

Understanding the Changing Dynamics in the Workplace:

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The changing dynamics of demographics, economics, sustainability and technology in the workplace require that Architectural and Interior Design firms stay at the forefront of the transition to a competitive workplace that truly supports a multi-generational workforce and is more environmentally responsible. Not all firms are up to the task.

The large national and international AD firms continue to struggle with uneven quality and skill sets from office to office. They routinely promise clients their best and brightest and regularly fail to deliver on anything but the largest projects. Medium-sized and regional firms struggle with the same challenges without the superstar quality or brand strength to compete for the biggest and best commissions. Most of the smaller firms have difficulty committing resources to maintain a database of suitable depth to allow its principals and teams to perform at the highest levels.

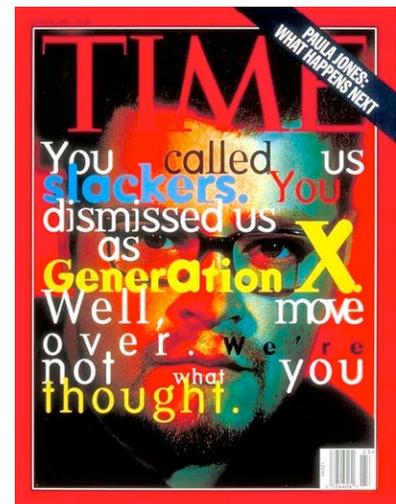
And many firms standardize their data-gathering and delivery process instead of utilizing client-specific methods and tools to engage clients and their employees in an experience where they can participate in the development of workplace strategy solutions that are linked to the effectiveness of their organization. Our practice focuses on the alignment of key business issues with physical space which requires deeper insight into the behaviors and tasks of the people in the organization to arrive at buy-in of the final workplace solution.



In the past 50 years, the population of the world has doubled and energy consumption has far outpaced population growth. Current behaviors are not sustainable. The workplace requires 62.5% of all electrical consumption, and in the US, is responsible for 30% of all greenhouse gas emissions.

For the first time, we have four generations at work in the same space. Each generation has distinctly different characteristics and needs to be productive. What worked for Traditionalists and Baby Boomers does not work for Gen X'ers and Millennials.

Gen X'ers are the first generation to grow up with both parents working. So they are more self-reliant than Baby Boomers and Traditionalists. They are also balanced, astute, fun, informal, detached, pragmatic, entrepreneurial and capable of global thought. They are adaptable, independent, unintimidated by authority, skeptical, and quick to criticize. They want gratification - *now!*



For Gen X'ers, spacial quality is a big deal. They like personalized flex space, open and accessible leadership and team areas.

Millennials are optimistic, confident, easily bored, nurtured and sociable with street smarts and a sense of morality.

Sociologists say that the Millennials may be the most productive of the four classes, but will be the most difficult to manage. This generation wants to work anywhere, any time, and use technology. They do not want to be told when, how or where to work. They are tenacious with technology, but require

supervision (which they do not want) and are prone to job hopping because work isn't everything. They also demand gratification now.

Baby Boomers are optimistic, team-oriented, self-centered and judgmental and overly sensitive to feedback. Traditionalists are dedicated, accepting of delayed rewards, willing to sacrifice, perform hard work, put duty before pleasure, value law and order, honor, loyalty and respect authority. They are less responsive to change and struggle to embrace technology. They value the private office they earned and do not want to give it up.

A look at issues, people and events that shape each generation can prove useful in defining and valuing differences.

Traditionalists, born 1928 – 1945, number 76 million and have as major influences the Yankee Clipper, the Duke, Pearl Harbor and the Great Depression. Traditionalists are stable, detail-oriented, thorough, loyal and hard working.

Their challenges are that they can be unresponsive to change, reluctant to rock the boat, uncomfortable with conflict and unexpressive when they disagree. Their ideal space reflects a clear division of labor, reflects rank, status and authority and defines boundaries.

Baby Boomers, born 1946 – 1964, number 80 million strong and have as their major influences Martin Luther King's dream speech, the assassinations of the 1960's, Woodstock, Viet Nam, the Beatles, the Boob Tube and Star Trek. Baby Boomer assets are that they are driven, service oriented, aggressive, value relationships, aim to please and are team players.

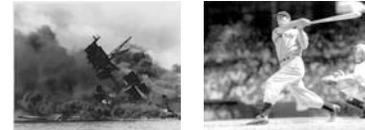
Their challenges are that they can struggle with technologies, are reluctant to disagree with peers, put process ahead of results, are overly sensitive to feelings, are self-centered and judgmental and are not naturally budget-minded. Their ideal space is one with a balance of private office and open plan environments with break-away private enclaves for teaming and collaboration with technology-ready training areas and a centralized knowledge center.

Gen X'ers, born 1965 – 1980 and numbering 46 million have as their major influences the Material Girl, Michael Jordan, anything electronic and the birth of MADD. They are adaptable, techno-literate, independent, unintimidated by authority and creative.

Their challenges are that they are independent, have atypical manners, are skeptical, are perceived as slackers, are quick to criticize and lack assertiveness. Their ideal space is flexible and has techno-ready multi-purpose rooms, has personalized flexible, mobile workstations, supports alternative officing and has open accessible leadership areas.

Millennials, born 1981 – 1999, 76 million strong, and characterized by major influences of the Williams tennis sisters, Prince William, instant messaging, 90210, portable technology and the tragedies of Columbine and 9-11.

Millennials like meaningful work, realism, are tenacious, have a heroic spirit, enjoy multi-tasking and are tech savvy. Their predicted challenges are their need for supervision and structure, inexperience, penchant for job hopping, desire to multi-task and their belief that work isn't everything.



The ideal space for Millennials is open, fun and collaborative, with flexible fluid workstations that allow personalization and a plug-n-play/ wireless high technology environment with high-speed broadband everywhere.

Comparative Generational Characteristics:

<u>Traditionals</u>	<u>Baby Boomers</u>	<u>Gen X'ers</u>	<u>Millennials</u>
Dedication	Optimism	Diverse	Optimism
Sacrifice	Team orientation	Global thinkers	Civic duty
Hard Work	Personal gratification	Balanced	Confidence
Conformity	Health/ wellness	Technological	Easily bored
Law and order	Personal growth	Fun	Sociability
Respect authority	Work involvement	Informal	Morality
Patience	Creative retirement	Detached	Street smarts
Delayed reward	Forever young	Self-reliant	Diversity
Duty b4 pleasure		Pragmatic	Automation in every aspect of life
Rule adherence		Entrepreneurial	Nurtured
Honor			
Loyalty			
Tenure			

A critical factor that impacts how the generations work is technology.

Traditionals used a fountain pen, had the telephone and television emerge in their lifetime, used an Underwood typewriter before electric typewriters came on the scene in the late 1960's. Today, the convergence of technology not only has the computers and internet as a major means of connecting with the visceral world, Facebook went from 100 million users in August 2008 to 200 million users by March 2009 – that's seven months! Wireless is dominant and text messaging, IM'ing and twittering are increasing rapidly. Today:

- 38% say they send more IM's than e-mail
- 63% of 13-21 year olds send more IM's
- 12% use IM to avoid tough personal conversations
- 30% of teens use IM to keep in touch
- 27% use a cell phone
- 17% talk in person

Computers are becoming smaller and more powerful. Networks will replace hard drives in the near future, allowing us at last to access information when we want it where we want it. And when that happens, we will always be "on" and work will less and less be a place and more a task that happens anywhere at any time the worker engages.

Older generations will still chose to speak face-to-face or by telephone, while younger generations will communicate with e-mail, text messaging or instant messaging. Observes author Charles Grantham in *The Future of Work*, "Because technology allows people to communicate easily and effectively, it's not unusual to see co-workers who are within 20 steps of each other communicate via e-mail rather than walking down the hall to have a real conversation."

Yet, Lawrence Prusak, IBM Executive Director of their Institute for Knowledge Management says, "Entropy or 'heat loss' occurs when you don't meet face to face. You lose heat, you lose passion. You lose emotional attachment. You lose coherence."



For organizations that treat knowledge as capital and social networks as the new economy of organizational management, space must move past six-packs of work stations to an environment that supports frequent face-to-face contact that facilitates interaction and exploits social networks for the good of the strategic business plan. Cellular space inhibits communication. Genuine knowledge transfer requires trust and happens in face to face interactions.



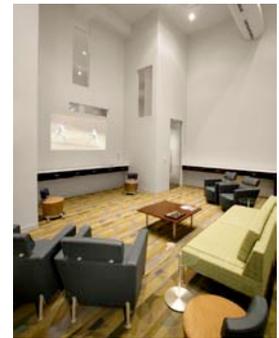
Collaborative spaces must be “funded” independent of their expressed needs yet with a balance for accountability and efficient space utilization.

“Google” is now a verb in the dictionary.

Previously, power was proximity to the boss. But hierarchy inhibits creativity and collaboration. The mix of generations requires a variety of spaces for people to work anywhere. Project space replaces “conference room.” Millennials learn by shadowing and being mentored. At the beginning of the technological revolution, people writing code or doing analytical work that did not merit the status of an office got a work station in an open plan environment where speech privacy was unmanaged (it still is for the most part). The cellular component of the workplace then was the programmer – an individual worker in a single work station.

Now, space must admit pairs of people and/or small groups as the new cellular ingredient of “workplace.” Many people need to be able to work side-by-side on line.

This comes at a time of economic upheaval and uncertainty. In a Transition Economy, real estate falters with weakened demand and uncertainty. Conventional market economics do not work for most market users and owners. Just when the market was beginning to see innovative products and new construction tax accounting rules with the associated opportunities for non-traditional responses to business needs for “win-win” outcomes, opportunities shift, go on hold or get value engineered to reflect the fear and uncertainty of users.



Businesses are competing differently at local, regional, national and international levels. New selling channels require agility. Trends towards mass customization seem to be returning to the economic benefits of mass standardization. The transition economy places pressure on the middle class and middle market as the economy becomes increasingly bi-polar.



Landlords are challenged by tenants who want:

- Low rent
- Free rent
- Cap on operating expenses
- High tenant improvement funds
- Construction costs are increasing while rents are not
- Shorter Lease terms
- View buildings as commodities

Tenants want:

- Location
- Views
- Amenities
- Expansion without ‘puts’
- Low rent
- Low Operating Costs
- Fully funded Tenant Improvement Allowances, including all Design fees, power/ telephone/ data and moving expenses
- Excellent maintenance, service and comfort
- 24/7 Security
- 24/7 HVAC



- Distributed broadband technology
- High connected power load
- Safe, accessible, inexpensive parking
- Incentives

Companies are increasingly sensitive to human performance. They may not be clear about the nature of the connection between space and performance, but they know there *is* one, and they are concerned with managing productivity, absenteeism, employee satisfaction and profit per employee. And while the synergy may escape decision-makers, they know enough to have a radar screen where they can and do try and assess comfort, control, views, daylight, privacy, lighting, ergonomics and human factors.

Senior management is looking to align its business models where their concern for organizational performance, group productivity and group satisfaction results from a workplace design that is appropriate to the organization to maximize human performance, deliver workspace agility and infrastructure agility to react and respond to changing needs. While the measure of business performance are profitability, share price growth, market share and shareholder value, the drivers are debt-to-equity ratio, speed to market, innovation, quality, global presence and brand recognition.

So tenants come to the real estate market hoping to align their business issues with physical space. They are looking for:

- Effective use of space
- Employee productivity
- Employee satisfaction/ retention
- Reasonable cost of occupancy
- Competitive advantages
- Reasonable profit
- Flexibility
- Exit strategy

Effective real estate interactions find the ability to align business models of tenants and landlords:

Landlord Needs

Full Buildings
 Tenant retention
 Longer Leases
 Competitive advantage
 Reasonable Profits
 2- + 3- Generation Strategy
 Exit Strategy

Tenant Needs

Effective Use of Space
 Employee Retention
 Reasonable Lease Terms
 Competitive Advantage
 Reasonable Profits
 Flexibility
 Exit Strategy

It is in this context that the Architectural and Design community must come to the interaction with key strategies that:

- Connect the Business Plan with physical Space/ A facility Plan
- Identify the metrics for the method of accounting
- Plan the integration of appropriate assets and space standards
- Attain stakeholder buy-in
- Present detailed Cost Analysis for client acceptance, buy-in, comfort
- Implement per Plan, Budget, Schedule

Life Cycle Cost must drive the new equation on product, material and system selection. At each stage of product life, the equation must pass the sustainability test. Aluminum is 70% recycled content, while steel is 30% recycled content. Yet it takes two to three times as much energy to make aluminum compared to steel. What are the strength-weight ratios and the role of aesthetics in the decision matrix?



End of Use gets compared to End of Life. For the past ten years, the number one reason something is replaced is because it has gone out of style. The Transition Economy makes “style” an elective and subjective criteria, not a critical success factor.

We have begun a materials matrix to identify chemistry to support an even greener product selection process than we have done to date. We have been specifying source-controlled non-rain forest wood products since 1993, long before the brain forests got on anyone else’s radar screen.

And there are exciting new product developments that mean that “design” is both composition and responsible product selection to align with the client’s business strategy. These new developments include:

- Demountable construction that has performance and high end quality & visual characteristics
- Raised flooring is now cost-competitive
- Modular lighting and power/ telephone/ data is now cost-competitive
- Fixtures, furnishings and equipment are designed for smaller space standards
- There are new IRS standards for accelerated depreciation
- Multi-generational and technological advancements require collaboration spaces that are informal and fun
- Facility is a tool for the recruitment and retention of the right knowledge workers
- Retained residual value with modular construction changes mix of construction vs. FFE = different real estate paradigm re. Tenant Improvement allowances



But there are also real barriers to change and progress. The inertia of the existing paradigm and focus on first-cost with confrontational negotiation is what most developers and real estate brokers know. It may be broke, but the Old School boys don’t want to change the game. It is what they know. And the financial industry is also a large part of the problem. In a Transition Economy, risk avoidance is king, which requires accountability in lending process and the cogent evaluation of residual value beyond what the appraisal market can be expected to deliver during the loan evaluation process.

Lack of client perceptiveness on the bigger picture of costs can be a problem. The Architectural and Design professions are partly to blame. Since the American Institute of Architects’ consent decree with the Justice Department in 1977, finding ways to be competitive has most often meant excluding from basic scope of services the development of comprehensive estimates of cost at Schematic, Design Development and Construction Document phases to get projects on budget and keep them there.

And the contracting community can own a bit of shame on this one as well. Even when engaged to assist with cost forecasting in the early stages of a project, general contractors and construction managers do weak estimates that are typically the sum of a single quote the CM got from a single favorite subcontractor in each category. Every number is conservative and sand-bagged, and the client is unnecessarily scared to death before the scope of the project is completely understood defined or estimated. And Value Engineering is nothing of the sort: it is the removal of meat and bone (scope) to achieve a predetermined target that too often does not reflect the project program requirements. And Value Engineering simply preserves the CM/ GC margin at the expense of the project’s quality and corresponding residual value. It is no wonder that in this context, owners struggle to balance First Cost with Life Cycle Costs and sustainability.



In a leased environment, ownership of the tenant improvements can be an barrier when demountable assets are involved. The tenant's rent has amortized the assets, yet conventional lease language vests ownership with the landlord, whose proforma depreciated them completely during the lease term. In existing buildings, ADA-compliant raised floor transitions at elevators, rest rooms, electrical closets, HVAC rooms and stairs can be costly and problematic.

Unions don't get modular lighting and power/ telephone/ data systems, and they don't want to, so contractors do not bid them properly to reflect the substantial labor savings when they are employed. And unions in many jurisdictions are resistant to facts and change.



And the accelerated depreciation benefits of the new IRS 1245 rules are simply not of benefit to every user in every instance. These IRS rules allow accelerated depreciation over five years of certain elements classified as personal property with appropriate documentation from qualified design professionals.

According to KPMG, Construction Tax Accounting methods achieve an average gain of 7% on base building construction and 15% on Tenant Improvements with an average tax rate of 35% and a discount rate of 6%. It is important to understand that Construction Tax Accounting is much more than Cost Segregation. It is a pro-active process that identifies qualifying assets and the documentation required to affirm their status. It is also important to understand that documentation quality limits audit risk because IRS says "...an accurate cost segregation study may not be based on non-contemporaneous records, reconstructed data or taxpayers estimates or assumptions that have no supporting records."

An example of a non-traditional approach illustrates the benefits: The 30,000 sf Enterprise Rent-A-car office in Kansas City, MO compared conventional construction with one involving modular construction: demountable walls, raised flooring with air distribution, modular power/ telephone data systems. Outcomes reflect:

	Depreciation Benefit		
	<u>Modular Construction</u>	<u>Conventional Construction</u>	<u>Variance</u>
Personal Property	\$1,749,339	\$ 668,088	\$1,081,262
First Year Tax Deduction	106,755	40,770	65,985
First 5 Years Tax Deduction	498,506	190,381	308,125
New Present Value Benefit	335,086	127,970	207,116

So the difference between conventional construction and the variance in NPV terms is \$90,014. The first year tax deduction of \$65k is 75% of the Additional Cost!

The First 5-Years Tax Depreciation of \$308k is 3.4 times the Additional Cost!

The NPV Benefit Variance is 2.3 times the Additional Cost!

This is a competitive advantage in *any* economy, let alone in a Transition Economy!

These are exciting and challenging times that demand a wider view of "workplace" in our society and economy where decisions can and should be collaborative and responsive to align physical space with business objectives. The process can embrace sustainability and alternative workplace initiatives and be cost-effective as well.



But if clients are to be positioned to make informed decisions, the Design community must come prepared to probe deeper in the programming phase to define the right questions if there is hope of arriving at the right answers, and the early and accurate definition of costs and construction tax accounting metrics are essential if flexibility and new high-performance solutions are to be accessed to achieve high performance environments.