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## What Will Tomorrow Bring?

By Jim Ware and Charlie Grantham

And just around the corner, we see . . .

We were recently asked by [CoreNet Global](#) to join a group of far-thinking futurists as part of the association's new Workplace Community initiative. As part of the "Future Trends" working group we've been asked to look at how the workplace (and workplace management challenges) will evolve over the next five to seven years.

In the spirit of full disclosure, we have been volunteering our time in a number of CoreNet programs and initiatives for over five years. We've also written several articles that have appeared in CoreNet's executive publication *The Leader*. See "[Demographics and the Changing Nature of Work](#)" (May, 2004), "[Location Strategies: Where Do You Need to Be?](#)" (July, 2006) and "[Closing the Talent Gap: Companies and Communities Team Up](#)" – the most recent one having been the cover article for the September/October 2007 issue).

Thus we are two of five experts who have been asked to pontificate on the "state of the future" as it will impact the corporate real estate profession, its operations, and the ultimate tenants of all those commercial real estate investments. The others in our esteemed group are **Frank Becker** of Cornell University, **Bill Porter** of MIT, and **Frank Duffy** of DEGW Architects. The results of the conversation the five of us are having will be made available to CoreNet members in the near future.

The five of us will come together (virtually) in early January to engage in a distributed conversation emanating from three diverse locations: London, Boston, and Palo Alto. We are very grateful to **Chris Hood** of Hewlett Packard, who has arranged for us to use HP's powerful [HALO video conferencing system](#).

Our conversation will be videotaped, edited, and distributed to interested CoreNet members. Hey, you might even see us on [YouTube](#) by the Spring time. However, we thought it might be interesting to involve all of you out there in this exploration of the future of the workplace.

So, here we go. We'll be brave enough to share our initial ideas with you, but in return we hope you'll push back and extend our thinking. Remember, these thoughts and ideas are in "first draft," as we're fond of saying. They are *not* fully formed and remain subject to much revision as we benefit from others' thinking. Who knows, maybe there's some important facts and data we haven't seen yet. Here in digest form are our respective answer to several key questions we've posed to all the members of our working group (note: we've kept our individual responses to each question separate in the interest of keeping the conversation fresh and avoiding premature closure).

### 1. What do you consider the two most important "forces" driving towards significant change in the future of work and the workplace?

**Charlie:**

Well, without a doubt energy costs are **the** major force at work. And it's not just the cost of moving people around (which I think is close to ridiculous); it's also the energy cost embedded in every product. Right now it costs more to move a tomato from California to Arizona than to grow the tomato itself. Extend that thinking and there is a **big** added cost coming at us. And we haven't even started to measure the negative impact. I think large employers aren't very far away from paying a "tax" (or impact fee, whatever) to offset the pollution their employees create by coming to and from work.

Technology can never be denied as an influencer of where and when we work. This giant growing web of connectivity actually expands the workplace. Just three years ago I couldn't get cell service, or broadband access, on a mountain top in rural Arizona. Today I have a choice of three providers. Work anywhere, anytime has become a reality in North America! This trend will continue and speed up in developing areas. I think firms will invest in technology before they invest in physical infrastructure like roads and light rail. The world will not only become flatter, but bigger (and smaller at the same time).

The last major force I see is social. Quite simply, demographics and shifting psychologies combine to totally re-define the contract between people and a source of income. I don't think we can underestimate this one. People (or employees) just don't see themselves working "for" someone else anymore. That's perhaps a subtle change, but it's also profound. It's like we are watching serfdom disappear; and look what that social change did to where, when, and who was doing the work. I'm fond of saying "Watch Hollywood and you'll see the future of people/company relationships." A writers guild says, "Hey, wait a minute," and an entire industry shuts down for a month. What would that look like in the banking industry?

**Jim:**

I vote for demographics and global climate change as the two forces that will have the most powerful impact on the future of work.

The demographic trends are clear, and becoming widely recognized. Over the next seven to ten years more than 75 million Baby Boomers will reach age 65. While not all of them are currently employed, the impact on the workforce of this "event" will obviously be dramatic. And I'm personally convinced that the majority of those boomers will not "go quietly into the night" of traditional retirement.

Instead, they will be seeking a different kind of work experience (part-time, more "at-home" work, a different mix of current income and benefits, more freedom and personal control over when, where, and how they get their assignments completed).

Because there are nowhere near enough workers in the next age bracket to replace those Boomers, organizations will be under enormous pressure to accommodate the wants and needs of both the Boomers themselves and those of the smaller cohort (the forty- and fifty-somethings) coming along behind them.

And the other force that I expect to have a major impact on work and the workplace is global warming. We're going to see significant changes in public policy and commercial practice in response to the growing evidence that we (all of us) must reduce our energy consumption and our production of greenhouse gasses.

But I'm not talking just about green buildings, though LEED certification for new buildings will certainly become not only desirable, but most likely mandatory. Don't forget that the greenest building is the one that doesn't get built (or is torn down for being too "ungreen"). And as desirable as high-mileage vehicles may be, the most energy-efficient car is the one that sits in the garage all day, unused.

My prediction is a simple one: we're going to see a fundamental transformation in commuting patterns as well as a very basic rethinking of what "corporate" offices are for. To be more tangible, I expect an increasing amount of work to be conducted either out of home offices (a two-second commute, to paraphrase the title of an excellent book on Virtual Assistants by our friends Chris Durst and Michael Haaren), or from local shared work facilities that people can walk or bike to (or, at worst, drive a mile or two to). Our society simply can't afford to support millions of people commuting into center cities, or even suburban office parks, in large, 3000-pound vehicles throwing tons of CO2 into the atmosphere.

## **2. What are the most significant forces for the status quo? (that is, what will slow down change?)**

### **Charlie:**

The embedded, or sunk, costs of existing real estate portfolios. These are long-term fixed assets that can't quickly be moved to a variable cost. You have to pay for it whether or not you use it, so why change? I think the United States (if not the World) has an excess of about 40% in commercial real estate assets. I believe that after we have a minor recession in 2008, future growth will be in eating up this excess capacity. Investing in new commercial construction in most markets is folly. The whole tenant/landlord/owner/investor relationship does not reflect today's distributed work reality. The impediment to change is long-term leases. If businesses could ever figure out how to break that impasse, change would happen more quickly.

Second is organizational inertia, or role re-definition. The old industrial model of skill sets is a real barrier; competencies and compensation (both real and psychic) are hard to change. Unfortunately, most people still derive a great deal of status and power from their employment position. As long as that holds true change will be resisted. It's inertia from large, established organizations that slows things down. The little guys (where most innovation occurs, by the way) don't have this problem. Even Google is going to have to face up to this one sooner or later.

### **Jim:**

That's easy: the familiarity and even comfort of current work habits, no matter how "crazy" and irrational they are in today's world; and the fears of middle managers who don't know how to manage a distributed workforce made up of relatively independent, in-short-supply professionals.

The vision I've got of "what could be" is so radically different from today's most common workplace management practices that I doubt even enlightened executives will embrace it without a lot of soul-searching and ROI analysis. And even then the scale and scope of the changes required to implement a genuine 21<sup>st</sup> century workplace are so great that I expect we'll see many more failures of nerve than we will examples of successful leadership. Change is tough, even when it makes both sense and dollars.

And the biggest change of all will have to be the willingness of first-line managers to trust that their subordinates can do good work even when no one is looking over their shoulders. Managerial resistance to distributed work, and to self-reliant employees, is the single most important challenge we face in our day-to-day client work.

**3. What will the workplace look like in 5-10 years? Think both micro and macro – workstations, interiors, etc, as well as what kinds of buildings we'll be using, and where they'll be located.**

**Charlie:**

In five years we will see a decrease in centralized office space by 50% of today's footprint. In ten years the footprint will be down by 75% from today's level. Buildings that aren't "green" will simply be torn down. We have already seen this happening all the way from California, where old strip malls are obliterated, to rural America where blocks of early 20<sup>th</sup>-century construction are being bulldozed. Look for more of this kind of thing. Those old large structures aren't effective (given technology) and now they aren't efficient either. They will start to go away.

At the micro-level, in five years we will see total portability of technology. Desks won't be needed to hold up phones; walls won't be needed to plug things into. This vision implies a total re-design of interiors. Start thinking about village centers; social squares. Storage gone; walls gone; electric outlets gone. I kind of like the workplace "arena" model right now. Think of large open spaces (like a hockey rink) that can be re-formed, partitioned, and re-designed on a whim. That's going to take a radical new look at "tenant improvements."

In ten years, if you want the vision look at the space station. Look at the interior of the space shuttle. We are already pushing the limits to "distributed work" to the outer reaches of our solar system. This trend will increase. Functionality will triumph over aesthetics for the next two decades. Life support will be a base requirement. Just think about how you would design the workspace if it were going to be on Mars. Looking at some existing far-out places, like Antarctica, would be instructive.

**Jim:**

I've tipped my hand on this one already. We're going to see plenty of smaller "green" buildings, located much closer to where people live.

More than that, however, I think we'll see the interior spaces of those buildings being used in very different ways. We're fond of pointing out that corporate facilities are becoming more and more like town halls or community centers. They're the places where employees congregate when they need to be with their colleagues – for group meetings, project team work, workshops and seminars, and social gatherings. Sure, there will still be some individual workspaces, but I bet most of them will be touchdown spots, not private places where you hang your coat in the morning and pick it up on the way home.

**4. How will rising costs of gasoline and attention to global climate change affect commuting patterns and corporate travel?**

**Charlie:**

When gasoline hits \$6 bucks a gallon in the United State and double that in China and Europe, travel “to work” will decrease by 50%. More and more “work” will move to communities within reach of local transit.

I've said this before, but it deserves emphasis. Global climate change will result in “taxes” (or, if you prefer, environmental user fees) being imposed on companies. The cost of business goes up 15%-25% to reflect the environmental impact. In addition, look for radical change in business processes. Do different workers really need to be in the same place at the same time?

Corporate travel won't go away, but you will really have to make the business case to justify it. Three trips a year to Asia will be down to one. Corporate travel used to be seen as a perk; it was viewed as glamorous. Perhaps that made sense in the days of the Titanic, but not on a Boeing 737 with a twenty-minute turn around time. Bottom line: it costs too much to move people around without a **real** reason for being in close proximity. Travel three days (one out, one in, one for work) for a routine staff meeting that isn't well facilitated? Not anymore.

**Jim:**

Again, I sort of answered this one way back at the beginning. We certainly aren't there yet, but when the price of gasoline hits \$5-\$6 a gallon and it costs close to \$100 to fill up a gas tank, I think we'll see a major revolt against five-days a week commuting. People just aren't going to be willing to commute 500—700 miles a week anymore, even in fuel-efficient hybrids. Sure, there's some mass transportation, and I'm sure more people will be using it (it might even be deemed part of a city's infrastructure, like roads, and be made free so people would actual use it). I've seen how reliance on mass transit in large cities like New York and Chicago can literally change people's work habits – defining the beginning and end of the work day, for example.

It might even get ugly as social pressure builds on individuals to stop pouring CO2 and other gasses into the atmosphere. I think we'll get to a point where people will explicitly ask each other, do we really need to get into our cars (or trains and planes) just to get together face-to-face?

And I suspect that it won't be long before we're even hearing about the immorality of carbon-based commuting (especially in automobiles moving only one person at a time) from the pulpits of our churches and synagogues (as well from the “bully pulpit of our political leaders).

We don't have to “go” to work to go to work; our motto for the last several years has been “Move bits, not butts.” But it's going to take some dramatic changes in public policy and infrastructure funding to make to make it happens.

**5. What "wild cards" could completely surprise and disrupt our visions of the future of work?**

**Charlie:**

**Technological discovery (and engineering proof) of an extremely low-cost, micro-sized power source.** Hydrogen fuel cells weighing ounces and generating multiple kilowatts of power.

Actually that isn't so wild. The futurist in me says we'll see it within ten years. But the wild part would be within three years. There are some experimental solar cell production technologies right now that could reduce the effective cost of solar electricity to \$.99/kilowatt in final testing. Do we really need the power company?

**Global enforceable legislation that partitions the type of work (and production) to different parts of the planet.** Manufacturing in Asia; agriculture in Africa; low-end knowledge work in South America and high-end knowledge work in North America and Europe.

This is happening already, but isn't legislated. If communities can see themselves as centers of excellence for certain types of work (like symbolic computing or medical software), why can't entire countries? A lot of this will be subtly directed by public policy that dictates investment in technologies, curricula development, and subsidies to specific industries. But what if we formalized these kinds of policies at a national level? Of course, the cynic in me says; "they don't have enough brains to do that." Maybe not Cesar Chavez, but what about Putin?

**Invasion from outer space.** Colonization of earth by advanced species that are vastly superior culturally and technologically. Okay, okay, I know this one is really far out, but play with it for awhile. There is absolutely nothing rational about this one; it's purely emotional, even primordial. What happens when the white man discovers (and invades) the Amazon rainforest? What impact did Europeans have on American (that's South, Central and North) culture and ways of life? Kick that up a notch or two and maybe you can see what I mean.

**Jim:**

What would happen if local or state governments started imposing **strict (i.e., meaningful) carbon emissions standards**? What if **telecommuting was mandated** – say, 50% of any company's employees *must* telecommute 2-3 days a week?

Or, from a completely different perspective, what if someone invents **a really effective 3-D videoconferencing capability** – and it's available at low cost over "normal" broadband communications channels? Would that make web commuting easier, or more common? Duh.

Or, to come from an entirely different direction, **what if we stumble into a worldwide recession that makes 1929 look good**? Suppose China and Japan demand repayment of the United States' debt obligations, and refuse to accept dollars? **If world trade were to grind to a halt**, what would happen to all our visions of "location-neutral" work?

Here's a really wild one. What if we discover that all the **electromagnetic waves that make possible television, radio, WiFi, cell phones, and microwave communications turn out to be highly dangerous to human beings**? How would our civilization survive if we couldn't use any over-the-air broadcast technologies?

And here's a final one (at least for now). **What if the federal government prohibits employers from offering group life and health insurance and provides some form of universal health care to all US citizens**? I believe we might see an incredible and unprecedented shift in employment from large organizations to smaller ones and to self-employment. Our own research suggests that health insurance and pension benefits (which have already all but disappeared) are the primary – if not the only – reason that millions of

workers are staying with their current employers. Think of the productivity improvements that might be unleashed if people felt “free” to find work that they’re good at and enjoy!

## Conclusion

Okay, so there you are. You may agree, disagree, or be totally skeptical. What have we missed? Where are we off base?

As always, we invite your comments and input. If we get enough feedback we’ll compile your comments and let everyone know what themes emerge, submerge, or vanish into the mists of time. And we’ll “steal” what we like for our upcoming CoreNet conversation too (just kidding – if you send us something really provocative we’ll be sure you get appropriate credit). Remember the old saying: if you steal ideas from one person, it’s plagiarism; if you steal from many people, it’s research. And we’re nothing if not researchers.

Send us your comments, challenges, and “atta-boys” to [comments@thefutureofwork.net](mailto:comments@thefutureofwork.net). We look forward to learning from you!

## About the Work Design Collaborative and *Future of Work Agenda*

*Future of Work* is a global network of resources – practitioners, thought leaders, researchers, and senior consultants – who are committed to building and implementing physical, social, and technology-based work environments that are cost-effective, socially and environmentally responsible, and personally satisfying.

We are focused on defining the future of work and helping our members and clients achieve new levels of workforce and workplace productivity. *Future of Work* produces and distributes management tools, surveys, benchmark databases, white papers and technical reports, conferences and workshops, newsletters, books and articles, and public presentations on the changing nature of work. The Work Design Collaborative, LLC, provides leadership and infrastructure services for the *Future of Work* community.

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