Change, Chaos, Contrasts and Compromise

Workplace of the Future

Presented by: Meredith Thatcher

Carroll Thatcher Planning Group

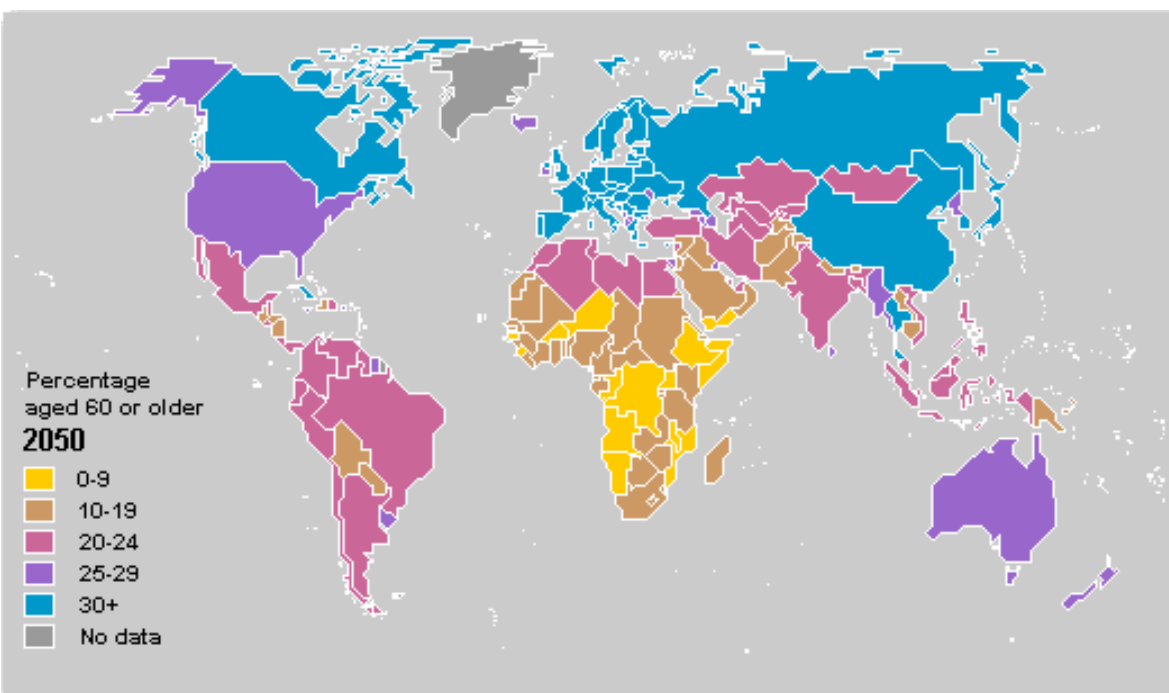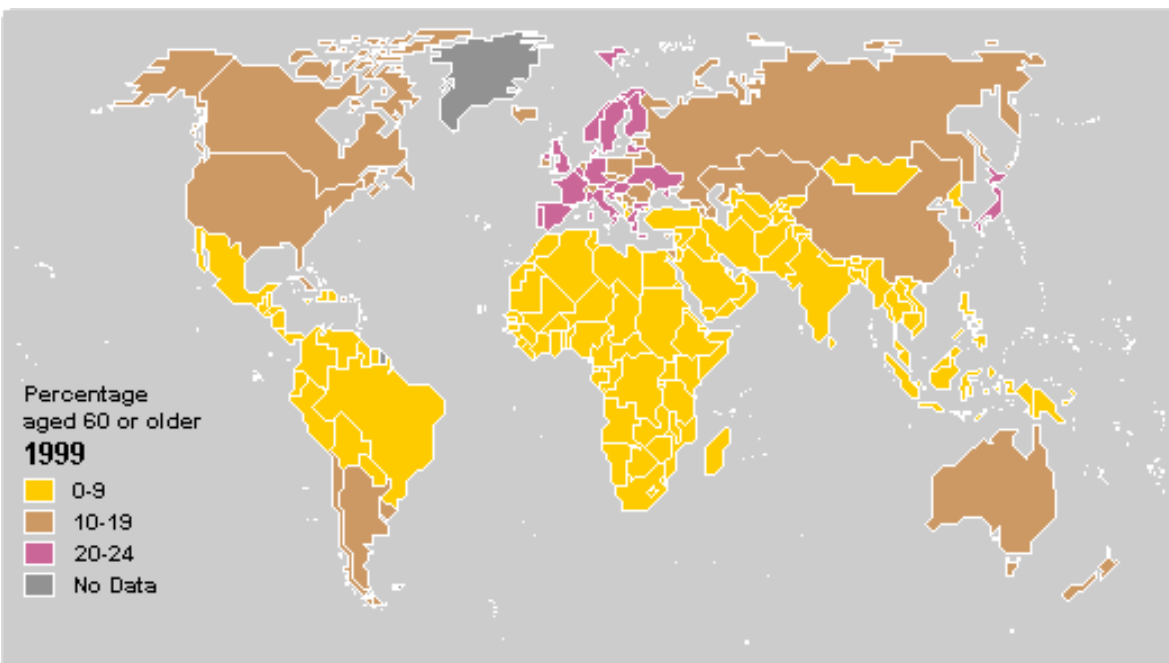**IFMA Atlanta Chapter**

January 2005

Future Trends

- Demographics
- Skills and occupations
- Global economy
- Knowledge management
- Business and cultural shifts
- New technologies
- Heightened security
- Work is where you are, not where you go

Boomers vs. Xers

quiet	rich sensory input
large families	latchkey kids
calm	frenetic
closed office	team space

Percentage aged 60 or older
1999
- 0-9
- 10-19
- 20-24
- No Data

Percentage aged 60 or older
2050
- 0-9
- 10-19
- 20-24
- 25-29
- 30+
- No data

Aging workforce

- Women in the workforce - peak in 2010

- By 2020 most baby-boomers will be in retirement years

- Labour shortage in 2020 - 950,000 workers (in Canada)

Aging workforce puts employers on notice

Kiss the 40-hour workweek goodbye: report

Aging: More women working

Emerging Occupations

- Computer related, multi-media and telecom
- Engineering, especially multidisciplinary
- Environmental specialists
- Aerospace
- Bio-technology

- Safety inspection
- Accountants and investment professionals
- Sales
- Nurses
- Heavy equipment operators
- HR professionals
- Building trades

Skills required

- **Flexibility and adaptability to change** - summarize and analyze information, withstand stress, accept criticism, work as part of a team, work in a multicultural environment

- **Independence** - learning, problem solving, decision making, taking calculated risks

- **Communications** - orally, in writing, independently, as part of a team

Global Economy

- Linked - a market drop in Japan has impact in Canada
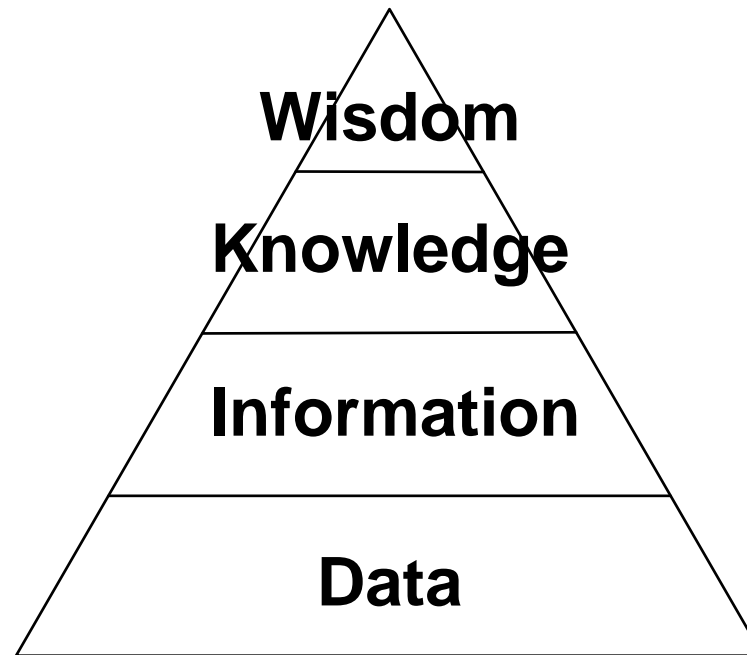
©Carroll Thatcher Planning Group
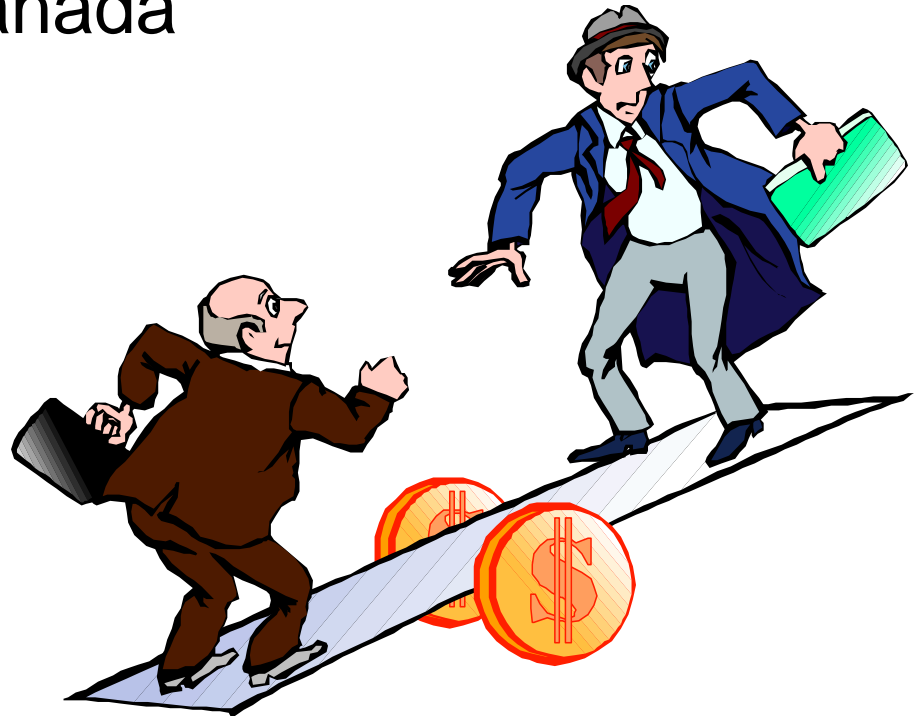
Knowledge Management

- Explicit and tacit knowledge

- Knowledge is 'sticky'

- Tacit ⊠ 1:1,000,000 ratio

- Knowledge worker

  - one who interprets and gains insight *or*

  - works with a computer

Why Worry About KM?

The Information Hierarchy

Business and cultural shifts

- Continuous improvement

- Diverse workforce

- Balance work and personal life

- 24/7 connection

- Disintermediation

- Defining value - tools vs. information

- Most educated workforce in history

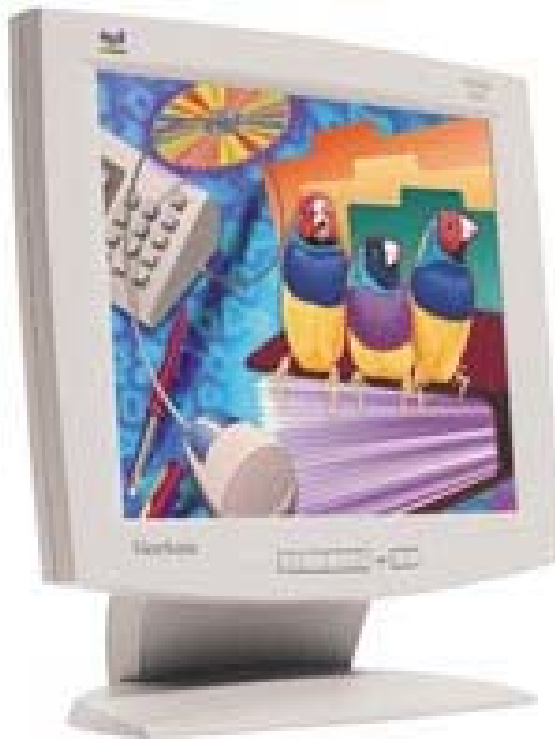- Less business travel = more reliance on technology

©Carroll Thatcher Planning Group

New Technologies

- Flat panel monitor

- Voice activated software

- PDA (personal digital assistant)

- Wireless communication

- Reliance on technology is causing a breakdown in communication

Flat Panel Monitor

- Draws less power
- Produces less heat load
- Easier on the eyes
- Less weight
- Less real estate required

©Carroll Thatcher Planning Group

Voice Activated Software

- Dragon Naturally Speaking
- Net Meeting
- Instant Messenger software
- **Noise, noise, noise, noise**

Work is where you are, not where you go

WAN

- Wide area network
  - Uses microwave and satellite
  - Public - i.e. Internet Service Providers

LAN

- Local Area Network

  - many standards

  - Uses radio signals

  - Communicates a few feet to 700 feet

  - Works well in dedicated environment - i.e. always use your desktop to print to a specific printer

PAN

- Personal Area Network
  - Bluetooth^{TM} - inexpensive chip
  - Instant network to connect to data, people and devices
  - Communicate within 6 to 30 feet
  - Great for people on the move - ad-hoc networking
  - PAN and LAN conflict (supposed to yield to 802.11 traffic)

Change

- **The only constant is constant change**
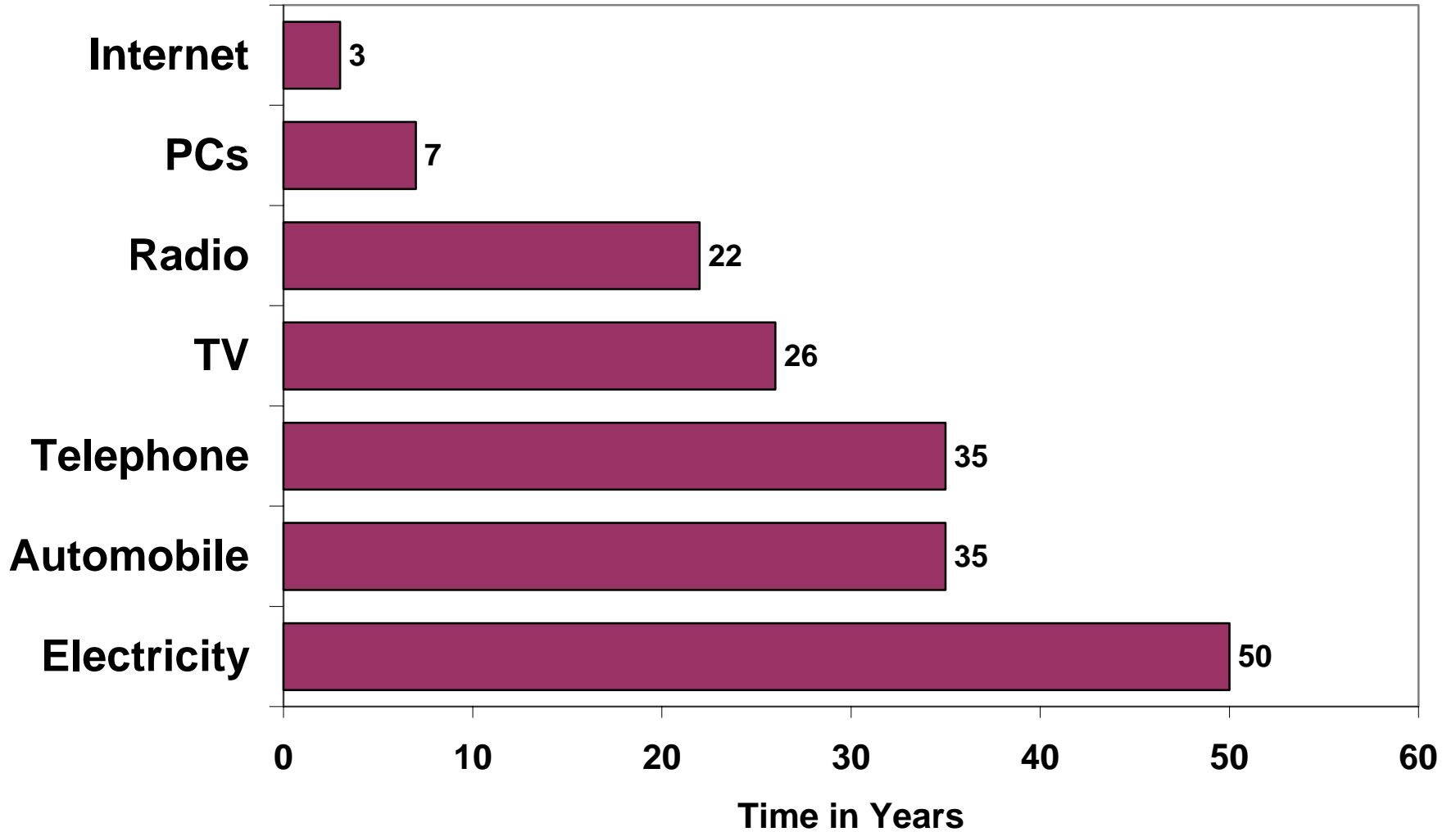
- **Change is accelerating**

In 1995

- 12% of companies never made substantial changes to their offices

- 42% moved their people

- 50% reconfigured their furniture, every six months or less

Critical Mass (30% of households)

Technology	Time in Years
Internet	3
PCs	7
Radio	22
TV	26
Telephone	35
Automobile	35
Electricity	50

Time in Years

Approaches

- 'Wait and see' attitude
- Constant improvement - never good enough
- Need for consolidation

Change is Stress Enough

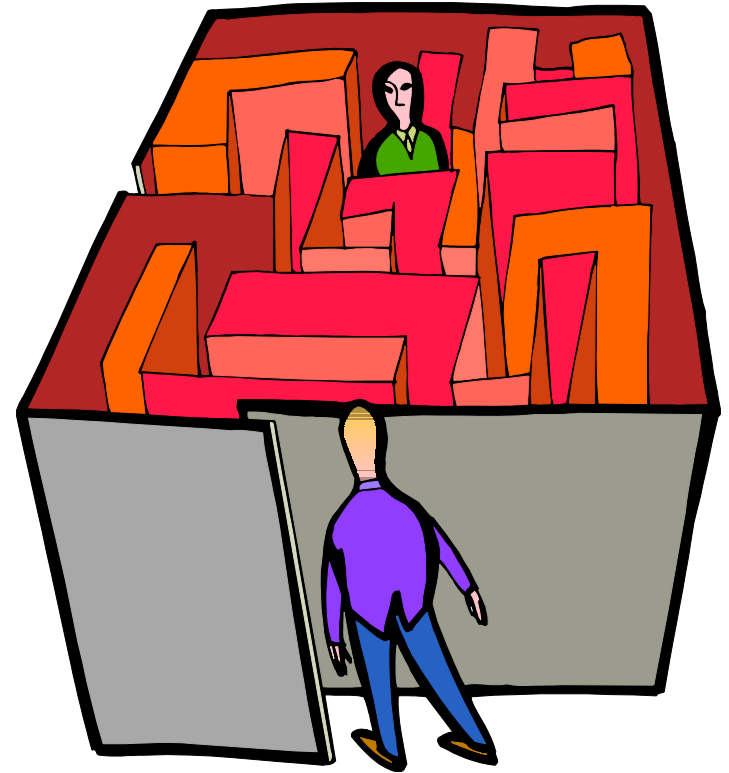**Create environments that are as stress free as possible**

Stress Through the Senses

The Five Senses,
Ludovicus Finson,
1580-1617

Sight

- **Visual clutter**
- **Unclear or missing signage**
- **Inappropriate lighting**
- **Gloomy or outdated environment**
- **Lack of visual privacy**
- **Unclean**
- **No variety - monotonous**

Sound

- Equipment
- People
- HVAC
- Street noise
- Management 'noise'
- Lack of quiet space - no refuge

Touch

- Dirty and sticky
- No texture
- Too hot, too cold
- Impersonal culture
- Inappropriate furniture
- 2 dimensional
- Quality of finishes
- Contact dermatitis

Taste

- 'I'm not even worth a cup of coffee'
- Lack of scheduled social interaction
- 'Left a bad taste in my mouth'

Smell

- Bad or stale air
- No welcoming smells
- Diversity in food
- Allergies - perfume, cleaning products, off-gassing

Intuition

- Don't have confidence with decisions based on intuition
- Risk aversion
- Cultural differences - react and interpret things in different ways

Balance

- Tension - 'you can cut the air with a knife'
- Moods
- Environmental deprivation
- Information overload
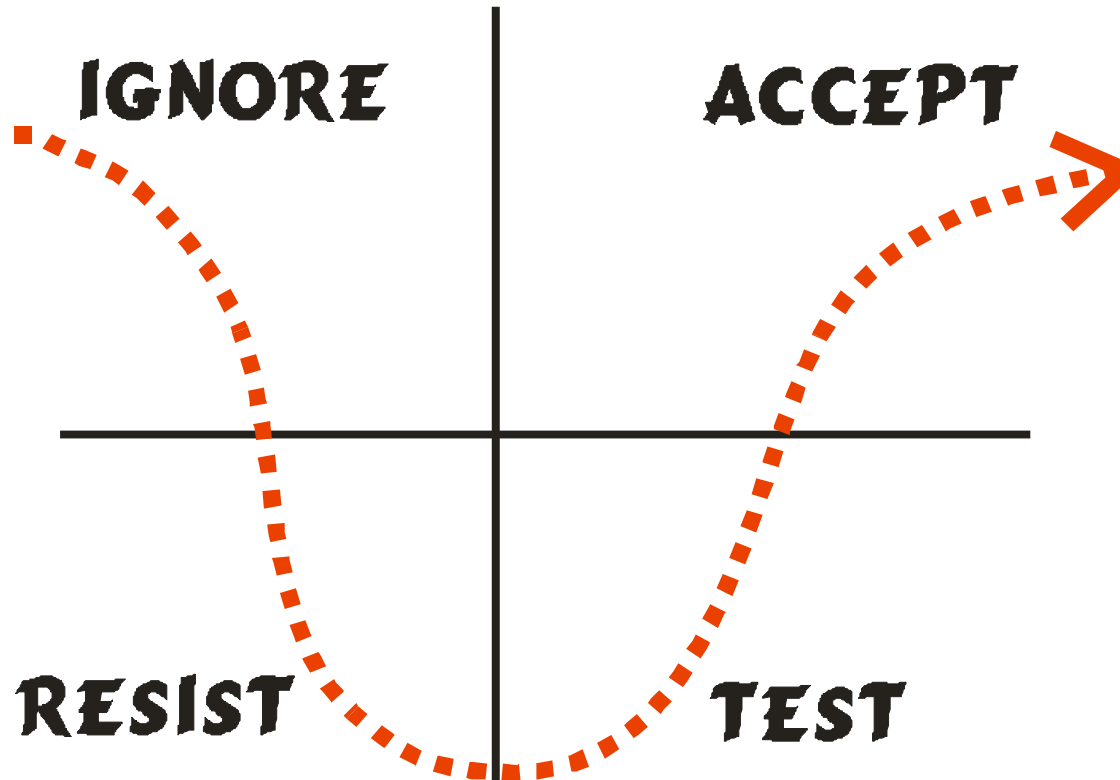- Competing demands from business and personal life

Change

- **The challenge to facility service providers is to be prepared for and reduce the cost and impact of change**

- **Opportunity or Threat !!**

How do you...

- Plan when the organization is constantly changing?

- Maintain efficiencies in planning, budget and control?

- Keep the cost of 'churn' under control?

What are our options?

- Real estate - rather than redundancy, build in capability for flexibility and adaptability

- Planning

- Behavioural

Flexibility

- ***Flexibility of the Interior Work Environment**: Flexibility is a measure of a building accommodation setting that has the capability to respond or conform to organizational operational change with respect to three major planning criteria - versatility, rearrangeability, and convertability
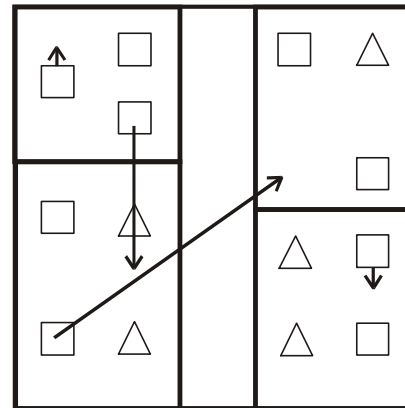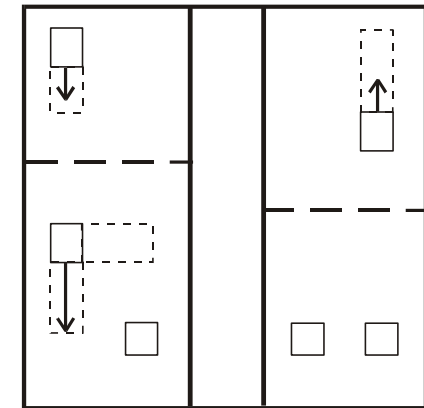
Ability to change

Flexibility

Versatility   **Rearrangeability**   **Convertibility**
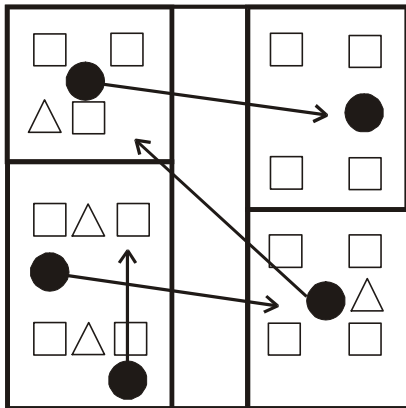
Move the People
Around

Move the Things
Around

Reconfigure the Space
and the Things

©Carroll Thatcher Planning Group

Flexibility Performance Indicators

- Ability to access and modify utility end points
- HVAC diffusers and radiators
- Communications end points and density
- Lighting
- Control of acoustics
- Separation of public, operations and secure areas
- Partition types
- Floorplate limitations
- Furniture and finishes

Adaptability

- ***Adaptability of the Building Fabric***: Adaptability is a measure of a building's capability to respond to major changes in functional use which involves implementation of new accommodation settings within an existing physical asset

Adaptability Performance Indicators

- Access to power, phone and data lines - horizontal and vertical

- Ease of change to supply and distribution lines

- Expansion capability of main supply and distribution

- Ability to modify air supply, ventilation, heating and cooling

- Ability to control lighting on an individual basis

- Structural capability

- Ability to easily secure part of the facility

- Capability to support special programs and initiatives

What are people asking for?

- **Connect with my community**
- **More, smaller, faster, shorter projects**
- **Keep managers out of trouble**
- **The latest and greatest technology**
- **Personal control of environment**
- **Storage space**
- **Quiet work space**
- **Space that I can personalize and have some choice**

Why should we do this?

- 'Retain and attract'
- Keep the talented ones
- It's good business
- It's our business
- If we don't, someone else will

Options for the Senses - Sight

- Lighting
  - high overall brightness
  - evenly balanced
  - quality and variety in daylighting
  - access to natural light
  - personal control of dimming
  - automatic switching controlled by ID card, photocells, occupancy sensors, telephones

Sight

- **Wayfinding - do it and keep it current**
  - **paint locators on columns**
- **Canary Wharf lessons (CFM&D Nov 2001)**
  - **integrated approach**
  - **brand identity**
  - **establish visual zones**
  - **proportionally appear the same size**
  - **'You are in…'**
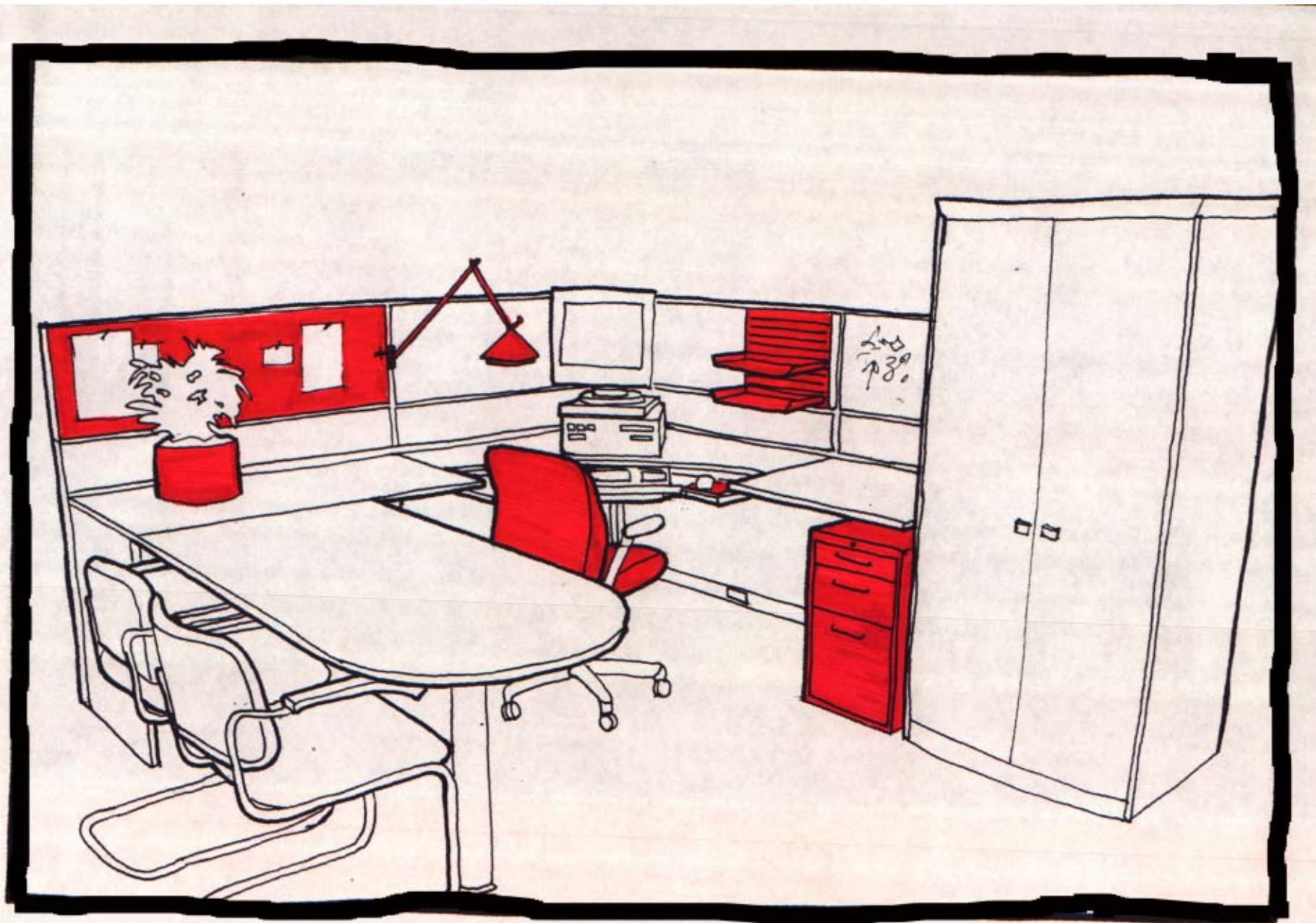 - **'You are here'**

Sight

- **Colour - let them pick!**

  - chairs, pedestals, hang-on components, task lights, desk sets, tackable elements, meeting rooms

  - thread of continuity within a framework

  - medical community beat FMs to it

©Carroll Thatcher Planning Group

Sound

- Open vs. closed - both are required - should be based on the culture of the organization - do your research

- You must understand the work

- As % of workstations increases, % of closed meeting spaces increases

- Provide a variety of types of spaces to support a variety of types of tasks

Sound

- Use acoustic materials

- Educate occupants on behaviours associated with closed office privacy, standing privacy, and seated privacy

- Develop protocols for working

- Visit open concept schools - if 7 year olds can be quiet, so too can adults

- Waterfalls, ponds, aquariums

Touch

- Too hot, too cold - give them some control

- Theatres - calculate heat load based on ticket sales

- Conference rooms - activate HVAC by opening door

- Add texture - half the population is kinesthetic

- Use organic finishes

- Keep both hands moving in 3 dimensions

Taste

- Schedule lunch and learn
- Provide beverages - or the infrastructure for someone else to
- Be careful not to cater solely to 'Gen X'

Smell

- Sears - automatic adjustment of fresh air by measuring carbon-dioxide

- Have coffee pots start brewing before occupants arrive

- Have cultural food days

- Be aware of and accommodate allergies

- EEU's

Sense of Community

- Keep groupings of people to about 250 (more entrepreneurial culture)

- Plan for alternative spaces within each team space

- Add organic elements to interaction areas

- Provide community collection areas - natural incubators of conversation

- Provide more 'pull-up' space

FM Group

- Build partnerships
- Give them the tools and the training
- Understand their interests
- Communicate, communicate, communicate
- Conflict resolution skills
- Deal with bad behaviour quickly

Change is Stress Enough

People who experience positive moods solve problems more quickly and come up with more creative solutions

©Carroll Thatcher Planning Group

Questions?

To contact us:

Carroll Thatcher Planning Group

phone: 613-729-2646

fax: 613-761-1609

solutions@thatcherplanning.com

Download this presentation from our website: www.thatcherplanning.com