilities management professionals know that to be true. But if you often feel like a voice in the wilderness when speaking to anyone other than a fellow FM or workplace professional, you are certainly not alone. For many if not most senior executives, their facilities are a necessary evil that always – always! – cost too much.

That reality frustrates me as much as it does you. So my colleague Paul Carder and I conducted two extensive research projects in 2012 and 2013 aimed at making the case (mostly to FM professionals themselves) that facilities and workplaces are incredibly strategic – and very poorly understood. And while we've gotten lot of positive feedback about our findings and conclusions, we haven't seen much change in mindsets, management practices, or business outcomes.

Maybe we're just naïve optimists, but we believe deeply in the strategic impact that workplace design can have on organizational cultures and bottom-line results.

> **"…Maybe we're just naïve optimists, but we believe deeply in the strategic impact that workplace design can have on organizational cultures and bottom-line results…"**

I am therefore very pleased to be able to report an important story about how a workplace transformation made a major contribution to a new CEO's ability to turn around a struggling financial services company.

Picture this: On the day the company moved into a new – and dramatically redesigned – workplace, two employees bumped into each other in the hallway. One said to the other, "Who are you? Why are you walking around our office?" The other replied, "I work here – I've worked here for several years." They had never seen each other before, even though the company's headquarters office in Chicago, Illinois, is home to only about 115 employees.

Today that company – National Equity Fund (NEF), a nonprofit financial services organization that constructs deals for the funding of affordable housing across the United States – is an industry leader that enjoys low staff turnover, high productivity, and a reputation as a high-energy, compelling place to work. It's characterized by open collaboration and a free-flowing, can-do culture. That encounter between two

"strangers" took place in 2001, right after NEF moved from two floors of a dingy, cramped building to a new, open-office single-floor environment filled with Herman Miller Resolve workstations, lots of conference rooms, and an employee "Back Yard" with bright colours on the walls, a miniature golf course along the window, and a pool table where spirited games enable staff to burn off stress and enjoy each-others' company.

And it all came about because Joe Hagan, NEF's CEO, recognized almost immediately when he joined the company in May 2000 that the office design was completely out of sync with his values and with the culture he knew he needed to build if NEF was to survive.

He said: "The culture I found when I arrived at NEF was really depressing. People were holed up in small cubicles and hard-wall offices. The office was dark and dingy – not a place to show our customers, and not a place that our people wanted to be. They weren't happy – I think they spent most of their time on their computers looking for other jobs."

Ed Simon, Senior Vice President of Information Technology (IT), described his first encounter with Joe:

"I was working on a new core software system for the company. I think he had been with the company about two months and he didn't know who I was – he didn't even know I worked there. We were all in separate offices, so no one really walked around and saw each other. We were all living in our own little silos."

It had become clear that NEF needed a new workplace. GayleneDomer, Vice President of Facilities, took a small team of senior executives (including Joe Hagan) to visit Herman Miller's corporate headquarters in Zeeland, Michigan.

Hagan admits today that the open nature and bright colours of Herman Miller's Resolve® furniture at first turned him off. But GayleneDomer persisted, arguing that a new, open office would bring staff out of the "woodwork" and help to create a collaborative work environment. Over the next year Domer oversaw the design and build-out of a completely

open and totally nonhierarchical office a few blocks down the street. While NEF got a new open office environment where everyone, including Joe Hagan, has the same size workstation, interestingly, the design was developed rather autocratically. It was Hagan and Domer who orchestrated the new design; they only consulted with two other NEF executives as they completed the design (one was Sue Ann Reed, Senior Vice President of Human Resources, and the other was a Senior Vice President of Asset Management). Hagan did not want endless debates; he wanted results – quickly.

Furthermore, Hagan did not allow anyone else to see the new facility until the day the staff moved in. Why the secrecy? Explained Hagan: "Back in 2000 NEF ran by consensus. Everyone wanted to have a say in everything. I needed to completely change how we worked. Before the move we'd have fifteen people in the room for every decision. You can't run a company like that.

> 66 …You need to listen, but ultimately the CEO has to lead. I had to have the staff see what I wanted – so we could build on that sense of direction and move towards a more reasonable collaborative culture… 99

"I had to lead; I had to define where we were going. Yes, you need to listen, but ultimately the CEO has to lead. I had to have the staff see what I wanted – so we could build on that sense of direction and move towards a more reasonable collaborative culture."

He added: "At first I wasn't sure about everyone having the same workstation. But then I realized that since I was accepting a smaller desk that was the same size as everyone else's, no one could complain to me that they deserved or needed anything more than what I had.

"One reason I was willing to be tough about these decisions is that at the time I was out spending a lot of time with our investors renegotiating loans so we could retain enough cash to survive. It was 'do or die' for NEF. If I couldn't pull it off, I was out the door, do I didn't have a lot to lose by endorsing this new office design.

"But I also knew I couldn't make the cultural changes NEF needed without getting us out of that office. Designing the new office somewhat autocratically was a way of signaling 'I'm in charge. This is the way we're going to do things from now on."

Another part of the "new culture" at NEF was that when the staff moved into the new office Hagan wanted everything to be working right from the get-go. That was another signal that things were changing.

That vision meant the Internet access had to be up and running immediately (which in turn put significant stress on Ed Simon and his IT staff – but late at night after a very long three-day weekend right before the actual move-in they got everything hooked up and working).

On the Tuesday after Labor Day 2001 the staff moved in to the new facility. But no one received a floorplan or any directions to their new workstation. Instead, Hagan wanted them to wander around the office in search of their new "home" (and thus be exposed to the entire office). That led to lots of people walking all over the new space, bumping into each other, and meeting some of their colleagues for the first time.

In addition, Hagan insisted that everyone get rid of their boxes from the move within two days. He wanted the place to look (and to be) settled. That was part of the strategy of having a company home that would impress investors, customers, and prospective customers. And it was also about being focused on getting back to business, not wasting time, and being professional.

Joe Hagan had come to NEF from a banking background, and he knew how important appearances are in the financial services industry. As others have often pointed out, success in the financial services industry often depends on creating a self-fulfilling prophecy. A big part of becoming successful is looking successful – even before that's completely true.

In hindsight the 2001 move to a completely new corporate headquarters - characterized by an open office plan, lots of meeting space, a fancy waterfall sculpture in the main lobby, and an employee lounge area with soft seating, a pool table, and a miniature golf course - was a clear strategic success. However, back in 2001 the move had felt like a major risk. But as

Joe Hagan reflected on the decision, he saw it as part of an "all or nothing" effort to transform the company's culture and its bottom line.

And it worked. In his words: "It was completely transformational. I was standing in the lobby greeting people as they came in for the first time. And I could see how impressed and excited they were as they walked around the building. And within a couple of weeks they were bringing their families in to see the new space.

"That's when I knew we were succeeding. They weren't job hunting anymore. They felt good about the space, and that made them feel good about the company."

Now fast-forward to 2014. NEF is getting ready to move once again. Why? The office still looks very much like it did in 2001, and the staff still likes working there. The company continues to be an industry leader; it's not in need of a dramatic turnaround.

But – and this is both obvious and critical – much has changed over the last decade. The last five years have been a very tough time in the financial services sector. The "Great Depression" and the housing debacle have put incredible economic pressure on NEF and its competitors (to say nothing of publicly funded housing). Just as importantly, technology has totally changed the way the company does business and the way its employees communicate with each other and with customers and investors. The current facility was designed before WiFi was common; while there is a wireless network in the building now, it is not particularly robust – there are several known "dead zones" throughout NEF's office.

In addition, with the growth of cloud computing services there isn't the same need for on-site servers and data storage capacity. And since almost everyone has a smart mobile phone and laptop computer today, there isn't the same need for all the staff to be in the office all the time. These new conditions led NEF in 2012 to begin exploring a range of new possibilities for supporting and provisioning its headquarters staff.

The first step in what has become known as "Project CHANGE" was to develop a part-time work-from-home program for some employees. The company conducted a careful analysis of which jobs could be handled at least part-time from employees' homes, what the current commuting patterns were, and what impact a more distributed work pattern would have on core business processes as well as employee attraction, retention, and productivity.

> **"…I was standing in the lobby. And I could see how impressed and excited people were as they walked around. And within a couple of weeks they were bringing their families in to see the new space…"**

To guide that analysis, and to help orchestrate the cultural and management changes central to implementing a work from home program NEF engaged The Future of Work… unlimited and its executive director (the author of this article).

GayleneDomer, Sue Ann Reed (SVP of HR), and Ed Simon (Chief Information Officer), with support from the author, spent about a year collecting data and developing a business case for enabling a whole new way of working at NEF – one that leveraged new IT capabilities and recognized the way the NEF workforce was already beginning to embrace flexible work.

Our analysis suggested that if about one third of the staff worked from home two to three days a week the company

could reduce its office footprint by about 25% - while at the same time upgrading from Class B to Class A real estate and adding a significant number of new conference rooms of varied sizes.

During one executive committee conversation about the proposed move to a smaller but better facility, in combination with an aggressive workforce mobility initiative, Joe Hagan commented "What do we care where someone is when they get their work done? If they meet their goals on time and on budget it really doesn't matter where they are when they do it."

That is clearly not yet a common view among senior business executives; but it reflects Joe Hagan's basic commitment to turning staff loose to make their own decisions about where, when, and how they complete their work – all the while holding them accountable for the results they produce (or do not produce).

The bottom line is that now, in 2014, approximately 40 NEF employees are spending 2-3 days working from home (and the company will be moving to a new, smaller but better facility at the end of August). Employee satisfaction with the new work arrangement is high, the managers of mobile workers are uniformly supportive of the new work environment, and the company expects to save at least $2 million dollars a year in real estate costs. **W&P**

ℹ Jim Ware

James Ware, PhD is a Global Research Director for Occupiers Journal Ltd. He is also the founder and Executive Director of TheFuture of Work…unlimited, and a Partner with TheFutureWork Forum. Jim was a co-author and the lead editor for Cut It Out! Save for Today, Build for Tomorrow, published by the IFMA Foundation in 2009. He also authored the chapter on change management for the recently-completed book Work on the Move: Driving Strategy and Change in Workplaces, also from the IFMA Foundation (October 2011). He holds a PhD, M.A., and B.Sc. degrees from Cornell University and an MBA (With Distinction) from the Harvard Business School..

e   jim.ware@occupiersjournal.com

w   www.occupiersjournal.com

t   @thefutureofwork

References

- Raising the Bar: Enhancing the Strategic Role of Facilities Management, by James Ware and Paul Carder of Occupiers Journal Ltd. for RICS, the Royal Institution of Chartered Surveyors, November, 2012.
- Raising the Bar II: City Roundtables, by James Ware and Paul Carder, Occupiers Journal Ltd, for RICS, the Royal Institution of Chartered Surveyors, February 2014.

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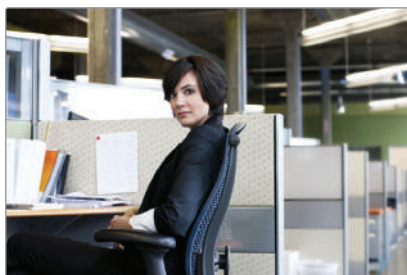
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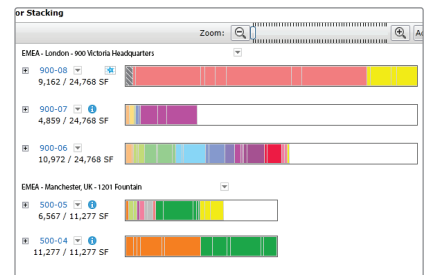
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Agustin Chevez PhD & Laurie Aznavoorian PhD

WORKPLACE • KNOWLEDGE MANAGEMENT

Space as a knowledge management tool

The management of knowledge (including creating, transferring and storing) within an organisation is considered to be a primary driver of a business' sustainability. Driven by changing demographics, businesses are recognising that valuable knowledge is lost when older employees leave the organisation or redundancies are made due to changing economic conditions. Geyer, an Australian design practice, undertook research to understand the role of the physical environment in knowledge management.

The aim of the research was to explore the kinds of environments and their attributes (if any) thatcould support the management of knowledge in an organisation. The research also aimed to expand the focus of existing knowledge management literature; from information technology to workplace design.

The research was based on an online survey, alongside a series of workshops,undertaken in Australia between November 2009 and March 2010. The survey measured various aspects of the relationship between knowledge and space including the perception of knowledge creation, transfer, storage and ownership.

A total of 94 responses were received from Australia (72) and overseas (22). The three most represented industries were engineering/design (31%) followed by finance (18%) and property (10%). A total of 34 people from legal, management, finance, mining, government and education attended the face-to-face workshops.

The research produced 13 lessons, discussed below.

1. Space as a time-saving tool:

The ability to observe and hear co-workers provides an opportunity to learn, even when those teaching do not always have the time to instruct. Spaces that foster learning by observation (e.g. open plan layouts) mimic the attributes found in a playground, where children learn by observing others. Open-plan environmentswere desired by time-poor

> **"…Spaces that foster learning by observation (e.g. open plan layouts) mimic the attributes found in a playground, where children learn by observing others…"**

organisations that struggle with finding the time to formally transfer knowledge.

2. Organisational structure:

The structure used to transfer company and industry knowledge is usually different from the one reflected in organisational charts, and often more complex, sometimes taking years to understand.Complex and secretive organisational structures of some (especially large) organisations wereidentifiedas a factor in knowledge transfer.

The literature refers to the scientific theory of complexity, to suggest that organisations naturally emerge out of the interaction of individual agents without any top-down control. Understanding this structure is important because knowledge is best transferred through naturally constructed structures, rather than top-down defined hierarchies. Given the adequate space and freedom, individuals will naturally organise in unpredictable ways, to adapt and, through experimentation, rise to higher levels of performance. In fact, not only does learning stimulate this process, but this self-organisation appears to be a learning process in itself.

3. Mentoring:

Participants singled out mentoring as one of the most successful vehicles for transferring knowledge. Mentoringis defined as an individual having regular dialogue with, and receiving advice from, a more experienced member of the organisation relating to the individual's job and career development. Mentoring programs, especially those in the legal, accounting and financial institutions, often expand to provide guidance and introduction to new contacts and networks.

Space does not only allow people to learn from their mentors by observation as described above, but the literature suggests most mentor-learner relationships are accidental anddo not arise from a formally constructed management development

scheme where mentor and learner are deliberately paired. The physical space could assist by providing environmental conditions that help shape these relationships.

4. Technology and knowledge management:

Participants identified the role of technology mainly as a repository of data, as well as a channel of delivery. On the latter, blogs, social networking and video were identified as useful methods currently used in some workplaces, as an emerging means to transfer data. This tendency is expected only to increase with the tech savvy emergent workforce. However, one participant mentioned in-house wiki-like environments, designed to share information, were often forced and, over time, then abandoned.

5: Size matters:

The size of the organisation was identified as a factor influencing the role of technology in KM. Large companies have procedures documented, and rely more on technology to transfer information, whereas small companies typically do not; however, people are usually more willing to talk face-to-face. It could then be said that large companies share information, whereas small companies share knowledge. The dependency on technology to transfer knowledge increased with company size, with bigger companies having geographically dispersed locations.

6. Acquiring knowledge:

Survey respondents considered experience – over self-learning (second) and formal training (third) – as the main source of knowledge they use in their job. Similar results were obtained during workshops; this is supported by the literature, which suggests that most professionals learn through work experience.

However, the literature also supports the idea that there is no limit to the ways by which workers learn informally in the workplace. Interpersonal observations and communication are seen by many workers as a critical vehicle for learning effectively in the workplace (see mentoring above). This is very much based on the workers' belief that they will learn 'tricks of the trade' faster by observing an expert rather than finding out information for themselves.

Preceding research in Australia suggests up to 70% of workplace learning is informal and not part of any formal corporate effort. This tacit knowledge is transferred through the daily interaction of a diverse mix of people and events, as well as through mentoring. These findings may lead to revisiting the need for training rooms, and considering the whole organisation as a training environment instead.

7. Transfer and storing knowledge:

Most of the respondents (82%, n=94) considered knowledge was best transferred through social environments rather than technology. Almost all respondents (88%, n=94) strongly agree (48%) or agree (40%) that knowledge in their organisation resides with people rather than a web page or IT system (n=94). This aligns with comments made that organisations can only store data, since information and knowledge reside in peoples' minds. Space still holds characteristics that are valuable in knowledge management, and that cannot be replicated by technology.

> **…The challenge of storing knowledge (not information) means people will walk away with it when departing an organisation as they take their minds with them…**

8. Knowledge leakage:

The challenge of storing knowledge (not information) means people will walk away with it when departing an organisation (as they take their minds with them). While intellectual property laws limit the use of this knowledge, they do little to prevent the loss of knowledge experienced by the company. The latter is reflected by most respondents (81%, n=94) strongly agreeing (23%) or agreeing (58%) that people leaving the organisation pose a critical loss of knowledge.

9. Knowledge as a product:

Almost all respondents (93%, n=94) strongly agree (50%) or agree (43%) that knowledge is an asset in their organisation. A slightly smaller percentage (84%, n=94) strongly agree (48%) or agree (36%) that knowledge is considered a competitive advantage at their organisation. Knowledge is increasingly becoming the only 'product' that organisations can commercialise, because organisations can no longer charge

for information that is now commonly accessible through the internet. Thus, organisations need to change their services to commercialise knowledge, not information.

10. Knowledge ownership:

In legal terms, knowledge acquired while working for an organisation belongs to the organisation (IP Australia 2010). However, 36% of respondents consider the knowledge they acquired while working at their organisation to belong to them, as they 'own their mind', but would not be able to use it for commercial purposes.

11. Knowledge sharing and competitive advantage:

The literature highlights that efforts to deploy KM systems are frequently hampered by employee reluctance to share their experience. In some instances employees do not realise their experience is valuable to others, and in other instances there may be a sentiment that holding information is more valuable than sharing it. Some employees are competitive by nature and may be more inclined to hoard than share knowledge they possess; and as a consequence the interest of the individual clashes with that of the organisation.

"...Some employees are competitive by nature and may be more inclined to hoard knowledge they possess; and as a consequence the interest of the individual clashes with that of the organisation..."

While the majority of respondents (53%) believe internal competition does not hinder knowledge sharing (n=94), the question registered the most divided response of the study. Roberts (2009) based on Stiglitz (1999) highlights knowledge is different from other commodities due to its scarcity-defying nature. 'Consumption' of knowledge is not subject to -rivalry in that knowledge is shared and the gain of the consumer (recipient) does not diminish the stock of the supplier. Therefore, the value of knowledge does not reside in its scarcity, but in knowing something that the competition does not. If people perceive their peers as competition, knowledge will not be shared.

12. Trust:

"Trust amongst employees is paramount for knowledge transfer", said one participant. The concept of trust surfaced as a key ingredient in the ability to transfer knowledge within and across organisations. This is very important in KM because it improves the belief in information (creates knowledge) and it enables voluntary cooperation (knowledge transfer).

Participants felt having a personal connection with a co-worker resulted in a greater opportunity to communicate and align purpose, which led to a greater 'trust factor' - something they believed was critical for knowledge transfer. However, trust is hard to build in today's environment. Issues of trust in inter- and intra-organisational relationships have changed due to changes in the social structure, economic exchange relations, virtual working and the relations between people – which are looser. When relationships between people become casual, temporal and more virtual, a paradoxical consequence can be experienced where trust is needed to enhance cooperation, and at the same time, fewer cues are present to build trust upon. Space plays an important role in providing an environment to read the social cues needed to build trust.

Moreover, personal connections in the workplace result from being in close physical proximity to others, working closely together on a project or task. The physical layout of the workplace and type and style of work-setting plays a role in making these connections easy to maintain.

13. KM and FM:

Research results highlight the importance of space as a knowledge management tool. However, for this to be the case, the relationship between space and knowledge needs to be taken into consideration at the operational and strategic management level of the facility. The lack of metrics equivalent to those available for Post Occupancy Evaluations (POE), for example, make the measurement of how well (or badly) space supports knowledge a challenging and subjective task. Further exploratory research could contribute to the identification of space parameters that affect knowledge management, which eventually could evolve into evaluating protocols.

Conclusions:

Organisations are increasingly starting to recognise that technology based competitive advantages are transient

and that their employees' knowledge is possibly the most sustainable advantage they have. However, this competitive advantage is being compromised by retirement and redundancies. Capturing and documenting critical knowledge prior to a person departing the organisation is challenging, particularly if leaving was not their choice. In addition, transferring knowledge through employee interaction has become a key focus of organisations that are increasingly looking to identify opportunities for knowledge transfer.

Today, the management of knowledge in organisations is led by technology. However, technology is limited to the storage and transfer of data; knowledge can only exist in people's minds, and it is best transferred through a social context. Research was undertaken to better understand the role of space in supporting the management of knowledge in organisations. Findings suggest that despite its passive nature, space plays an active role in the creation, storage and transfer of knowledge. This could imply the best tool that organisations have to manage knowledge may be their workplace.

For organisations to use space as a knowledge management tool, the relationship between space and knowledge needs to be taken into consideration at the management, operational and strategic level of the facility. Designers and facility managers should ensure the decisions taken to meet the occupant's comfort levels and achieve environmental targets also enhance the capability to transfer knowledge within the organisation.

This research identifies trust as a key ingredient in knowledge management. Trust helps people transform information into knowledge (as it justifies a belief) as well as facilitates the willingness to transfer knowledge (people will not share knowledge if they do not trust the recipient). Space plays a crucial role in providing the social cues required to build trust. Casual spaces (e.g. breakout areas) remove the formality and expectations of formal spaces (e.g. meeting rooms) and allow people to connect in a more relaxed, human way that builds trust.

The research highlights the limitations of technology as a knowledge management tool. In general, respondents identified technology as a repository and transferrer of data; however, respondents preferred face-to-face interaction to transfer knowledge. Moreover, experience and tacit knowledge were highlighted as the most important types of knowledge in organisations. Considered difficult to digitise, these are better transmitted by behaviour and perception. **W&P**

References

- Allee, V. (1996), "Knowledge and self-organisation", Executive Excellence, Vol. 14 No. 1, p.7.
- Beinhocker, E.D. (1997), "Strategy at the edge of chaos", The McKinsey Quarterly, Vol. 1, Winter, p.24.
- Bijlsma, K. and Koopman, P. (2003), "Introduction: trust within organisations", Personnel Review Vol. 32 No. 5,
- pp. 543-555.
- Carneiro, A. (2000), "How does knowledge management influence innovation and competitiveness?", Journal of Knowledge Management, Vol. 4 No. 2, pp. 87-98.
- DiMattia, S. and Oder, N. (1997), "Knowledge management: hope, hype, or harbinger?", Library Journal, Vol. 122 No. 15, pp. 33-5.
- Drucker, P.F. (1993), Post-capitalist Society, Harper Business, New York, N.Y.
- Du Plessis, M. (2007), "The role of Knowledge Management in Innovation", Journal of Knowledge Management, Vol. 11 No. 4 pp. 20-29.
- Elliman, T., Eatock, J. and Spencer, N. (2005), "Modelling knowledge worker behaviour in business process studies." The Journal of Enterprise InformationManagement Vol.18 No.1.
- Englehardt, C.S. and Simmons, P.R. (2002), "Creating an organisational space for learning", The learning
- Organisation, Vol. 9 No. 1, pp. 39-47.
- Forbes (1997), "Knowledge management: the era ofshared ideas", Forbes, Vol. 160 No.6, p.28.
- Gerber, R., Lankshear, C., Larsson, S. and Svensson,L. (1995), Self-directed learning in a work context, Education + Training, Vol. 37 No. 8, pp. 26-32.
- Gloet, M. and Terziovski, M. (2004), "Exploring therelationship between knowledge management practices and innovation performance", Journal of ManufacturingTechnology Management, Vol. 15 No. 5, pp.402-9.
- IP Australia (2010), Intellectual Property Australian Government , http://www.ipaustralia.gov.au/
- Johannessen, J.A., Olaisen, J., Olsen, B. (2002), "Aspects of a systematic philosophy of knowledge: from social facts to data, information and knowledge", Kybernetes, Vol. 31 No. 7/8, pp.1099-1120.
- Kock, N.F., McQueen R.J. and Corner, J.L. (1997), "The nature of data, information and knowledge exchanges in business processes: implications for processimprovement and organisational learning", The Learning Organisation, Vol. 4 No. 2, pp. 70-80.
- Martensson, M. (2000), "A critical review of knowledgemanagement as a management tool", Journal of
- Knowledge Management, Vol. 4 Num. 3, pp. 204-216.
- Pritchard, D. (2006), What is this thing called knowledge, Rutledge, USA.
- Roberts, J. (2009), "The global knowledge economy in question", Critical perspectives on international business, Vol. 5 No. 4, pp. 285-303.
- Roos, J., Roos, G., Edvinsson, L. and Dragonetti, N.C. (1997), Intellectual Capital – Navigating in the New Business Landscape.
- Shimizu, H. (1995), "Ba-principle: new logic for the realtimeemergence of information", Holonics Vol. 5, No. 1, pp.67-79.
- Stiglitz, J.E. (1999), "Public policy for a knowledge economy", speech delivered to the Department of Trade and Industry and the Centre for Economic Policy Research, London UK

Dr. Agustin Chevez

Dr. Agustin Chevez is currently a lecturer and researcher at the Faculty of Design at Swinburne University of Technology He combines industry practice with academic research in the field of design. Agustin's interest in the relationship between people, space and technology saw him pursued a PhD on the evolution of workplace architecture as a consequence of technology development at RMIT University. Following its completion, Agustin joined the research and workplace strategy team at Geyer, where he undertook research on design topics as well as developed workplace strategies.

e achevezbernaldodequi@swin.edu.au

W www.swinburne.edu.au/health-arts-design

Dr. Laurie Aznavoorian

Laurie Aznavoorian is a partner and Workplace Leader at the design consultancy Geyer. Laurie is committed to promoting space as a business tool and has a proven history in developing innovative approaches to the briefing and design process, customised to address business demands, brand and company culture.

t @laznavoorian

W http://www.geyer.com.au

l www.linkedin.com/pub/laurie-aznavoorian/8/b64/676

David W. Karpook

The workplace as an immersive experience

For generations, the workplace has been thought of as something to be acquired, allocated, traded, upsold, utilized and disposed of. The facility management profession turned the workplace into a service offering, one that dealt in amenities, convenience, and the delivery of the provisions necessary for successful job performance.

Now, technology has moved the ball forward again and the workplace is being reconceived in many sectors as an "experience," akin to retail or hospitality.

We're seeing this in sectors such as healthcare delivery, where pharmacies and department stores are establishing themselves as total healthcare providers, advisors and concierges; in specialized co-working spaces that cater to various niches of the workforce and highlight the particular attractions of their setting.

Spotlight on performance

"Work is theatre," said B. Joseph Pine II and James H. Gilmore in their book The Experience Economy. They go on to explain: "The word drama derives from the Greek expression 'drao', meaning 'to do.'

In all organizations, whether or not managers generally recognize it, the workers are playing, not in some game, but in what should be a well-conceived, correctly cast, and convincingly portrayed real-life drama of doing.

Indeed, understanding this crucial point brings whole new meaning to often-used business terms borrowed from or shared with the performing arts, such as production, performance, method, role, scenario, and a host of others."

If we see work as theatre in these terms, then that makes facility managers the stage managers, set designers and lighting technicians tasked with readying the performance space; and the newer, professional class of workplace strategists act as producers, directors, choreographers and

scenarists, making sure that all of the varied components of the environment work in synchronicity to support a top-notch production.

> *"When a business calls its workplace a bare stage, it opens up opportunities to distinguish itself from the myriad humdrum makers of goods and providers of services that perform work without recognizing the true nature of their acts."*
> *-- Pine and Gilmore, The Experience Economy*

Often, that bare stage has been staffed by people who see their roles as background, as invisible service providers. Perhaps more businesses should take a cue from high-end hotels where a card may be left on your nightstand to let you know that your room was "expertly prepared by Hannah."

"…If we see the workplace as theatre, then facility managers are the stage managers, set designers and lighting technicians tasked with readying the performance space..

The enemy of performance is indifference

Facilities management has engaged in the crafting of experiences for generations, but often in transforming negative experiences we didn't create. The leaky roof, the smelly carpet, the dirty bathroom, the crowded and overheated conference room – these are the experiences that FM routinely is called on to transform. We do so by providing services: rapidly, unobtrusively and economically.

Because we meet those goals so well, we are often not credited with the transformative impact we have on our customers' experiences. But we have opportunities to craft wholly positive experiences for our clients, and it is on these we must focus.

The paradigm of unobtrusive facilities service may inadvertently contribute to a culture of minimal performance. If the only expectation is that:"I work quickly and quietly and get the hell out of there", can I be expected to focus on more than the absolute minimum required to complete the job?

Facility and real estate management professionals ought not to be seen – or, more accurately, hidden -- as merely providers of commoditized space and services, but should present themselves as key participants who enable the production to take place and garner applause.

To once again quote Pine and Gilmore: "All business, as well as the work that defines it, from executive suites to factory floors, demands the same kind of performance as that featured on Broadway and in ballparks." It should be well-rehearsed, passionately delivered, reliable yet nuanced and surprising. And it should happen in venues carefully selected, designed and tuned to enhance and extract the maximum impact from the customers.

"Consider the sequence, progression, and duration of events. How are work activities arranged? What continuums exist in the organization of events? Where does work begin, reach dramatic climax, and have its denouement? Finally, consider the rhythm and tempo of work, for these define the relationships between dramatic elements. What transitions present themselves and need to be managed? What building, diminution, contrast, and release enrich the scene's energy level?"
– Pine and Gilmore

Context matters

"I can take any empty space and call it a bare stage. A man walks across this empty space whilst someone else is watching him, and this is all that is needed for an act of theatre to be engaged." – Peter Brook, The Empty Space.

It is up to the production staff to see to it that in each setting the work plays to maximum effect. The luxuriousness of the venue may have little relationship to the quality of the

production – rather, it informs and suggests how the staging should proceed. Experienced theatre professionals learn that certain kinds of actors, costumes and props and scenery work best in certain kinds of venues – and they use those uniqueness's to enhance and extract the maximum impact.

We have the same kind of varied settings at play in the workplace today, and the same expanse of variations in workers, attire, equipment and furnishings. Smart workplace strategists will learn to foster the combinations and juggle the variations that lead to maximum impact on the business. The product may or may not change, and even the work may remain largely the same, but the performance spaces may make a crucial difference in quality and quantity of production. Context matters.

Going for the Gold

As in the theatre, stellar performance in the workplace does not necessarily equate to spectacular costs. If fresh, high quality food delivery, opportunities to mix work with pastimes such as fitness, or vibrant surroundings full of creative minds are what a particular set of customers crave, these are the things that should be emphasized. They are things that will make a particular workplace – and workplace experience – memorable.

Answers matter. But so do questions. In so many ways, you get what you ask for. If you are only looking at averages, you can't expect your results to be more than a little above or below average. By asking for averages, you are indicating what is important to you. Look in addition at the outliers, the extreme cases. These represent the needs and desires of individuals

> **"…As in the theatre, stellar performance in the workplace does not necessarily equate to spectacular costs. If fresh, high quality food delivery, opportunities to mix work with pastimes such as fitness, or vibrant surroundings full of creative minds are what a particular set of customers crave, these are the things that should be emphasized. They are things that will make a particular workplace – and workplace experience – memorable…"**

and purpose-specific groups. Think about how you could accommodate them. Your decision may be that you can't, but you may surprise yourself with effective and cost-effective options.

For example, maybe it doesn't make sense for the real estate group to change the property for a set of meeting requirements that happen once or twice a year? But perhaps there is a co-working option down the road, or a reversible space owned and operated by your landlord that could lead to a successful event and a satisfied customer.

Your customers may already be looking outside the organization for purpose-specific space when your business has none available. How much better would it be to enhance your own service offering to them by incorporating outside options into your space reservation system so that they need shop in only one place?

Leverage your technology investment to make it easier to explore these options. Your property tracking doesn't need to stop at the front door of your business. It can extend into your community and aid you in developing and exploring the options that your individual customers will find memorable.

And don't forget that your real estate inventory can become someone else's memorable experience. That half-vacant building

that you have in an expensive city centre may be a drain on your real estate portfolio today, but if it could be made available to other businesses or individualsfor meetings, events or simply touchdown work spaces, it could in short order become a revenue generator. The city of Antwerp has recently done this with unused and underutilized space within its borders.

For workplace professionals, the move to the experience economy offers a means of remaining relevant in a world where options proliferate outside the traditional corporate boundaries. This can also help to raise both the value and recognition of their efforts far beyond the realm of finding an empty seat or cleaning up a nasty mess. **W&P**

Editor's footnote:
The use of the theatre as an allegory for the work of facilities managers dates back at least to the work of Frank Duffy and it's a great way of describing how FMs create the setting in which the action takes place.

i David Karpook

David Karpook is responsible for the marketing and product development of Manhattan's suite of real estate, asset and facility management products. He is a graduate of Harvard University and has a master's degree in Architecture from the University of Florida.

W http://www.manhattansoftware.com/emea.html

L https://www.linkedin.com/pub/dave-karpook/0/437/44

References

• B. Joseph Pine II and James H. Gilmore: The Experience Economy: Work Is Theater & Every Business a Stage: Work Is Theatre and Every Business a Stage

• Peter Brook: The Empty Space (Penguin Modern Classics)

Wim Pullen   HUMAN RESOURCES • WORKPLACE STRATEGY • PROPERTY

Age, office type, job satisfaction and performance

Age is everything but a number, as it covers individual changes in physical, mental, social and societal aspects; factors that influence people's perceptions and expectations in life. This research focuses on ageing in an environment which normally covers a long period of time in life: the workplace. The aim of this study is to get insight into the influence of age in relation to the experience of the office environment and job performance. A differentiation will be made between traditional cellular offices with assigned places and flexible office concepts (i.e. more open layouts with non-assigned places and multiple age groups will be distinguished).

It is important to emphasize the effects of ageing on an individual performance level as well as on an organizational performance level. The results can help organizations to anticipate the possible difficulties people from different ages encounter in general in their work environment. Also, these findings can give organizations insight into how the preferences of employees of different ages can be taken into account.

> **"...The world population is ageing rapidly. The proportion of the world's population over 60 years old will increase between 2000 and 2050 from about 11% to 22%..."**

The results will lead into suggestions for making the work environment attractive for employees of all age groups and to recruit or retain talented and valuable employees. Overall, the outcomes will be supportive for decision-making regarding optimization or adaptation of the current or new office environment.

Changing environment

The world population is ageing rapidly. The proportion of the world's population over 60 years old will increase between 2000 and 2050 from about 11% to 22% (WHO, 2013). Ageing in The Netherlands is mainly a consequence of the post war baby boom and the following increase in births until around 1970. At present, the number of people from 50 to 65 years old is growing rapidly; and this increase in the number of elderly people sets up some interesting challenges within the work field, at least in the short term. Likewise, in the long term, the retirement of the baby boom generation will probably lead to other

challenges, like a temporary shortage of employees, vitality for the other generations expecting a higher retirement age (67 or plus), the demand for young and talented people and the need to sustain a quality knowledge base within the organization.

In 2010, 60% of the public organizations in The Netherlands are expected to encounter problems with attracting enough suitable employees as a result of the ageing population (Netw erkOrganisatie&Vergrijzing, 2010). The largest ageing related problems people foresee in public organizations are the loss of knowledge, lack of motivation and willingness to change with respect to older employees, lack of internal mobility and a loss of younger employees (related to the lack of internal mobility). As almost every organization has to deal with this insurmountable phenomenon, it is important to face these ongoing issues.

At the same time, technological and strategic developments trigger shifts within the workplace environment. Reasons that give cause to these changes, are mostly related to 'always positive' expectations of increased revenues (e.g. the employee productivity, satisfaction, image) and expected reduction of costs (e.g. facility and building related costs, IT, traveling expenses) (Baane, 2010). These issues translate to the workplace in such a way, at least in the Netherlands, that currently a shift is going on from traditional cellular offices (a combination of the cell office and small shared room office, in which all employees have an assigned desk) to more open and transparent offices with activity based workplaces, meaning that people use workspaces according to their presence and activities. As a consequence, increasingly people must be able to work in a flexible manner while no longer using a personal desk.

The flexible office is an innovative office type with an open and transparent character. Yet, it is not comparable to an open-plan office since it is based on a mix of spaces (e.g., open and half-open spaces, additional open and enclosed "back up" areas for individual concentrated work, telephone calls and for a variety of communication and conference activities). Possibilities for communication often include enclosed formal

"…The people who are ageing successfully, generally experience a low probability of disease, high cognitive and physical functioning and an active participation in life…"

meeting rooms, open informal meeting areas, coffee corners and lounge seats.

There are also shared facilities, like printing areas and lockers. Generally the number of available places per FTE is between 0,7 – 0,9. This means that there are no assigned workstations anymore and people are expected to clear their desk every time they leave a workstation for more than a few hours, so that their colleagues can make use of it.

The flexible office concept is very popular in the Netherlands, since it does account for an efficient use of office space (as defined in square metres). Other motivations that are often heard are related to an expected improvement of communication and social interaction, and a positive effect on productivity and innovation. The development goes hand-in-hand with technological developments which make it possible to work at any place you want, within the office but as well as outside the office.

So far so good, it seems. But do such developments in the work environment match up with the assumptions, and with the experiences of all employees? It is questionable if a flexible office is the right environment for everyone. According to the person-environment fit theory, people will achieve a higher level of satisfaction and mental and psychical well-being when they experience a match with their environment (e.g. Holland, 1997).

Research shows that individuals are satisfied with, and adjust most easily to, jobs when they are congruent with their own career-relevant personality types (Spokane, 1985; Tinsley, 2000). It is known that job content characteristics leads to more job satisfaction and motivation, which lead to better performance (Hackman & Oldham, 1975; Morgeson & Humphrey, 2006). How do the different office concepts fit employees of different age groups? Also, design questions need to be asked about the supply of workplace solutions that support the broad diversity of employees' demands.

Challenges of ageing at work

With the phenomenon of ageing come additional issues related to the workplace. What are the possible challenges people can encounter on the work floor as a result of ageing, and in what perspective does that place the popular flexible office concept?

It is not as easy as it seems to define 'young' and 'aged'. A distinction can be made in chronological, functional and psychosocial age. A definition of chronological age which is often used in studies, is one based on the Age Discrimination in Employment Act (ADEA). Herein workers aged 40 and older are protected against age discrimination. However, there are

studies in which ages from 55 or even 65 years are used to define 'aged' people.

The difference in these numbers reflects the fact that it is very difficult to identify a specific age on which individuals are older. One of the reasons is that the needs, values, skills and health of older people can differ widely (Baltes&Baltes, 1990). Besides that, they often vary greatly in response to ageing. Many of the older workers remain fully functioning in the workplace (Hursh, Lui&Pransky, 2006). Often the terms "successful" and "normal" ageing are mentioned to describe the ageing process of people. The people who are ageing successfully, generally experience a low probability of disease, high cognitive and physical functioning and an active participation in life (Rowe and Kahn,1997).

A study by Cleveland and Shore (1992) shows that age may be a predictor of performance in a negative way, but that age usually only explains a small part of the total variance. The problems which come along with ageing don't seem to influence the overall work performance directly (e.g. McEvoy & Cascio, 1989). Apparently, many of the elderly are able to adapt or compensate for age-related challenges (Hansson, Robson & Limas, 2001). According to Schkade and Schultz (2003, see Moyers & Coleman, 2004) the ability of older workers to properly deal with the challenges in the workplace depends primarily on the total experience of the person in order to successfully adapt.

However there might be differences in ageing between people, we cannot escape from the fact that the cognitive functioning of people generally declines during a lifespan. For example, there is a relationship between sustained attention and age (Mani, Bedwell and Miller, 2005). Both older and younger subjects performed worse on a task when exposed to noise in comparison to subjects who were sitting in a quiet room. However, it turned out that with increasing age a poorer performance outcome occurred on the attention task.

Also, people over 62 years old are more sensitive to auditory distraction than young adults (Hasher et al., 2007; Horváth et al., 2009) and older people have poorer speech understanding than young people when experiencing a similar level of background noise (Wegman& McGee, 2004). In some cases, older people are more sensitive to visual distraction as well. In correspondence with the former results a study revealed that elderly are easier distracted while reading than younger subjects (Li et al., 1998).

Youngsters have a natural goal to gain knowledge, in friendships (O'Reilly, Chatman & Caldwell 1991), but they also find this an indispensable attribute when they are looking for a job (Corporaal, Riemsdijk, Kluijtmans&Vuuren, 2012). The latter

Features	<31 years	31-40 years	41-50 years	51-60 years	> 60 years
Sharing own ideas about working environment		-**	-**	-**	-**
Accessibility of the building		+**	+**		
Architecture and appearance of the building	+**	+**	+**	+**	+**
Subdivision and overall layout of the building	+**	+**	+**		
Number and diversity of spaces	+**	+**	+**		
Adjacency and locality of the spaces		+*		-**	-**
Openness and transparency of environment	+**	+**	+**	-**	-**
Functionality and comfort of the workspaces	+*		-**	-**	-**
Interior design appearance and ambiance	+**	+**	+**	+**	
Privacy	-**	-**	-**	-**	-**
Opportunities to concentrate		-**	-**	-**	-**
Opportunities to communicate	+*		+**	-**	-**
Archive facilities		-**	-**	-**	
ICT and ICT supporting services		-**	-**		
Facility services	+*				
Indoor climate	-**				
Light	+**				
Acoustics		-**	-**	-**	-**
Opportunities for remote working	+*	+**	+**	+**	
Overall value office concept	+**	+**	-*	-**	-**
Overall value pleasant work environment			-**	-**	-**
Overall value support of productivity by environment		-*	-**	-**	-**

*Overview of the ratings of respondents working in a flexible office concept, compared to the rating of respondents working in a cellular office concept. Meaning of signs: + flexible office higher rated than cellular offices, - flexible office lower rated than cellular offices. ** p ≤ 0,01 * p ≤ 0,05.*

also found that young people search for jobs that include the following favourable job characteristics; organizations have to offer challenges tasks, variability in activities, autonomy and flexibility regarding to time and place. When Dutch employers where asked for their vision towards younger workers, it turned out that they are characterized by skills with new technologies, physical capacity, flexibility, creativity and mental capacity (Dalen, Henkens and Schippers, 2007).

This general deterioration of prolonged attention might cause concentration problems for older employees in the flexible office concept, because the workspace is more open and transparent compared to that of a cellular office. At the same time, flexible office environments seem to fit quite well to the preferences and characteristics of younger employees.

Research Method - present study

This research work aims for an improved understanding of employee satisfaction and the importance of age and different office concepts. Two factors are of special interest for exploration of their influence in this study: 1) age, and 2) the office concept.

The Work Environment Diagnosis instrument (WODI) is an online questionnaire developed for measuring employee satisfaction with the working environment (Maarleveld, Volker & Van der Voordt, 2009). WODI was used in many case studies to measure satisfaction about a broad range of aspects of the physical work environment and perceived productivity support.

The employees of the participating organizations received an e-mail invitation to complete the online questionnaire. The questionnaire consists of 41 standardized items in total. In

some case studies additional questions were added if relevant to the concerning case study.

In this study, 19 items were used for analyses. Most of these items are about satisfaction with the lay-out of the building and direct working environment, privacy, concentration, communication, technical aspects, facilities, remote working and services. The items that were left out in the analyses are considered less relevant in the context of the current study or because they are case specific. The left out items are i.e. about the job description and department of the employees, the occupation and use of the available spaces and the importance that people attach to certain aspects of the office.

The following 19 items, about which the respondents were asked to rate their satisfaction levels, were used:
- Sharing ideas about the work environment.
- Accessibility of the office building.
- Appearance of the building's exterior.
- Most of these items are about satisfaction with the lay-out of the building and direct working environment, privacy, concentration, communication, technical aspects, facilities, remote working and services.
- Number and diversity of the places.
- Lay-out of the spaces.
- Openness of the work environment.
- Privacy.
- Functionality and comfort.
- Ambience and interior design.
- Opportunities to concentrate at work.
- Opportunities for communication.
- Archive facilities.
- IT facilities.

- Facility services.
- Indoor climate.
- Light.
- Acoustics.
- Possibilities for remote working.

These questions were answered on a 5-point Likert scale ranging from very dissatisfied (1) to very satisfied (5). Three other items were used which gain insight into the overall evaluation of the total office concept, the pleasantness of the working environment and the extent to which the work environment supports productivity. The questions were answered on a 10-point scale ranging from a very negative evaluation (1) to a very positive evaluation (10).

For the analyses, a dataset collected by the Center for People and Buildings (CfPB) with the WODI was used. Only the respondents who work in a traditional cellular office or innovative flexible office were selected for the current analyses. This resulted in a dataset with 12,574 respondents derived from 83 different case studies, executed from 2007 until 2013. From the respondents, 6403 (50,9%) work in a cellular office type and 6171 work in a flexible office type (49,1%). All employees in question fulfilled white-collar functions, varying from administrative and supportive functions to research and management functions.

The 83 WODI Light case studies were conducted within 28 different organizations from which seven organizations in the public sector, eight organizations in the semi-public sector, seven higher educational institutions and six commercial organizations.

People were divided into five age groups: 'under 31 years', 'between 31 and 40 years', 'between 40 and 50 years', 'between 50 and 60 years' 'and 'over 60 years'. Furthermore, the respondents were assigned to one of the two office concepts that are distinguished in the study: traditional cellular structured office with assigned desks, and the innovative multi space office with flexible use of workspaces (hot-desking).

Results

When comparing respondents working in flexible offices versus cellular offices within a particular age group, we find that the youngest age group (< 31 years) evaluates the flexible office concept on most aspects more positively than the cellular office concept. So the younger respondents seem to favour the flexible office concept. For the older respondents, this is the other way around: they are generally less satisfied with the work environment when working in a flexible office concept compared to those working in a cellular office (table opposite page).

Overall we can see that aspects related to the architecture and layout of the building and workspaces, is rated neutral or more positively by people working flexible offices. However, we can also see that in all age groups, people in flexible offices are less satisfied about the aspect privacy. And except for the

> **"…In flexible offices, attention should always be paid to aspects like privacy, possibilities to concentrate at work and acoustics, since these aspects are general points of concern in flexible offices, especially for older workers…"**

youngest age group, this is also the case for the possibilities to concentrate, archive facilities, ICT, acoustics and the support of productivity by the work environment.

When comparing the scores of the respondents from different age groups working in a flexible office concept, results show that younger respondents generally have much higher scores compared to the older respondents. This is not at all true when it comes to the cellular office concept: both the youngest and oldest aged people are relatively satisfied with the work environment in this office type.

Conclusions

The results show that there are large differences in the assessment of the two office types between different age groups. Younger employees (<31 years) are more positive about the flexible office compared to the cellular office. While these younger respondents favour the flexible office type, they are however also quite satisfied about the cellular office type compared to the other age groups. The results show that the older the respondents are, the more negative they seem to get about the flexible office.

Overall, some general positive and negative points for both office types arise in each age group. The flexible office type scores highly in all age groups on aspects related to the architecture and layout of the building and workspaces. However, we can also see that privacy is a negative point in the flexible office according to respondents from all age groups.

And, except for the youngest age group, the respondents have lower scores in flexible offices on the possibilities to concentrate, archive facilities, ICT, acoustics and the support of productivity by the work environment.

When deciding about office type the organization could use the flexible office as a factor to attract and retain young employees. When the organization's demographics show a larger proportion of younger employees, the change towards a flexible office type should not cause too many problems, while the additional space (and cost) reduction is an advantage to the whole organization.

When demographics show a considerable amount of older workers, the level of flexibility in the office design should be considered as a critical factor for the "penny wise pound foolish"- effect. In this effect a considerable loss of peoples' productivity has to be evaluated against a relatively minor cost reduction in rental cost.

To overcome this, we should design offices with the needs of the generations in mind. In flexible offices, attention should always be paid to aspects like privacy, possibilities to concentrate at work and acoustics, since these aspects are general points of concern in flexible offices, especially for older workers.

The second issue is the implementation process when changing office layout. The expectations of employees about the new working conditions might be indicators for the issues

at stake. The 'why and how' questions need to be addressed. When changing to a flexible office concept, extra attention and assistance should be there to listen to and answer the needs of older employees.

This research points to certain issues that need to be taken care of, both in the design of office layouts and in the development of awareness when implementing other layouts and concepts of use. **W&P**

i Wim Pullen

Wim Pullen is the Director and co-founder of the Center for People and Buildings since September 2000. The Center for People and Buildings (CfPB) is a not for profit research and educational knowledge center. It develops scientific research and educational programs.

Wim holds a MSc degree in geodetic engineering from Delft University of Technology. His career showed his different interests (Meteorology and Oceanography at the Ministry of Defense), Real Estate development, Public Buildings Policy and Research at the Dutch Government Buildings Agency.

Wim was (board) member of several Dutch professional bodies e.g. Institute for Construction Law, Council for Real Estate and Geographical Information. He serves on the editorial board of a number of journals in his field: Journal of Corporate Real Estate, Journal of Facilities Management, Corporate Real Estate Journal.

This feature was written with the help of Iris de Been, Eeke Steenaart, Dorieke den Hollander.

e w.r.pullen@tudelft.nl

w www.cfpb.nl

t : @PullenW

References

- Baane, R. (2010). Het nieuwe werken ontrafeld. Over bricks, bytes and behaviour.Tijdschriftvoor HRM, 1, 7-23.
- Baltes, P. B., &Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes& M. M. Baltes (Eds.), Successful aging: Perspectives from the behavioral sciences (pp. 1–34). New York: Cambridge University Press.
- Chapman, D. S., Uggerslev, K. L., Carroll, S. A., Piasentin, K. A., & Jones, D. A. (2005). Applicant attraction to organizations and job choice: a meta-analytic review of the correlates of recruiting outcomes. Journal of applied psychology, 90(5), 928-44.
- Cleveland, J. N. & Shore, L. M. (1992). Self and supervisory perspectives on age and work attitudes and performance. Journal of Applied Psychology, 77, 469 484.
- Corporaal, S., Riemsdijk, M. J., Kluijtmans, F., & Vuuren, T. (2012). Aantrekkelijke banen en organisaties voor jonge baanzoekers. Tijdschrift voor HRM, 2012, 58-81.
- Van Dalen, H., Henkens, K. & Schippers, J. (2007). Oudere werknemers door de lens van de werkgever. Nederlands Interdisciplinair Demografisch Instituut (NIDI), Den Haag.
- Dawis, R. V., & Lofquist, L. H. (1984). A psychological theory of work adjustment.Minneapolis:University of Minnesota Press.
- Hackman, J. R., & Oldham, G. R. (1975).Development of the Job Diagnostic Survey.
- Journal of Applied Psychology, 60(2), 159-170
- Hansson, R. O., Robson, S. M. &Limas, M. J. (2001). Stress and coping among older workers. Work, 17, 247-256.
- Hasher L., C. Lustig and R. Zacks, (2007).Inhibitory mechanisms and the control of attention. In: A. Conway, C. Jarrold, M. Kane, A. Miyake and J. Towse, Editors, Variation in Working Memory, Oxford University Press
- Herzberg, F., Mausner, B. & Bloch Snyderman, B (1959). The motivation to work, Wiley New York.
- Holland, J. L. (1997). Making vocational choices: A theory of vocational personalities and work environments (3rd ed.). Odessa, FL: Psychological Assessment Resources.
- Horváth, J., Czigler, I., Birkás, E., Winkler, I. &Gervai, J. (2009). Age-related differences in distraction and reorientation in an auditory task.Neurobiology of Aging, 30 (7), pp. 1157-1172.
- Hursh, N., Lui, J. &Pransky, G. (2006).Maintaining and enhancing older worker productivity. Journal of Vocational Rehabilitation, 25, 45-55.
- Li, K. Z. H., Hasher, L., Jonas, D. &Rahhal, T. A. (1998). Distractibility, Circadian Arousal, and Aging: A Boundary Condition? Psychology and aging, 13 (4), 574-583.
- Maarleveld,M.,L. Volker & D.J.M. van der Voordt, (2009),Measuring employee satisfaction in new offices - The WODI toolkit, Journal of Facilities Management, vol 7, no.3.
- Mani, T.M., Bedwell, J.S., & Miller, L.S. (2005). Age-related decrements in performance on a brief continuous performance test. Archives of Clinical Neuropsychology, 20(5), 575-586.
- McEvoy, G.M. and Cascio, W.F. (1989).'Cumulative evidence of the relationship between employee age and job performance'. Journal of Applied Psychology 74(1), pp. 11-17.
- Morgeson, F. P., & Humphrey, S. E. (2006).The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. Journal of Applied Psychology, 91(6), 1321–1339.
- Moyers, P. A. & Coleman, S. D. (2004). Adaptation of the older worker to occupational challenges.Work, 22, 71-78.
- Netwerk Organisatie & Vergrijzing (2010). Vergrijzingsmonitor 2010. Consulted on http://www.marketresponse.nl/wp-content/uploads/2009/12/Samenvatting-VGM-2010.pdf
- O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. Academy of management journal, 34(3), 487-516.
- Rowe, J.W. & Kahn, R. L. (1997).Succesfull aging.The Gerontologist, 37(4), 433-440.
- Spokane, A.R. (1985).A review of research on person-environment congruence in Holland's theory of careers.Journal of Vocational Behavior, 26(3),306–343.
- Tinsley, H.E.A. (2000).The Congruence Myth: An Analysis of the Efficacy of the Person Environment Fit Model. Journal of Vocational Behavior,56(2),147–179.
- Wegman, D.H. & McGee, P. J. (2004). Health and safety needs of older workers, National Academies Press, Washington DC. World Health Organization 2013: www.who.int/ageing/en/, last visited April 30, 2014.

Editor's footnote: Commentators may focus on the impact of Generation Y on the workplace but the reality is far more complex as Wim shows here. The workplace of today and tomorrow is not only multi-generational but has a wider age range.

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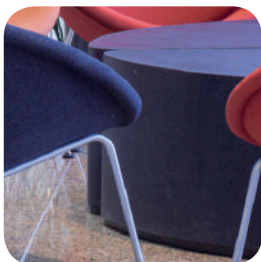
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New working practices and increasing urbanisation mean the world's cities are becoming increasingly important elements in the work and place mix

Erik Jaspers   URBANISATION • WORKPLACE

The emerging role of the city as a workplace

The 2014 Workplace Strategy Summit organized by IFMA evolved around questions of how to adjust our strategies to better serve our businesses and communities for a second time. Innovation is a key word in this context. Leading researchers and business people speak at this event to convey notions about change as needed and research to address it. In formal sciences, a good practice is to define the 'universe of discourse' of fields of research at an early stage. In our case: what defines the 'world of workplace'?.

When we talk about 'workplace' today, we very often seem to 'context' the term as placed within a building and we often review its performance in view of the requirements of the owner of that building (either owned or leased).

But buildings are effectively nodes of those grids that we call cities. And cities are transforming and innovating at an accelerating pace, their innovation projects often funded by governments. Over the past two years a small group of people at IFMA has been working intensely and in detail on the subject of cities and their influence on the trades of housing and FM services, addressing the definition of that 'universe of discourse' for facilities management and workplace .

> **"…In 1900 there were only 200 million people living in urban locations (1/8th of the world population) but in 2014 the numbers have increased to 3.5 billion and will grow to 6.5 billion by 2050…"**

We strongly believe that the definition of 'workplace' will embrace the larger urban design patterns with all the resources they will provide for individuals and organizations to thrive. In fact, we believe that cities form the universe of discourse for workplaces.

We try to design workplaces around people. Nowadays cities are being designed around citizens. Cities have flourished in the 20th and 21st centuries. In 1900 there were only 200 million people living in urban locations (1/8th of the world population) and in 2014 the numbers have increased to 3.5 billion growing to 6.5 billion by 2050. "The urban expansion is the biggest building boom humanity will every undertake" said Anthony Townsend in Smart Cities where he stated examples such as India having to build the equivalent of a New Chicago every year to keep pace with housing needs; and China with plans to build twenty new cities each year through 2030.

It is not just the growth of new cities around the world that also captures our attention, but the rise in importance of the 'metropolitan revolution'; with older cities being reborn. In the US, "metropolitan areas produced some 84% of the nation's exports, including 90% of service exports" in 2010.

All over the world these patterns are alike. In fact, one can view cities as grids of economic activity, the thing we tend to address as 'work'.

Place matters

In his address to the audience of the Amsterdam Smart City Event (May 2014) , Kit Malthouse (the deputy major of London for Business and Enterprise) noted that 'place' is an important aspect of cities. Like the professional circles in workplace design, officials in public administration also identify and understate the extraordinary value of in-person encounters.

Cities are the hot beds of innovation and are luring the creative class to come together to learn, work and live in these exciting communities of individuals from all over the globe brought together to produce some of the most exciting products and services imaginable. In fact, city administrations are planning and designing plans to attract specific economic activities that on the one hand fit to the city makings and on the other hand will provide the foundation for their cities to thrive.

Forces of change

Innovation of the urban environment is fueled by what we for now label as the 'urban nexus of forces', partly explaining why it takes place.

• Demographics: Figures provided by the United Nations indicate that by 2015, 70% of Earth's population will live in cities that will create 90% of the global GDP. Taking the growth of earth's population into account, this means that cities will double in size over the coming decades.

As a result, we can expect 70% of workplace capacity to reside in cities by 2050.

> **"** …Today, developments in information technology provide almost ubiquitous availability of information and ability to put that information to use at any time or in any circumstance… **"**

• **Technology:** We live in a time of unparalleled technology innovation. Today, developments in information technology provide almost ubiquitous availability of information and ability to put that information to use at any time or in any circumstance . This allows us to connect to information and create many types of social networks that inherently and fundamentally change ways we understand, interact and create: the internet of everything.

• **Scalable economy:** The growth of Earth's population is anticipated to grow to some 9.6 Billion people by 2050 from 7 billion today. To provide wealth to that rising number we need to rearrange production and consumption methods. The current developments around sustainability are not solely directed towards 'green' anymore. They are also addressing the notion of a scalable economy: providing wealth to the growing world population and ensuring that we can continue to do so.

Solving problems

With increases in footprint, cities are being confronted with typical 'problems' to solve.

• **Health** - protecting the human environment: air quality and clean environments (waste) to citizens.

• **Safety** –ensuring the safety of citizens and low levels of crime.

• **Transport** – allowing citizens to move around the city in convenient ways.

• **Supplies** of natural resources and services – providing for the necessities for personal and economic life: energy, water, heating, cooling.

These are all requirements that workplace professionals are concerned with as well. 'Smart City' projects are addressing new ways to provide this, intimately engaging technology to achieve that but also defining new structures of collaboration and sharing resources instead of owning them. Workplace represents a significant category in any city. Perhaps it is time to 'hop on' to the bus. **W&P**

Editor's footnote:
What will also be interesting to observe is how the colonisation of cities as workplaces will impact office design and facilities management. We already seem to be seeing a degree of 'reverse engineering' in this regard.

ℹ Erik Jaspers

Erik Jaspers has held various senior positions, in IT Project Management and Information Management for multi-national companies including ATOS (Origin) and Philips. For the last twelve years, he has been working for Planon Software, the leading European CAFM/IWMS software vendor. He now heads up Planon's innovation policy as well as the management of the Product & Solution Roadmaps - focusing on translating market developments/requirements into leading solutions for Facility Management.

L nl.linkedin.com/pub/erik-jaspers/0/b30/189

W http://planonsoftware.com/uk

References

• FM in the City tracks at World Workplace and Fusion conferences in 2012, 2013 and 2014

• Townsend, Anthony. Smart Cities (New York: WW Norten& Co.), 2013. P.2.

• Katz, Bruce and Jennifer Bradley, The Metropolitan Revolution (Wash: The Brookings Institute), 2013, p.33.

• Big Data, Mobile Technologies, internet of things: connected devices are a few examples

• http://www.un.org/apps/news/story.asp?NewsID=45165#.U80haONOVLM

Dominika Kowalska & Pawel Lenart

WORKPLACE DESIGN • PRODUCTIVITY • TEAMWORK

The metamorphosis of the Polish workplace

Political transition in Poland, which was initiated by "Solidarność" (led by Lech Wałęsa), caused the collapse of the block of socialist countries (USSR, Czechoslovakia) and began to build a free market economy. This resulted in an unusually high level of unemployment in Poland. That is where the story really begins....[1].

Every area of life started to change. New economic, political and social structures were created. The style of life and work was changing rapidly. All of the aforementioned transformations had a direct impact on the "Polish workplace", increasingly showing its importance, its role not only in the government but more often in the emerging businesses in Poland.

The rapid pace of change was also characteristic of work environments and the architecture of office buildings. The lifting of numerous COCOM restrictions accelerated the computerization and increased work efficiency. Since that moment the "Polish workplace" started the pursuit of Western work standards.

The typical picture of the office and the nature of work began to recede further and further from the well-known scheme

> **❝…Every area of life started to change. New economic, political and social structures were created. The style of life and work was changing rapidly…❞**

of clerical work in the office, which can be briefly described as follows - "coming to work, having a coffee, chatting with colleagues, opening several documents and going home." After these economic changes this type of behavior was systematically disappearing - "office work was no longer imitative in its nature but more creative and involving decision-making processes on the part of the clerk. Gathering and processing data became the basis for the decision making and predictions that had an impact on the direction of economic and social development at the micro and macro scale."

The scale of transformational changes can be best indicated by the number of enterprises founded after 1990 (around 3 million). Some of them went bankrupt very quickly, but others are still functioning today. At that point, the development of the Polish economy resembled one seen in Western European countries 40 years earlier. The first companies offering comprehensive office solutions started to appear in Poland. Monotonous work in enterprises was more frequently performed by the computer - for example, instead of "hand drawing" architects started to use "AutoCAD" computer programs for the first time.

The first offices designed by Polish architects largely resembled the enclosed offices of the "cell" type, which were also the first types of offices in Western Europe at the beginning of the twentieth century . One of the characteristic elements of this type of office was a large number of rooms arranged along long corridors. The rooms were designed primarily for managers and groups of employees (4-8 people).

Only large multinational corporations, which were increasingly establishing their offices in Poland, could afford to design offices at larger scale (projects were initially carried out mainly by foreign architectural studios). It was not until 10 years after the transitionperiod when Western office solutions began to be used in designing – permanent partition walls started to disappear thus creating a large open space instead ofa number of group rooms.

In other words, "enclosed offices" were increasingly being substituted by "open" ones. What is more, some interesting office design has found its way into the Polish workplace since, and CEOs became aware of the fact that the office cannot only fulfill its basic function, i.e. providing a place for employees to perform their duties, but it can also facilitate carrying out everyday tasks.

At this point it is worth noting the change in the office market in Poland that has progressed over the last 25 years.

Warsaw, 2014, a very different place to the city two decades ago (following page)

In the first years after the transition a big challenge was what might be termed the "conquest" of office space (office buildings were fully leased a long time before their construction). After year 2000, modern design began to appear in office projects and Polish architectural studios worked for multinational corporations who had their offices in Poland.

However, after the great worldwide financial crisis of 2008, office space was no longer regarded merely as a place to perform your duties but also as a place which could facilitate it. In Warsaw, for example, companies engaged actively in office research and optimization studies, taking into account the new and emerging needs of employees, and making offices more functional and utilizing a wide range of innovative solutions.

Workplace research became a strong trend in the office market in Poland which, just like the new approach to the design of office space, came from the West. First "Western" organizations opened their branches in Poland, implementing solutions that had already been developed for other markets.

The same mechanism concerned workplace research. All that had been already developed in other countries was left unchanged and introduced in Poland. Not always the same scheme works on a different ground, though. For instance office solutions offered to a consulting firm established in London cannot be simply copied into the "similar" organization operating in Warsaw.

Indeed, many companies following the trend were ready to pay large sums of money for the research which was to optimize their workspace. Despite this large expense incurred on research, many of the companies did not utilize the outcomes. This was due to the fact that very often the results did not fit the working style of their organization and the proposed schematic style of working was not adequate for them.

It is worth noting that the efficient use of rented office space is not a key issue for many Polish companies. What they do care about is improving working conditions, and thus increasing productivity and, consequently, revenues of the organization. They care about this value-chain.

Therefore, local companies dealing with working space research were more frequently choosing not to duplicate schemes that had already been developed in the West. A new trend towards increasing significance of qualitative research in the whole process of working space research could be observed

Data collected via, amongst other things, online surveys was only considered the starting point for designing a new office, and not the end result shown in the final brief which presented the proposed office solutions. The most important matter in the process of preparing a given company for the change of its office space is the identification of the needs of which the company is already aware. But it also must try to consider the needs which it may be unaware of, as well as the needs which the future and the ever-changing market will bring.

It is here that the following important question arises; how to find and discover the needs which the organization

> **"…What Polish companies care about is improving working conditions, and thus increasing productivity and, consequently, revenues of the organization…"**

Warsaw in 1990

responsible for commissioning the research does not yet know about?

It only shows how big a challenge learning the needs of the company can be, even if it is acquired via the means of onlyan online survey.

Neither the companies commissioning new office design nor the ones conducting office space research should reject quantitative research in the process of creating a new office. One should, however, focus more on personalization and matching research methods to the company, not vice versa. It is easy just to type a company name into the previously developed scheme and give a ready-made solution, but is it not a shortcut.

Managers in Poland want the solutions developed not only to bring measurable financial benefits, but also for them not to disrupt the already developed organizational culture of the given company. Regarding such a significant change as the change of office, but foremost the change of the style of work, change management becomes an indispensable part of the process. In the past, this soft element was treated as additional, or sometimes as unnecessary. Change management itself is a rather fresh process in the minds of Polish entrepreneurs.

The benefits that the process of a change management brings made it become an increasingly important element in the implementation of new solutions. Companies appreciate not only preparing for the change, but also making all members of the organization fully aware of the process.

Very often when companies decide to change offices, the whole layout of their workplace is altered by the transformation process; for example, from a typical space with private offices for managers, to open space layout, which are

> **"…Very often when companies decide to change offices, the whole layout of their workplace is altered by the transformation process…"**

associated with a better use of space. However, for employees in Poland, open space is viewed as being like a 'prison sentence'.

They may even prefer to stay in an old and sometimes cramped and inadequate office than to be shut "in a production hall". Sometimes when managers learn that they will work in the open space in their new office they will say; "It doesn't concern me, I will change my job before moving into the new office, because I am not able to work in these conditions".

That is why the process of change management is so important, requiring agentle introduction of workers to the new reality.

In order to have something to offer to the companies seeking change, we need to identify their needs carefully. In addition to taking their offices away and locating all the employees in an open space layout, we need to offer solutions that will make working in the open space not only tolerable but effective. There are several support spaces to serve this purpose, namely; quiet rooms, brainstorm rooms, phone booths, restaurant, tea rooms, meeting places and informal meeting spaces.

All this sounds incredibly simple, but for a new space to work we need to know where and what additional areas to install. It is not difficult to apply all of these solutions and lose valuable space. It is important to suit the specific needs of specific departments andpeople working in them.

All things considered, one should not treat qualitative research merely as a change management process, not paying too much attention to the data collected. There is a new trend in Poland to connect the data, not to reject the benefits that research provides as part of the change management process, but also to find out the causes of the phenomena described in surveys.

> **"**…Despite the reluctance of many Polish workers to adopt the open plan workplace, the latest trends in the research and design of offices clearly shows that the Polish office market (especially the one in Warsaw) has largely caught up with the developed Western countries… **"**

Qualitative data is more difficult to analyze; however, it supports the process of interpretation of quantitative data perfectly. Qualitative data also provides much more research material, which helps to personalize suggested office solutions for specific organizations.

Creating new solutions and "making them to measure" is a time-consuming process. However, it is worth spending a little more time and resources in order for the idea to be implemented correctly first time, without any major amendments.

Despite the reluctance of many Polish workers to the adoption of the open plan workplace, the latest trends in the research and design of offices clearly shows that the Polish office market (especially the one in Warsaw) has largely caught up with the developed Western countries. So what will the future bring? It is predicted that office solutions like desk-sharing or home working will increasingly gain popularity in Polish offices, and working in the office will be supported by modern technology on a greater scale. **W&P**

Pawel Lenart

Pawel Lenart is a business analyst at PKP Intercity in Warsaw, Poland. For the past few years he has been associated with the study and analysis of office space in Poland. He has worked as a workplace consultant for DEGW/AECOM Poland and for Workplace Solutions. At Workplace Solutions he was responsible for the analysis of data for the first office research program in Poland, "Workplace Research", which examined 30 offices of leading companies in Poland. Mr. Lenart also worked as an editor at Harvard Business Review Poland.

W http://intercity.pl/en/

L pl.linkedin.com/pub/paweł-lenart/59/b70/a87/en

Dominika Kowalska

Dominika Kowalska is a workplace consultant with InDesign, based in Warsaw. Her work involves creating new research tools. organizing workplace research and analysing data, leading workshops and focus groups and writing research reports

L https://www.linkedin.com/pub/dominika-kowalska/7a/3b7/a97

References

1. The Coordinating Committee for Multilateral Export Controls (CoCom) began operations in 1950 to control export of strategic materials and technology to communist countries (Russia and what have been its allies in the East Bloc). Participants included Australia, Belgium, Canada, Denmark, France, Germany, Greece, Italy, Japan, Luxembourg, the Netherlands, Norway, Portugal, Spain, Turkey, the United Kingdom, and the United States. It maintained three export control lists: (1) the International Industrial List, (2) the International Munitions List, and (3) the International Atomic Energy List. CoCom ceased to function on March 31, 1994, and the then-current control list of embargoed goods was retained by the member nations until the successor, the Wassenaar Arrangement, was established.
2. Maria Konarska, Ph.D. Central Institute for Labour Protection in Poland
3. Chronicle of Polish Office – transition period, Monika Pytkowska, Office&Facility Magazine, August 2009

Editor's footnote: Although it is possible to identify global workplace trends, it's essential that we also understand how they are interpreted and work at a local level. as Pavel and Dominika have here.

Nancy Sanquist   URBANISATION • FACILITIES MANAGEMENT

IFMA's role in developing urban facilities management

IFMA is very interested in Urban FM. There have been special sessions on FM and the City at Facility Fusion and World Workplace over the past two years; the IFMA Chapters and Councils with members who reside in cities around the world are awakening to the more macro environment in which their buildings are located; the Knowledge Management Task Force is examining the right mix of content for the IFMA knowledge base; the IFMA Research work is looking at future trends and cannot ignore the importance of this new viewpoint; and finally the IFMA Foundation is focusing its largest ever initiative on enabling FM workforce development worldwide and engaging the various levels of government, businesses, economic developers, education institutions and other foundations in cities around the world.

This year's Workplace Summit had a lively panel on FM and the City where we discussed this macro view as seen in new GIS and FM applications, along with moderatorErik Jaspers, and FM and the City experts Andrew Laing and Frank Duffy.

The concept of Urban FM first emerged in the UK beginning in 1993 with researchwork by Kretzmann and McKnight, who identified the value of an inventory of community assets, and this was followed five years later by Ngowi and Mselle's work on community participation in FM. Roberts picked the ideas up in 2004 where he defined "Urban FM" as a logical extension of the need to reinvest in community facilities and systems while "putting people first." Keith Alexander then added sustainability to urban FM but defined it in the same context.

The latest work on Urban FM that has captured interest is an editorial for the Journal of Facilities Management in 2013 by a South African professor, Kathy Michell. She writes how FM is a key component for the growing demand from both private and public sectors for the creation and management of sustainable cities with a need to understand urban facilities management. To do this, she noted that we need to take our research from the micro (space and building level) scale to a macro scale

> **"…In 1900 there were only 200 million people living in urban locations (1/8th of the world population) but in 2014 the numbers have increased to 3.5 billion and will grow to 6.5 billion by 2050…"**

of the urban environment, which includes "an improved understanding of the relationship between buildings, people and the urban precinct."

FM in the urban context is a new focus for IFMA as illustrated in the following network of the organization's activities for the next year:

1.The IFMA Chapters

These Chapters are organized around cities and include all the types of workplaces one would find in the urban environment, with the membership drawn from professionals living and/or working in each location. Each region of the world presents its own distinctchallenges and opportunities, but they can collaborate on new ideas and solutions when we start to think about the value of Urban FM in that area. Each understands their own urban environment better than anyone and have input into how perhaps a new Urban Workplace Strategist role can emerge andwork to integrate FM on the building scale and in the urban environment. Working with the IFMA Foundation on the Global Workplace Workforce Initiative will also bring the Chapters into this discussion.

2. IFMA Councils

These are extremely important to the work in this new area of FM. 14 of the Councils refer to all the building types that are in an urban environment including: academia, healthcare, airports, banks/financial institutions, city/country clubs, corporate facilities, manufacturing/industrial/logistics, food service/restaurants, legal, museum/cultural, public sector (city, region, state, federal), religious, research/development, and utilities.

While these Councils remain mostly silos, we believe that Urban FM, by its nature, can bring them together to have a dialogue on the interconnectedness (network) and collaboration with themselves, the community, the government and the economic development agencies as

representing all the varied building types in an urban environment. Urban FM also views the Real Estate, Technology and Corporate Facilities Councils, along with the Sustainability, Workplace and BIM Communities, critical to the work of FM in this area.

3. The IFMA Foundation Global Workplace Workforce Initiative(WWI).

IFMA Foundation can play a supporting role in discovering and encouraging practices to leverage opportunities provided in urban environments as the various stakeholders come together to collaborate on creating a better urban experience for all who work, live and play in the city. The Foundation also is the linkage to the education community with the ADP program.

The market is strong for graduating FM's from these programs, but there are still not enough qualified graduates to fill workforce positions. In addition, businesses have come to the IFMA Foundation to determine how they can help connect graduates and businesses in specific geographies. Therefore, a new program was created called the great "Global Workplace Workforce Initiative."

This Initiative will bring together IFMA, the Foundation, educational institutions, businesses, government FM vendors and economic development organizations together in a particular geographic region to create a think tank that enables a dialog about the future of the FM workforce:

•   Determine the requirements for FM from the largest of the local businesses and if they match the curriculum being taught at the educational institutions (including high schools and community colleges) with the FM roles required to replace the aging existing workforce and to match increased growth;

•   Utilize the economic development resources to understand where the growth of the region is going and how facility management can play a more substantial role for future businesses;

•   Include representatives from local/county/state government in the dialogue;

•   Include FM vendors and other service providers, as well as other corporations who contribute to the Foundation to be part of this dialogue.

4.   The IFMA Competencies

The competencies define capabilities of successful FM professionals. We will suggest in this paper additional competencies that will be worthwhile to consider as the field evolves.

A revision of the 11 Competencies is scheduled for 2015. We would hope some of these new Urban FM skills will be considered by the Task Force that examines the workforce of today and the one required in the future.

These areas of new competencies are shown in the diagram on the next page: **W&P**

Nancy Sanquist

Nancy Johnson Sanquist is Vice President Marketing and Communications at Manhattan Software, an IFMA Fellow and IFMA Foundation Board Trustee.

L   www.linkedin.com/pub/nancy-johnson-sanquist/4/b5936

e   nsanquist@manhattansoftware.com

W   http://www.manhattansoftware.com/

References

1.   Michell, Kathy, "Urban facilities management: a means to the attainment of sustainable cities?" Journal of Facilities Management, Vol.11 (2013).

Editor's footnote:
The world's growing urbanisation is not only throwing great challenges at us, it is also opening new vistas and new opportunities as Nancy makes clear in this feature.

COMPETENCIES	ADDITIONAL Capabilities
Communication	Facilitation of discussions with all stakeholders including: government, economic development, developers, architects, urban planners, private businesses, education and the community.
	Ability to convey criticality of connectedness and collaboration with the urban environment to the C-suite
	Social media and crowdsourcing effects on FM and the City
Emergency Preparedness	Understanding the need to share up to date floor plans with critical information (exits, hazardous material storage, etc.) on occupancy with government agencies (fire, planning, etc.)
	Ability to do "what if" scenario modeling in GIS based on various disaster situations (bombings, fires, etc.)
	Identify and leveraging opportunities that the urban environment provides them to plan for alternatives in *non self owned buildings (Disaster recovery networks)*
Sustainability	Reporting on building carbon footprint to government organization which holds details for entire city
	Best practices sharing throughout the community on energy saving practices
	Identify opportunity to leverage elements in the urban infrastructure to improve sustainability (city heating / cooling)
	Ride sharing, biking program development and management with results of lowered carbon emission reported to government agency
	Opportunities for alternative transportation means potentially provided through the urban infrastructure (towards government)
Finance and Business	On-going communication with economic development agencies regarding demographic profiles for future staffing
	Understanding of economics of the city currently and in the future and the part a FM's organization can play in various situations
	Understanding of potential government regulations, programs and processes for cities that FM organizations occupy.
	Public and private initiative examples
	Understanding potentials of crowd funding and how to address that (funding networks!)
	Understanding financial demographics and how they are dispersed in the urban environment
Human Factors	Understanding of current and future demographics
	What social metrics can be collected on employees and others who come to work in co-working locations (ala London Google offices)
	A strategy for employing the Wellness Standards for tracking the quality of the built environment for the human population.
Leadership and Strategy	Leading a new view of FM and the City for the entire company
	Strategy development of FM and the City and the FM company
	Definition of a Urban Workplace Strategist and acceptance of new job title and value statement
	Identifying and planning the use of urban networks to achieve certain goals
Operations and Maintenance	The interconnectedness of each building and the city infrastructure
	A life-cycle viewpoint for managing it within the urban environment
Project Management	A new category of Program Management be added to this competency which is a higher level than Project Management.
	Addressing multiple types of projects, related to the effective use of urban networks for a certain purpose
Quality	Understanding that the quality of life and work in the built environment requires a holistic view of the entire city and not just building by building
	Identifying threat and/or opportunity as provided by the urban environment and plan how to act on them
Real Estate and Property Management	Understanding of land use issues for FM and the City
	Understanding of the RE markets wherever corporate buildings are located
	Linkage with economic development group in each city where there is occupancy
	Understanding of existing transportation and infrastructure issues of each city where there is occupancy
	Co-working in the city
	Planning for and enabling non-owned workplace capacity for the workforce to use
Technology	Understanding of CAD, BIM, GIS (3D cities and location analytics included), Video and any other technology which can be used to plan for and manage the built environment
	Smart City Initiative around the world
	Understanding Big Data opportunities and the open data sources that exist / emerge.
	Understanding the role of smart machines (which are connected!) and how they can be applied to the business of FM
Built Environment / Workplace	Understanding of buildings (*How Buildings Learn* by Stewart Brand is a great text for this)
	Understanding of basic principles of design (and redesign principles for reuse of existing) of buildings and the urban environment.
	A **new definition of Workplace** is accepted by IFMA to include all places that house workers no matter what type of space (reflective of the different workplace types of the 14 Councils mentioned previously).
	Workplace Strategy

Charles Marks   WORKPLACE DESIGN • URBANISATION

UK's regional cities begin to think smarter

There is a great deal of talk about the growing urbanisation of the world right now, and its effects on societies, economies and individuals. The numbers of people involved are daunting, especially in the developing world. As a result, many countries are currently experiencing the sort of upheaval we in Britain experienced nearly 300 years ago, and they are doing so in a very compressed time span compared to the 150 years it took in Britain. But the changing nature of cities is also apparent in the UK where it is having an effect not only in the country's only megacity but in regional centres too. For places such as Manchester, Birmingham, Bristol and Glasgow the challenges presented by a new generation of initiatives focussed on urbanisation can be profound and mark an opportunity to shift at least some of the UK's economic focus away from London.

A recent McKinsey report, called How to Make a City Great, claims that by 2030 around 60 per cent of the world's population will live in cities, 5 billion people compared to 3.6 billion at the moment. It contrasts the needs and experience of cities in the developing world to those in the developed nations although it says they all have similar challenges in terms of their response to growing urbanisation, use of resources and sustainability.

This is manifesting itself in a number of ways. Academics at organisations such as MIT are engaged in research projects such as the Senseable City Lab. But the most high profile is the idea of the smart city. These are cities that use intelligent technology to monitor their urban infrastructure and improve the quality of life for the people who live and work in them they include places such as Bristol, London, Dublin, Barcelona and Boston have something in common. It is particularly pertinent in the UK where around 80 percent of the population live in cities.

The industry involved in this is will be worth some $400 billion worldwide by 2020 and it has, of course, piqued the interest of politicians. At the national level in the UK, where

> **"...For places such as Manchester, Birmingham, Bristol and Glasgow the challenges presented by a new generation of initiatives focussed on urbanisation can be profound and mark an opportunity to shift at least some of the UK's economic focus away from London..."**

global market share of this industry is expected to be 10 per cent ($40 billion) the government has announced it is to set up a new Smart Cities Forum, chaired by Universities and Science Minister David Willetts and Cities Minister Greg Clark, with representatives from cities, business, and scientists.

A new report called 'Global Market Opportunities and UK Capabilities for future smart cities' was published recently to highlight how the technology could transform lives and provide an economic boost. Volker Buscher, Arup Director and Smart Cities Forum member, who wrote the report, said: "Smart technologies can help address some of the challenges of rapid urbanisation by improving services and managing their efficiency. We already have incredible academics and professionals in the UK so we are well equipped to capitalise on this growing market and help create a better environment for us all."

The government has already invested around £95 million of research into smart cities funded by Research Councils UK, £50 million over five years earmarked for the new Future Cities Catapult centre being established by the Technology Strategy Board in London, and £33 million invested in future city demonstrators earlier this year.

One of the cities leading the way in all of this is Bristol. Championed by mayor George Ferguson, Bristol is aiming to be one of the top twenty cities in Europe by 2020. It sees two of the main drivers for this as the development of a digital economy and by setting world class environmental standards in every aspect of the way it function. As a smart city, these two objectives go hand in hand.

It's already got a head start on plenty of other places. In 2015, Bristol will be Europe's Green Capital. And it has already established an organisation called Connecting Bristol which has been working since 2006 to improve the technological infrastructure of the city, including its broadband network. In doing so, it will set the benchmark not only for the UK's cities

but also its large towns. This might especially be the case along the thriving M4 corridor in places like Reading, Swindon, Oxford and the home counties, which already boast some of the most successful technology based organisations in the UK.

Given the opportunities for smart cities it's little wonder that a diverse range of organisations are looking at the implications of the phenomenon. These range from the UK government itself, to the Royal Society of the Arts to the Royal Institute of British Architects.

Last November RIBA nailed its colours to this particular mast with the publication of a new report that explored the massive potential role that data could have in the planning and design of our buildings and cities. The report was launched jointly by RIBA and Arup (who are obviously very keen on the idea of Smart Cities).

Called 'Designing with data: Shaping our future cities' identifies the main approaches to working with data for those involved in designing and planning cities. Better data can offer a deep insight into people's needs and has the potential to transform the way architects and urban planners design our built environments.

This could result in cheaper experimentation and testing of designs before construction begins. It also promises the chance for greater consultation with potential users – speeding up the process, saving time and money and resulting in better and more affordable design.

The report calls on UK Government to take steps to make it a requirement for the data that is already collected during the planning and design process to be easily accessible for those who may need it in the future. It's not only the Government and Local Authorities who will benefit from analysing this big data to improve local and national policy making (as is already common is areas like health and transport), it will also free up real time and resources for designers, planners and architects

The Government has recognised that better use of data has the potential to inject £2 billion in to the UK economy in the short term and £6-7 billion further down the line – these kinds of savings will ultimately filter down for those who invest in good design and benefit our towns and cities.

RIBA President Stephen Hodder said: 'The UK currently scores top for open data according to the Open Knowledge Foundation. Lots of the data is available and already being collected, so why aren't more architects taking advantage? We need the Government to ensure this data is harnessed by local authorities and made available for architects, developers, residents groups, charities, and business so they can make the best use of it.

'This report must signal an end to clunky planning application websites with their overly long reference numbers and multitude of pointless scanned documents, data collection needs to be standardised across the country, easily accessible and open to everyone. The RIBA is looking to a future where data will enable architects to unleash their creativity in ways that are currently too expensive or time consuming to create the best buildings possible.'

Léan Doody, lead consultant for smart cities, Arup, and author of the report said: 'We have all been in situations when we are frustrated by our environment; when we are unable to park, roads are over-crowded or pavements too narrow.

"Analysis of open data provides the possibility of avoiding this, and we are already seeing some exciting government initiatives in the UK around this, including the launch of the Smart Cities Forum, the Open Data Institute (ODI) and the Future Cities Catapult. This report illustrates the positive practical and economic benefits of using open data, and in doing show demonstrates the necessity for its wider use.'

The implications of these kinds of initiatives will be profound for the people and organisations of the world's cities and towns. but also for specific professions who already understand the role that data has in shaping the world around us and helping us to make better decisions about how we shape it.

It's essential that the UK and its great cities other than London remain world leaders in the development of the ideas and infrastructure that help us to work in new and more rewarding ways. Because once we have shaped our cities, they will shape us. **W&P**

ℹ **Charles Marks**
Charles Marks is managing director of Fresh Workspace

e charles@freshworkspace.com

W www.freshworkspace.com

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WORKPLACE DESIGN • COLLABORATIVE WORKING

Don't look to the skies

The idea that extraterrestrial organisms have throughout time seeded the surface of the Earth is not the sole preserve of loonies, mystics, conspiracy theorists, the stoned and wishful thinkers. It has some high profile and serious adherents. One of the most surprising was the astrophysicist Sir Fred Hoyle; pillar of the scientific community, atheist, Darwinist and the man who coined the term Big Bang.

Yet also a man who believed that the 1918 flu pandemic, polio and HIV were the result of micro-organisms that fell from the skies rather than evolved on Earth. The broader scientific community dismisses such thinking because it derives in part from either an incredulity at the processes involved or an ignorance of them.

The same mindset is evident whenever some supposed trend is latched on to in other aspects of our lives. It is the underlying notion behind the generalisations about Generation Y and is there in the much talked about issue of how the technology, media and telecoms sector (TMT) is not only gobbling up all the available office space in the world's tech hotspots but also transforming how everybody else sees their workplaces and redefining what is 'cool' about them.

So far as much of the media is concerned, this seems to mean slides, graffiti, juvenilia, quirky meeting rooms, those battered old armchairs that haven't already been bought by Starbucks, pool tables and anything else that lets people think they're not really in an office at all.

More soberly, the general characteristics of TMT offices are listed in the British Council for Offices' (BCO) recent report on the sector. They are:
• More floorplate given over to collaborative work areas.
• More amenities – cafes, restaurants, relaxation and play areas, and 'outside space'.
• Office density levels counterbalanced by increased amenity space and the needs of core business 'creatives'.

• Flexible accommodation – versatile spaces that can adapt quickly to changing demands.
• User control – increased preference for efficient lighting and heating and sustainable features that contribute to a company's green credentials.
• New lighting, smaller power – increased use of portable technology may reduce the need to power IT servers and 'hard-standing' desk computers, with lighting for the person rather than the tool.
• Shift of spend – less emphasis on Category A and growing focus on Category B and C interior fittings with potential for quick refreshes and restyling to stay 'on trend'.
• Technology: more cloud and thin client systems, and increased use of personal digital devices means that superfast connectivity for all communication tools is a top priority.
• The popularity of cycling to work means more bike storage, lockers and showering facilities.
• Aesthetics: less concern about exterior appearance, with the focus shifting to interiors, and a preference for a 'stripped back' industrial warehouse style to emulate the 'San-Fran' look rather than corporate steel and glass

Yet these are not only desirable features for a wide range of offices, some have been around for a long time. For example, the idea of a shift in emphasis from the personal workstation towards more collaborative and recreational space and mobile working can be comfortably mapped back some 20 years. In Frank Becker and Fritz Steele's 1995 book Workplace by Design you will find: 'an effective organization is best managed as a total integrated system that includes the physical facility, information technology, organizational policies and practices and management style' The TMT sector no more fell from the heavens than did the members of Generation Y, albeit that they may push boundaries. To the authors' credit that is also the conclusion of the BCO report. **W&P**