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Real Estate 20:20

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Real estate 20:20

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THE ROYAL
INSTITUTION
OF CHARTERED
SURVEYORS

REAL ESTATE 20:20

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Abstract

This paper seeks to establish a framework for studying real estate futures. In doing so, it explores the general climate of change within which property decisions will have to be made, and examines the specific real estate opportunities that might emerge as a result of that change. For the purpose of appraisal, the forces of change are grouped into six sectors - cultural, demographic, economic, environmental, governmental and technological. Property perspectives are then portrayed for each of these sectors, and some conclusions drawn regarding the likely directions of change in the fields of real estate investment, development and management. Above all, the paper aims to provoke thought and provide a means for identifying and evaluating the forces of change as they affect decision making in the real estate industry.

Introduction

The impetus to write this paper sprang from a spontaneous bout of personal reflection upon the nature and degree of change that has come about in the world of property over the past 25 years, coupled with an uncontrollable impulse to peer ahead at the next. Risking the wrath of those who despise such proprietary prognostications, damning the presumption as “pop futurism”, the paper seeks above all to establish a framework for studying real estate change and future prospects. In doing so it explores two main themes:

- 1) The general climate of change within which property decisions will have to be made.
- 2) The specific real estate opportunities which might emerge as a result of that change.

On the world stage, who would have dared predict only 10, let alone 25 years ago such colossal events as the destruction of the Berlin Wall and the re-unification of Germany, the collapse of the USSR and the renaissance of Eastern Europe, a bloodless end to apartheid in South Africa and the emergence of the “Rainbow” society, the astonishing speed with which China would arise as a major open economic force and the rapidly diminishing extent to which the worlds powerhouse economies would be dependent upon the price of oil. They would have been deemed certifiable.

Within the field of real estate the past quarter of a century has witnessed several startling property cycles with recurring promises of “never again”, mass movements “out-of-town” across all sectors of the industry, urban regeneration recognised as a signal challenge to inner-city communities, land and property valuation maturing and propagating as a discipline, property finance markets gaining in sophistication and expertise, and real estate research achieving acceptance as a necessary and credible activity.

The Climate of Change

All the usual epithets apply: "Change is not what it used to be", "There is nothing so constant as change", "Even change is changing". The very study of change itself has become a major industry. By definition, of course, change has always been with us, but this time, the argument runs, it is different. All the dimensions of change - frequency, magnitude, complexity, rapidity and visibility - are happening at an ever accelerating pace (Lyons et al 1996). In the past, moreover, there has been a more discernible pattern to change. Though that might be historic hindsight. This time, however change is far less sequential and certain, showing much greater discontinuity and unpredictability. Tofler's towering trilogy, (Future Shock, 1971), (The Third Wave, 1981) (Powershift, 1990), for example, charts the astonishing effect on people when their entire society abruptly transforms itself into something new and unexpected, examining respectively the process of change, the directions of change and the control of changes still to come. In similar vein, Handy intriguingly examines more specifically the way in which work is being reshaped (The Age of Unreason, 1989), and subsequently seeks a philosophy beyond the mechanics of business organisations and material choices:

"to establish an alternative universe, where life and work are re-grounded in a natural sense of continuity, connection and purposeful direction".

(The Empty Raincoat, 1994)

Few fields are now without their futurologists, their assayers of change and their apostles of "paradigm shift". In looking forward, the world of real estate would do well to remember the old adage that we tend to underestimate change in the long-term and overstate it in the short. A prime aim of this paper, therefore, is to provoke thought about the nature and role of real estate in a world of radical change.

The Forces Of Change

To help understand the various forces "at play" in configuring this climate of change the "six sector system" developed by Philip Kotler in his popular text Marketing Management (Prentice Hall, Ninth Edition, 1997), and now widely used in strategic planning and business management, is adopted. Under this system all aspects of change are placed in one of six categories: Culture, Demography, Economics, Environment, Government and Technology. This is a simple convenience for assembling material and ordering thought. It is neither prescriptive nor proscriptive in intent.

Borrowing from the physical science of geology, and stealing unashamedly from a leading figure in the discipline of economics (Thurrow, 1996), the dynamics of change in any sector of the economy, including the field of real estate, can be likened to the study of plate tectonics. In geology the visible manifestations such as earthquakes and volcanoes are caused by the invisible movements of the continental plates floating on the earth's molten inner core. In an analogous way, the upheavals in economies and their constituent sectors are caused by the slow almost imperceptible shifts in the underlying forces of change that lie beneath the surface of society. Changes in the nature of work, household formation, market regulation, environmental legislation, consumer preference, shopping mobility, management practice, investment policy or construction methods are all examples of tremors in urban economies as profound as earthquakes. As the geophysicist must probe deeper to look at the forces generated beneath the surface of the earth by the continental plates to explain the altered terrain, so too must the researchers, analyst or consultants explore more thoroughly the forces of change underlying the economic surface of the world in general and the landscape of real estate markets in particular.

With continental plate tectonics what seems static, the surface of the earth, is in reality in constant flux. Similarly with the economic surface of the earth and the world of property. The six tectonic plates whose forces metaphorically are just as irresistible as those of geology, and by which this paper is structured are:

1. Cultural Change.
2. Demographic Change.
3. Economic Change.
4. Environmental Change.
5. Governmental Change.
6. Technological Change.

1. CULTURAL CHANGE

What is happening in society is not just cultural change, but more a culture of change. Societies are abruptly being transformed into something new and unexpected. Twin forces are at play - homogeneity and diversity. On the face of it contradictory, but in fact mutually supportive - the first leading to an awareness of the second. Changes in cultural values result from changes in other aspects of life and society, with global pressures towards conformity consequently producing countervailing forces for distinctiveness.

It is not always easy to distinguish between cultural values and social issues, but attitudes towards such societal elements as work, health, education, welfare, crime, environment, equality and leisure clearly fall within the generic, though somewhat gauzy, field of "values". These, in turn, impact upon the shape and direction of the real estate industry. Some of the more apparent cultural changes currently obtaining in society, therefore, are discussed below.

1.1. Present Paradox

Contemporary life in mature economies is undeniably complex, and to a high degree confused. In many ways it is also paradoxical. Stealing straight and unabashed from Charles Handy's **The Empty Raincoat** (1994) it is possible to identify a number of present paradoxes which go some way to explaining today's turbulence and suggesting ways in which they might be understood and managed so as to forge a better world.

(i) The Paradox of Intelligence: post-capitalist society is witnessing the fact that the real assets of an organisation truly are the people employed, so that focused intelligence, the ability to acquire and apply knowledge, is the new source of wealth. Intelligence is thus the new form of property. The paradox being, however, that it does not behave like property. It cannot be allocated or transferred, and it is extraordinarily difficult to measure and tax.

(ii) The Paradox of Work: work, of course, is the way in which societies' income is distributed, and money the means of measuring efficiency. Organisations, however, want the most work for the least money, whilst the individual seeks the reverse. The conundrum for economies and countries is whether it is better to have fewer, better paid, better educated and better protected workers, or more but cheaper ones.

(iii) The Paradox of Productivity: whereas, in the past, increased efficiency in one area, resulting in more and better work from fewer people, generally led to growth and extra employment in other areas, there is now the emergence of the "do-it-yourself" economy where it makes sense for those unemployed to do for themselves what they used to pay others to do for them. This is invisible, unpriced and defies measurement, so that the formal economy consequently declines.

(iv) The Paradox of Time: although people live longer, and the necessities of life are produced more efficiently, there appears to be less and not more time available. The "normal" working day is fast becoming a thing of the past as flexibility in the culture of work takes over. Time not product, moreover, has become the prime commodity in society.

(v) The Paradox of Riches: as Handy (ibid) succinctly states: “economic growth depends, ultimately, on more and more people wanting more and more of more and more things”. Rich societies are having to invest in potential competitors to generate their own growth and there is a dependency upon conspicuous consumption to sustain profits.

(vi) The Paradox of Organisations: the very nature of organisations is in flux. They have to be global and local, large and small, centralized and delegated, individualistic and team-based, focused and diverse, planned and flexible, differentiated and integrated, mass marketers and niche exploiters, and, above all, they must compete in terms of cost, time and quality. A veritable farrago of paradox, lending support to the notion that the organisation of the future will be very different to the organisation of today.

(vii) The Paradox of Age: This is neatly summarised by Handy (ibid) as being the condition whereby every organisation perceives itself as justifiably different from its predecessor, but plans as if its successor generation will be the same as them. Changes in employment, education, the family, health, mobility, savings and security, together with increased longevity itself, all dictate that this time around it must be different.

(viii) The Paradox of the Individual: there exists a dichotomy in contemporary society between the resurgent respect for individualism and the management ethic of team building and combination. Creativity and corporatism remain uneasy bedfellows, but new business and social relationships are fast emerging.

(ix) The Paradox of Justice: the dilemmas of distributive justice, deciding between what is deserved or what is needed, for example, or treating everyone equally or accepting the arguments for unequal treatment, are by no means new. With increasing awareness, however, a society perceived as unjust by its citizens will not last. If there is inequality there must, at the very least, be equal opportunity to aspire to that inequality.

1.2. Cultural Harmony or Discord?

It has been stated that the greatest threat to future world order and peace is the potential clash of civilizations, not of countries (Huntington 1996). In this, there can be said to be seven major “civilizations” in today’s world:

- **Western** - Europe, North America and Australia.
- **Orthodoxy** - Russia, Greece and other Eastern Orthodox Christian countries.
- **Sinic** - China, Taiwan, Hong Kong, Singapore, and overseas Chinese.
- **Japan** - unique, despite a cultural debt to China.
- **Hindu** - India and Sri Lanka.
- **Muslim** - religiously focused, widespread, fast growing with no core nation.
- **Latin America** - close ties to the West, but many independent traits.

Understanding these helps forecast future trends. For instance, an argument runs that future flashpoints will lie not along purely national borders, but where different civilizations meet.

Countries should really only worry about crises involving their own cultures and try to ignore others. Further, it should be appreciated that modern economies need not be western in character. The use of Western languages, the rule of secular law, popular or liberal democracy, notions of individualism and equality all evolved over centuries and could now decline in influence as the power of other civilizations grows. Facing up to the differences between alternative cultures many not be politically correct, but may be politically necessary. The challenge to the West, for example, from the rise of Islam, with the West convinced their culture is “best” and obliged to spread, and Islam sure of its cultural superiority but obsessed with its inferiority of power. A confrontation between divergent trends which has rather colourfully been labelled as “Jihad versus McWorld” (Barber 1992) in developing the theme that the world is falling precipitously apart and coming reluctantly together at the very same time.

In the similar vein, cultural homogenization vies with, or more probably foments, cultural protectionism. On the one hand, there is a growing “monoculture” resulting from the global homogenization of culture, lifestyle and level of technological immersion, with a corresponding dismantlement of local traditions and economies (Mander & Goldsmith 1996). Soon, it is argued, every place will look and feel like every place else, with the same shopping malls and superstores, the same workplaces and entertainment centres and the same restaurants and hotels. A kind of cultural cloning. On the other hand, the issue of cultural protectionism begins to loom large, and there is no easy way to draw the line between culture and economics (Thurow 1996). Indeed, there is now a line of political thought advocating “A New Protectionism” which questions the orthodoxy of globalization and aims at:

“regenerating interest in a realistic system for the preservation of communities, economies and livelihoods; a return to the security provided by a local self-sufficiency that emphasizes local economic control and local production for local consumption, protected by a modernized trade philosophy that restricts unnecessary aspects of international trade.”

(Lang & Hines 1993).

Perhaps the most powerful and pervasive force for cultural homogenization is the entertainment industry, with virtually the entire planet in the process of being wired into music, movies, news, television programmes and other cultural products that originate primarily in the film and recording studios of the United States. Thus, it is claimed that advances in intrusive technologies and the spread of privatisation, deregulation and commercialization of electronic media are all making it increasingly difficult for families and teachers to compete for the attention of the next generation (Barnet & Cavanagh 1996).

1.3. Business Culture and Financial Change

In the wake of the words of Brundtland in **Our Common Future** (1987), “with greater freedom for the market comes greater responsibility”, there is an emerging recognition on the part of corporate leaders that ignoring cultural change ultimately will court disaster. A prime example of this has been the formation in 1990 of the Business Council for Sustainable Development (BCSD) which aims to present a global business perspective on, and involvement in the task of environmentally sustainable development. The Chairman of the BCSD argues that business has developed remarkable skills in market intelligence to identify and predict changing patterns in consumer demand and must now also construct a system of “social intelligence” to spot, understand and interpret signals of change in development patterns (Schmidheiny 1992). Clearly, those who are the quickest to receive and act on such signals will have the advantage over competitors who only react when cultural changes in society become apparent in the form of changed consumer habits.

One fundamental question arises, however: are the world’s financial markets and those who work in and around them a force for sustainable human progress, or an impediment against it? (Schmidheiny & Zorraquin 1996).

The answer, of course, is complex, but there are encouraging indications that the key players - the corporate leaders, mainstream investors, bankers, insurers, accountants and credit raters - are beginning to grasp the nettle of assessing the impact of cultural change.

1.4. Cyberspace and a Virtual Culture

There is a burgeoning literature on the impact that the cultural changes brought about by advances in and applications of information and communications technology (ICT) will have upon society. This new technological domain called "cyberspace" is said to herald nothing less than:

"the promise of a new social space, global and antisovereign, within which anybody, anywhere can express to the rest of humanity whatever he or she believes without fear. There is in these new media a foreshadowing of the intellectual and economic liberty that might undo all the authoritarian powers on earth"

(Barlow, 1996).

To what extent this libertarian future of self-expression, freed from the imposition of government regulation, will be realised is debatable. Issues of security, surveillance, control, access, privacy, crime, taxation, propaganda and social colonization all emerge. In terms of urban development, however, it is intriguing to consider the popular notion of a polarised society best described by Virilio (1993):

"One is a society of "cocoon" where people hide away at home, linked into communications networks, inert The other is a society of the ultra-crowded megalopolis and of urban nomadism".

The concept is further developed whereby the world of cyberspace becomes itself another urban environment. It has been suggested, moreover, that a clearer understanding of contemporary urban processes can actually be gained from a reading of such "cyberpunk" as Gibson (Virtual Light 1993) and Stephenson (Snow Crash, 1992) than from the work of such luminaries as Pahl, Sassen or Castells (Burrows, 1997). Fiction and analysis become increasingly entwined.

1.5 Changing Cultural Values.

It is progressively possible to discern a movement in society towards a discovery or rediscovery of certain fundamental values. The sheer amount of shelf-space in libraries and bookshops devoted to sacred, spiritual, religious and alternative life-style publications supports this view. There is, for example, a distinct shift away from materialism towards more enduring philosophical and spiritual values. Ethical business, more cynically, is now good business.

Adding to the earlier paradoxes, in terms of cultural values, there is also the paradox of location. Roulac (1996) adroitly contrasts the views of two leading management theorists on this topic. One view, espoused again by Handy (1994), concludes that work is no longer so contingent upon "place". The other, expressed by Porter (1994), argues the case for the competitive advantage of the inner city, and the rediscovery of locational preference. On balance, however, the case that culturally we perceive ourselves ever more in time than in space is compelling - however disconcerting.

In a myriad of guises "quality" is becoming a familiar concept in the culture of organisations. Quality in design, quality in performance, quality in product, quality in environment, quality of experience and quality of lifestyle. It is now over forty years since Deming (1986), widely acclaimed as the greatest of the quality gurus, argued that to stay ahead of the game there is no substitute for being the best. Quality is not another management catchword - it is the answer.

A concluding comment on cultural change concerns the concept of exponential growth as a transient phenomenon. It is averred that the principal impediments to making the transition from what is seen as the present precarious state of humanity to some future optimum condition are not ecological, material, physical or biological, but essentially cultural (Hubbert 1993).

The argument runs:

“During the last two centuries we have known nothing but exponential growth and in parallel we have evolved what amounts to an exponential - growth culture, a culture so heavily dependent upon the continuance of exponential growth for its stability that it is incapable of reckoning with problems of nongrowth”.

(Ibid)

Perhaps a serious examination of the nature of cultural constraints and the need for cultural adjustment is called for. The dominant themes and emphases are clearly changing: from tangible to intangible, from products to services, from materialism to spirituality, from the mass and physical attributes of commodities to their information and intelligence characteristics, from basic manufacture to information and communications technology, and from location to space and time.

PROPERTY PERSPECTIVES

1. At the risk of stating the obvious, the world is culturally becoming not just a global village but also a global property market. Many corporate cultures have already ‘globalised’, and the real estate profession has been relatively slow in adopting an international perspective towards its affairs. This is changing, and will change with increasing rapidity, as attitudes towards property investment, development, management and marketing all gain a broader international context.

2. Probably the most profound cultural change facing the developed world is the metamorphosis in the nature of work. In the words of Charles Handy (1994):

“Instead of an organisation being a castle, a home for life for its defenders, it will be more like a condominium, an association of temporary residents gathered together for their mutual convenience.”

Property professionals will have to alter their perspectives towards location, time, distance, use, ownership and responsibility, as well as value, in meeting the transforming demands for workspace. Peoples expectations about work, moreover, are shifting from a primary focus on the materialistic aspects (pay and working conditions) to a growing focus on the ‘post-materialistic’ aspects (opportunities for self-development and self organisation).

3. The house will become more than a home. It will become a base for home-working as well as a study centre for the whole family. The family will also seek entertainment and social contact through the integrated information systems within the house. There could even be medical diagnostic systems built into the domestic services. Safety and security will be placed at a premium, especially for the old and the young. The notion of the ‘smart house’ with a ‘total living environment’ cannot be far away. There is perhaps the need for a latter day Frank Lloyd Wright to emerge to re-assess and redesign the 21st Century intelligent and sympathetic house.

4. Health, education and leisure will evolve as major sectors of the real estate industry, paralleling the present classification of shops, offices and industry, which are fast disaggregating and lacking in cohesion.

5. Leisure and recreation will become an increasingly important part of everyone's life, and a growing challenge to the creative abilities of the real estate industry. New self-contained 'destination resorts' will be developed featuring the latest virtual technology and themed for such activities as sport, health, education, food, career advancement, culture and, who knows, pure hedonism. The restoration or re-use of railway tracks, canals, riversides, waterfronts and outmoded buildings for leisure and recreational development all offer potential. New games and new sports, and modifications of old ones, are likely to evolve out of advances in I.T., which will also open up a veritable galaxy of interactive entertainments.
6. With the movement towards a less materialistic and more spiritual society becoming increasingly evident, there is the likelihood of 'lifestyle communities' being developed in a more structured and formal manner.
7. Education will become one of the drivers of the 21st century, and commercial opportunities for real estate development directly and indirectly related to learning will abound. It is not difficult to envisage the concept of an Education Park designed for lifelong learning, or even speculative educational developments. Redundant office space alternatively might suitably be converted.
8. The professional culture of the real estate industry is already changing, and seems destined to experience even greater reform. Accountability everywhere is heightening; stricter ethical standards are being enforced and continuing professional education is now seriously taking hold. A fiercer competitive climate prevails and individuals, firms and organisations in the property arena will have to become even more flexible, better informed, have greater financial acumen, adopt more proficient management systems, establish innovative strategic alliances, set higher performance standards, achieve greater transparency in transactions, provide a broader service coverage, capitalise upon information technology and demonstrate a truly global awareness for their increasingly internationalised clientele.
9. Safety and security is assiduously sought in all sectors of society, few more so than the property sector. Gated or fortress communities are likely to be more and more attractive at all levels and in all locations. Land use regulations need to be amended to take account of current crime trends. The notion of 'designing out crime' will gather adherents in the development process. Security precautions for business premises will become a prime consideration and ever more sophisticated, and the creation of a safe and secure environment in shopping, leisure, health and educational developments will be a paramount objective. At another level, there is the constant and escalating threat of terrorism and blackmail, which will demand the attentions of public authorities as well as private owners and developers.
10. There will be a growing recognition of the relationship between public art and the built environment. The quality of urban areas and open space will be paid greater heed by planners and developers alike. In a cultural context, moreover, the arts, crafts and culture in general will actually become more of a catalyst of urban development and regeneration.

2. DEMOGRAPHIC CHANGE

Demography, it has been said, is destiny. There is also the old saw that without demography you cannot have democracy.

Whatever their worth, these sayings support the sentiment that of all the forces that will change the world over the next generation, demography is probably the most important. Put simply, the world's population is growing, moving and getting older. This impacts upon all aspects of society, including, of course, the realm of real estate.

2.1. Where Are We ?

The basic facts are fairly familiar. The world's population more than doubled between 1950 and 1992 from around 2.5 billion to about 5.5 billion (5.8 billion 1996), and is forecast to grow to approximately 8 billion by the year 2020 (UN 1992) and it may double to more than 11 billion sometime next century unless serious measures are taken to slow the increase, (UN 1995).

In 1950 a third of the population lived in the "industrialised" world, this is now less than a quarter, and by 2020 will fall below a fifth. A sense of some of the issues raised can be gained by the following stark statistics:

- There are roughly one billion very poor people on the planet today.
- 1.3 billion people lack access to clear water.
- 2 billion people do not have safe sanitation.
- Some 800 million people go to bed truly hungry every night.
- There is one doctor for every 7,000 people in developing economies compared with one for every 400 people in industrialised countries.

(UNDP 1994)

These sample ingredients of population mix may not seem of direct concern to decision makers in the real estate markets of modern economies at the moment, but the recipe is a potentially dangerous one. It has been pointed out that on the one hand there is the increasingly old and conformist world of the rich, whilst on the other there will be a surge in the numbers of young people in crowded cities casting envious eyes at standards they can never hope to attain (McRae 1994). Resentment could become rampant, and in an age of terrorism and mass destruction the ramifications are truly alarming. Property "at home" as well as "overseas" is an all too obvious target for discontent. It must surely be in the interests of all to manage affairs so as to minimise that risk.

2.2. The Grandchild Gap

Much has been said and written about the "population explosion", but at the same time something else, much less publicised and apparently contradictory, is going on. Never before in history have birth rates and fertility rates fallen so low, for so long, in so many places, all around the world. In most rich countries the average fertility rate has fallen below the figure of 2.1 children per woman - the replacement rate - a number that has near mystical significance in the field of demography. In fact, since 1975, every modern industrial nation has experienced a sharp decrease in its fertility rate. In the USA it is 1.98, in Canada 1.74, in the U.K. 1.78, in Japan 1.48, in Germany 1.30, in France 1.70 and, most staggering of all, in Italy 1.10. According to recent United Nations data, the total fertility rate for Europe dropped by 16% over the past decade to 1996, down to an average rate of 1.57 children per woman, 25% below replacement. This trend of reduced fertility is not only happening in modern economies, the trend is well underway in the developing world as well. The total fertility rate for less developed countries for the period 1960 - 65 was 6.0, but by 1990-95 it was down by 3.30 children per woman. In particular countries, over the thirty years, India has seen a fall from 5.8 to 3.2, Brazil 6.2 to 2.3, Egypt 7.1 to 3.6, Mexico 6.8 to 3.0, Bangladesh 6.7 to 3.6, South Korea 5.6 to a below replacement 1.8 and China, for special coercive reasons, 6.1 to 1.8.

Many factors are cited for causing these falling rates: increased urbanization, growing aspirations, greater life expectation, enhanced opportunities for women, better contraception and generally a modernization of attitudes and ideas. Some of the effects of this birth dearth, especially when combined with longer life expectancy, are now beginning to emerge and occupy the minds of policy makers in all sectors of economies and agencies of governments.

2.3. Age And Growth

In simple, if not simplistic, terms, the trends for the populace of modern economies is to become older, wealthier, wiser and more demanding. Some of the issues and characteristics that surface from these trends can be catalogued, in no particular order, as follows:

- The older the population the fewer people of working age there will be to support the old and the young.
- Some countries such as Germany and Japan face an imminent steady decline in total population.
- Older populations have less propensity for “growth” than younger ones.
- Mature industrial societies will have to learn how to adapt to changing requirements regarding infrastructure and housing provision.
- Living standard aspirations will continue to grow in “older” countries.
- Older societies are likely to have lower inflation, low unemployment, low crime, low tolerance of disorder, greater acceptance of authority and a possible return to “Victorian” values.
- Whilst the developed world will probably become more ordered, the developing younger world is likely to become more chaotic, and the tension between the rich and poor heightened.
- The use of labour will change in ageing economies with a rise in the retirement age, increased female participation rates, a growth in part-time employment and homeworking, college students working more during their studies, a fuller involvement of the unemployed through some form of “workfare”, an increase in voluntary work and a growing pressure upon children to learn work skills.
- Having fewer, more expensive, young people will change further the nature and scope of manufacturing with an accelerated shift “off-shore” to younger developing economies.
- Markets will become ever more dominated by older buyers, and generally the second half of life will be of more social and economic importance.
- The emphasis increasingly will be placed upon continuing education, reskilling and leisure learning.
- Establishing appropriate policies towards health and education are two of the greatest challenges facing the future of the mature industrial world.
- Older populations will have greater recourse to direct mail order services.
- There will be an increased demand for a fuller and wider range of financial services.
- Likewise, there will be more and more call for a diverse array of leisure services.
- The worldwide boom in the tourism industry will have an insatiable appetite for labour resources.
- With older and better educated tourists the accent will be upon cultural, historic and educational experiences.
- Mobility among the older portion of the population will increase in the search for secure, comfortable and tax and health sheltered retirement accommodation.
- New household formation and consequent types of residential accommodation will be more diverse.

2.4. Closer To Home

Rightly or wrongly, the most hotly debated demographic issue in the U.K. at present surrounds the future provision and location of housing. The latest household projections show that in England alone there will grow by 4.4 million (23%) over the years from 1991 to 2016, to reach 23.6 million. This is due to a complex set of factors not merely an increase in population. Almost 80% (3.5m) of the growth is forecast to occur in one-person households and the other 20% (0.9m) in the growth of multi-person households. Population and household growth is projected to vary significantly in different parts of the country, but one of the most difficult elements to forecast is migration into or out of a region depending upon such factors as job prospects, housing availability and attractiveness of location. Thus, it is thought that the major conurbations in the North West, Merseyside and London will continue to see outward movement of population while the South East and South West will see the largest in-flows (Anthony Bowhill and Associates, 1996)

In Ireland, the demographic focus is more upon examining the shape and needs of the labour market. The country has experienced one of the highest birth rates in Europe over the past twenty years, with the result that young people account for a higher proportion of the population than in the E.U. as a whole. It is now part of the popular Irish perception of themselves that they are the "young Europeans". It is likely, however, that the labour market will be increasingly polarised between a well rewarded white collar 'core' and a less well rewarded unskilled periphery. Demographic changes seem to be leading to an increase in a trend towards sub-contracting and it is clear that women are making up a larger part of the workforce.

The final word about demographic change everywhere, however, must be that future generations will generally need to be very much more flexible and adaptable.

PROPERTY PERSPECTIVES

- 1. With the populace of developed economies getting older, wealthier, more mobile and increasingly employed in knowledge based work, it is almost certain that the real estate industry will be heavily engaged in providing a wide range of accommodation and facilities in the fields of health, education and leisure by the year 2020.**
- 2. Significant shifts in demographic trends will cause noticeable changes in housing demand and supply. There will be a change from mass market standards to niche market differentiation, both by life-stage and lifestyle; from unplanned suburbs to master planned communities; from hard infrastructure, such as sports facilities, to soft infrastructure, such as community clubs and interest groups; from single-purpose infrastructure to multi-function uses; from suburban anonymity and individualism to a yearning for community; from contemporary styling to neotraditional design; from suburban sprawl to compact, highly defined town centres; from unprotected open suburbs to the safety and security of gated and walled communities; and from car-based locations to those served by public transport (Warrick and Alexander, 1997).**
- 3. Different lifestyles and changing expectations will lead to people wanting different features from their housing in terms of quality, location, value for money and customisation. Niche markets will develop and strengthen. These will include 'empty nester' homes, single and 'pre-nester' homes, city centre rented accommodation, home-worker accommodation, leisure homes, urban pied-a-terres, commercial conversions, serviced and sheltered housing, sports villages and timeshare. Specialised investment vehicles will increasingly be available to fund such developments.**

4. The provision of assisted, sheltered and independent living accommodation will burgeon. Similarly, focused community developments for different generations such as the 'active adult' community (55-65 years old) and the 'business village' (30-55 years old) will emerge.
5. With advances in building technology, construction cost reductions and a social need to address homelessness and the widening gulf of 'haves' and 'have nots', affordable housing will become a high priority, and an actuality.
6. Health Parks, as a sub species of the business park, will spring up, providing a wide range of health and medical care related activities and facilities including conventional surgeries and clinics, minor operations theatre, self-diagnosis centres, health kiosks, customised pharmacy services, alternative medicine facilities, health clubs, fitness centres and health food outlets. At a more local scale there will be chains of medical superstores, or 'Doc in a Box' centres, providing one-stop medical care services. These will also be integrated within shopping, residential and leisure developments.
7. With a growing 'middle class' and an ageing shopping public, there will be a greater emphasis upon middle class values in retailing. The keynotes to consumer satisfaction in this middle class market will be quality, satisfaction and reliability. The mass production, mass marketing, mass distribution and mass selling will give way to customised, service oriented retailing with the emphasis placed upon creating a positive experience. There will also be an acceleration in the micro-demographics of retailing with individualised customer information retrieval and analysis.
8. As workstyles and business organisations change so there will be a breaking-off from large corporations of knowledge workers increasingly defining themselves as consultants and information specialists who back up the new virtual corporations. They will work where they live, or in working communities of similar people, demanding customised accommodation and facilities.
9. The wealthier society becomes, and the more mobile the learning, working and retired population, the less people will feel the need to own their own homes. Prosperity will lead to a declining propensity for proprietary ownership. Corporate tenure will be the same.
10. There will be an increasing number of active people who will choose where they live and where they are based for work for tax reasons. In many circumstances this group will act as a further catalyst for growth and development, and the use of fiscal policy with attractive tax regimes is already being used to this end by a number of countries with consequent effects on local real estate markets.

3. ECONOMIC CHANGE

A radical restructuring of the world's economic order is taking place, the impact of which will be as profound as anything experienced since the Industrial Revolution. Economic globalism is the name of game. Fostered by agencies and agreements such as GATT, NAFTA, ASEAN, WTO, IMF, the World Bank and Maastricht, this global economic imbroglio is hailed by world political and corporate leaders as heralding a new era of prosperity and peace. The dynamics of this new economic world, however are largely untried, decidedly uncertain and little understood. Rightly or wrongly, property has always been seen as a bulwark against the vicissitudes of economic change, but this too is subject to doubt. What then are the forces at play?

3.1. The Underlying Forces

Straightaway, it has to be stated, however pejoratively, that capitalism is the only economic system that has been seen to work anywhere. Twentieth century alternatives - communism, fascism and socialism - have all failed. Good or bad, the market alone rules. Nevertheless, even the foundations of capitalism are shaking with the speed and force of change. It has been argued that the eternal verities of capitalism - growth, full employment, financial stability, rising real wages - are threatened, and that five fundamental forces collide in constant flux in determining the new economic order (Thurow 1996):

(i) The End of Communism. The third of humanity and the quarter of the landmass previously communist is joining the old capitalist world with serious problems of such sudden assimilation.

(ii) A Technological Shift to an Era Dominated by Man-made Brainpower Industries. These new industries are geographically free, capable of location anywhere in the world, and the economically dominant are those able to create, mobilize and organise the brainpower that determines their location.

(iii) A Demography Never Before Seen. The world's population, as already discussed, is increasing, ageing and becoming more mobile.

(iv) A Global Economy. Shifts in technology, transportation and communications are creating a world where anything can be made anywhere and sold everywhere.

(v) An Era Where There Is No Dominant Economic, Political or Military Power. The twenty-first century will have no single power able to design, organise and enforce the rules of the economic game.

3.2. The New Economy

It has been suggested that three distinct economic evolutions can be identified over the past 150 years as follows (Beck 1992):

(i) The Commodity Economy. Dating from the industrial revolution to around 1918 with: the key factor of cheap steel ; four "engines of growth" in textiles, coal, steel and railroads; and infrastructure based upon railways, shipping and the telegraph; and leading economic indicators of pig-iron production, railroad operating income, inner-tube production, and cotton consumption.

(ii) The Mass-Manufacturing Economy. Dating from 1918 to around 1981 with: the key factor of cheap energy, especially oil; four engines of growth in cars, machine tools, housing and retailing; an infrastructure based upon highways, airports and telephones, and leading economic indicators of industrial production, capacity utilization, machine tool orders, retail sales, housing starts and car sales.

(iii) The Information Technology Economy. From 1981 to date with: the key factor of cheap microchips; four engines of growth in computers and semi-conductors, health and medical services, communications; and telecommunications, and instrumentation; an infrastructure of telecommunications satellites, fibre-optics, LAN's and WAN's, and microwave communications, and leading economic indicators of computer production, semi-conductor production, instrumentation sales, high-tech trade balance, knowledge employment and medical starts. Interestingly, however, there exists no adequate theory of the economics of information.

To these readily recognisable economic era's can already perhaps be added a fourth - the **Biotechnology Economy**, driven by advances in genetic engineering, artificial intelligence, and the discovery of new materials and sources of energy - and maybe even a fifth, in an **Educational Economy** with the accent firmly placed upon knowledge industries.

Alongside new economic milieus come a new set of business paradigms. Some of these have been identified in the context of the real estate industry as follows (Lyon *et al*, 1996):

- Successful businesses will excel in customer service.
- Workers respond productively to a system of individual responsibility and accountability.
- Consumers are becoming increasingly sophisticated.
- Each firm focuses on only one customer at a time.
- The consumer controls marketing, buying what, where, when and how they want.
- Firms act as information consultants.
- Success lies in obtaining more of a customers business, not more customers.

Within the new economic and business climate is emerging a new type of business organisation. The global marketplace is becoming so highly automated, so fast paced, so ruthless and so inescapable that such familiar norms as caution, continuity and conservatism are rapidly becoming fading memories. What is happening has been described as nothing less than the total reinvention of employment (Martin 1996). With economic conditions changing so quickly no outcome can be certain and long-range planning becomes pointless. In the future more things will happen "just-in-time" (JIT), there will be no need for costly warehousing, and the mass markets of the past will fragment down to individuals who want more customised products. To survive, producers will need to maximize profit in every way they can. Increasingly, it is possible to envisage companies depending upon the ingenuity and ethos generated by rapidly assembled teams of specialists hired JIT for every job.

The term "Cyercorp" has been coined to describe the new form of business organisation, which can be any firm in any service or production field once it has been re-designed to take advantage of today's computer capabilities and global communications network (*Ibid*). It is contended that such cybercorps, unlike traditional companies, should be happy as well as exciting places to work with employees free to take risks, be creative and enjoy their jobs. Equally, however, there is no place for absolutes in either today's markets or in the global cybermarkets of tomorrow. There can be no stability and no rule that cannot be bent or broken as circumstances change. In a virtual environment, loyalty to a place or a country, established policies toward employees, even commitment to one basic product or service can cost jobs or put a company out of business. Unenviable perhaps, but inevitable, it is claimed (*Ibid*). What is missing in this scenario is a measure of the human and environmental costs incurred when businesses are accelerated, de-materialized, outsourced and radically redesigned. Nevertheless, the prevailing ethos of more output for less input remains.

3.3. Financial Markets and Money Management

One immediate, and possibly rather obvious, feature of the growing power of financial markets, combined with their increasingly international character, is the inevitable reduction in the power of individual national governments. Failure to frame their economic policies without due regard to the predilections and preferences of the international finance community can lead to swift retribution through the currency markets or unwanted pressure on interest rates. Conversely, the internationalization of financial markets, with the resulting freedom of movement and location by funds and investors, means that vast sums of money are freely available for development projects. It can easily be appreciated, however, that this free flow of global funds can have both favourable and unfavourable results.

Economic take-off can occur more rapidly, risks can be spread more widely, large-scale projects can be implemented and expertise and accountability heightened. But there is a price to be paid by debtors. Principally in the loss of control over trade regulation, capital movements, and economic and even political self-determination. Moreover, countries with a strong flow of savings and financial institutions with an abundance of investment capital can readily acquire the companies, assets, resources and even the skills of other nations. Financial power buys economic influence (McRae 1994).

This mushrooming growth in international investment calls for a change in mind-set, or "paradigm shift", on the part of research organisations. Conventionally, the research procedure of most securities firms has been based upon a top-down view of the way in which capital markets are perceived to work. The starting point being normally the national economy, which is assumed to drive markets, then comes the bond, equity and property split, followed in the equities market with a sectoral analysis and finally investigation into individual firms. This sounds logical, but such an approach is viewed as increasingly out-of-date because stock markets are decoupling from national economies. Due to the phenomenal growth in cross border investment, it no longer makes sense to consider assets allocation in the old top-down way. Increasingly competitiveness is of firms and not of countries. Global industries have become more important than national markets, and sectoral analysis more valuable than country based research. Already, a two-tiered market is emerging comprising at one level international corporations operating in a global economy, and, at the other, national companies competing in countryside sectors.

One aspect of the rapid transformation in the world's money markets has been the hefty growth in the number of firms managing money. There is now a movement from proliferation to consolidation, with the likely outcome being the survival of a few giant full-service institutions surrounded in the market by complementary niche or boutique firms. This concentration has been driven by five major factors: advanced technology in the gathering and processing of data; convergence of financial activities; increased competition in the money markets; globalization of financial transactions; and increased demand for financial capital. Given this momentum it is interesting to note the comment of one leading observer:

"The availability and flow of information has changed the nature of our work but no evidence suggests that the practice of our craft has improved. Computers and complex financial instruments have proliferated across the investment landscape but market performance trends are down not up!"

(Zeikel 1996)

As far as the real estate industry is concerned, it has been claimed that explicit forecasts of capital market activity can be as critical as forecasts of rents, prices, and vacancy rates in measuring the success of real estate debt or equity investment (Muldavin, 1996). As rental value and vacancy forecasting has improved over recent years, this capital markets information has become more important in separating top performers from the rest. Predicting capital market activity requires a strong understanding of historic capital flows by source. Even more importantly it needs a detailed understanding of the various factors - technological, regulatory, competitive, organisational and the like, that motivate the behaviour of each capital source. Comprehending these factors is a necessary prerequisite to interpreting how a capital source will respond to major macro-economic changes in interest rates, economic growth, the relative attractiveness of capital sectors, international fluctuations and other similar trends (*Ibid*).

There seems to be general agreement, however, about one particular trend in the world's real estate markets and that is the continued growth in securitization. The securities market enables global investors to construct diversified international real estate portfolios without the research, information and monitoring problems common to direct international property investors. Indeed, it has been claimed that such international portfolio diversification would have protected many investors against the crash of the late 1980's. (Eicholtz & Koedijk, 1996).

3.4. Inflation: Deceased or Dormant?

The proclamation announcing the “death of inflation” is now familiar, but to some is much exaggerated. In brief, the obituary, popularly propounded by Roger Bootle (1996) in the U.K., runs along the lines that historically inflation and deflation had alternated over time, but before World War I there had, in fact, been no persistent inflation. The last 60 years, however, witnessed a very different story. Sustained high demand and low unemployment, fostered by governments and central banks, gave rise to producer power. For most of the post World War II period large companies and powerful unions were able to override market forces and the resulting wage/price spiral eventually guaranteed an inherent high rate of inflation, unless repressed by a shift to recession and high unemployment. Crisis came in the 1970's, and is claimed to have been quite out of kilter. It is said to be difficult to overestimate the effect of the two sharp oil price rises, but their impact has been likened to a major war being waged on Western economies. The world is described as different now due to the reversal of two forces. First, central banks everywhere are now hell-bent on pursuing low inflation rather than full employment. Accordingly, demand-led inflations cannot last long before they are suppressed by deliberate policy action. Second, over the past 15 years a series of structural changes in economies have come together to end the era of producer power and create radically different behaviour among costs and prices. These can be summarised as follows:

- The spread of labour saving technology.
- Decline in the power of trade unions.
- Emergence of competitive economies in East Asia and Latin America.
- Widespread application of information technology.
- Increased pressure on companies to downsize and restructure.
- Globalization.
- Demography of labour force - ageing and paying.
- Discount buying and the resurgence of private labels.
- Just-in-time for everything - labour and materials.

Thus, it is maintained, shocks on the cost side, like those in the 1970's, are highly unlikely. There is, however, the risk of occasional deflation as has happened recently in Japan and Sweden. The prognosis is for inflation rates of between 0% to 2% over time, with short periods of negative inflation, accompanied by low long-term interest rates of around 3% to 5%, except for pessimistic spasms in the bond markets.

There is a more sceptical view advanced by Sir Alan Walters which warns of a possible “growth recession”, where even if there is no formal recession with negative growth rates, the rate of growth will be so low as to cause economic stagnation.

The interesting question, however, is how real estate markets would fare in a low inflation climate. Inflation has all too often been the maker of gratuitous fortunes and the camouflage of mistakes in the property world. Nevertheless, with real estate a distinction must be drawn between land and buildings. Land has a value because of the activities that can be conducted upon it. It does not generally decay, require maintenance or become obsolescent. As a non-renewable scarce resource, therefore, prices normally should rise. This is not necessarily true of buildings, for like capital equipment in a non or very low inflationary economy they should depreciate as obsolescence sets in. The lower the rate of inflation, the lower the growth in physical property values. Indeed the real value of buildings could actually fall farther and longer. Perhaps land and buildings should be valued separately on a wider basis ?

3.5. Economy and Ecology

Heading towards the section of this paper addressing environmental change it is germane to pose the question of the degree to which financial markets foster a short-term profits only mentality that ignores much human and environmental reality, or are they sufficiently robust and inclusive to take on board the moral disquiet over poverty and the ethical concern over the degradation of nature by rewarding companies that treat people and the environment in a responsible manner? As mentioned earlier, it is suggested that some of the key players in the financial community - company leaders, investors, bankers, insurers, accountants and developers - are beginning to respond to environmental demands made on their professions (Schmidheiny & Zorraquin 1996). However, certain major difficulties are encountered:

- Sustainable development requires investment accepting a long payback.
- Efforts towards eco-efficiency often reduce present earnings in favour of future profitability.
- Many costs are still kept "external" to the balance sheet.
- Such development relates to massive investment in developing countries which attract a high risk premium.
- Conventional accounting and reporting systems do not adequately convey potential environmental risks or opportunities.
- The future is routinely and heavily discounted.

(Ibid)

Notwithstanding all the above, as an epilogue to this section on economic change, it is impossible to resist a favourite quotation from the master, John Maynard Keynes (1936), in his **General Theory of Employment, Interest and Money**, when stating in respect of ideas and ideologies:

"The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back soon or late, it is ideas, not vested interests, which are dangerous for good or evil".

PROPERTY PERSPECTIVES

1. **Worldwide, real estate markets are recovering. In Europe, there will be the emergence of 'Eurotigers' arising from the former Eastern bloc, supported by EU structural funds and fuelled by increasingly securitised capital markets seeking rapid growth. In North America, current consolidation will provide a powerful platform for strong consistent long-term less volatile growth. In the Far East, there will continue to be high returns coupled with high risk, the spectacular rise of selective markets such as Shanghai and perhaps Jakarta, and the cataclysmic collapse of others such as Hong Kong and Taipei; and generally the growing maturity of many economies fostering substantial inward investment. India will slowly arise, Australia must surely perform, Japan recover, Vietnam is worth a bet, a few South American cities will succeed and Africa will continue to flounder. Overall, however, the auguries are propitious. Watch where the multi-national companies site themselves to gain competitive advantage.**

- 2. International real estate markets will become more obviously tiered. At one level, there will be the property investment, development, facilities management and marketing companies that operate in the global economy with a multi-national clientele and top-flight entrepreneurial management. At a lower level will be those property companies operating at a national and regional scale with an increasingly different set of objectives, investors, clients and staff.**
- 3. Real estate finance will become ever more sophisticated as property markets are further integrated with other capital markets. Methods of funding will be tailored to best suit the various parties to a transaction. There will be a reduced reliance on debt finance in speculative schemes and more development projects will be occupier led. New innovative vehicles will include the finance lease, stepped rents, amortization, purchase options and equity participation. Securitisation and unitisation will flourish and real estate investment trusts will surge. Transactions will be structured with several tiers of stock ownership and varied risk profiles. Different combinations of equity and leverage will be devised. Short and long-term lines of credit capable of securitisation will be arranged. Private placement type instruments will emerge. Traditional first and second mortgages will be augmented with various forms of mezzanine finance. In short, anything the financial markets can dream up. Real estate consultants had better beware before they become incapable of proffering adequate competitive services.**
- 4. As securitisation starts to surface in financial markets worldwide so the advent of syndicates and consortia dawns across global property development horizons. The construction of mega-projects, the privatisation of large public estates, multi-national corporate expansion and the demand for professional services 'one-stop shopping' all conspire to produce a variety of collaborative endeavours within the real estate industry.**
- 5. The future economic value of buildings will be determined much more by function and much less by location. Building specification will have to address very seriously the twin forces of adaptability and flexibility. Robust shells with infinitely changeable interiors capable of accommodating a whole range of services and facilities will be required. Customisation, conversely, will be coveted. Energy efficiency will be demanded, and other 'green' priorities regarding materials, waste, recycling, water economy and similar resource-related impacts taken into account. Initial design should consider the potential for conversion between sectors, and opportunity costs calculated in appraisal. Valuation for alternative use will become a more complex yet commonplace practice. Indeed, conventional valuation standards, referencing procedures and investment criteria will all severely be tested and transformed over the next ten to twenty years.**
- 6. The link between land values and the distance from city centres will weaken. Moreover, in the same way that international business mobility and the margins of competitive advantage narrow, so too will comparative property rentals and capital values converge.**
- 7. Property market research will come of age. Lack of sufficient and reliable data has always been a problem, in terms of stock, ownership, occupation, development, vacancy, take-up, rents, yields and values, but this is changing. Research until relatively recently was used more for profile and promotion than it was for prescience and prediction. This again is no longer the case. The advances that have been made in the field of property investment analysis will spread to more behavioural aspects of the market and, in line with this paper, more attention will be paid to the cultural, demographic, macro-economic, environmental, governmental and technological dimensions of real estate.**

8. The retail sector will, as always, be transformed over the next decade, and probably transformed again over the one after. Electronic shopping will blossom; the virtual mall will become a reality; the accent will be on market space and not market place; quality and service will be paramount; customer research, micro-marketing and nurturing will abound; the shopping mall will increasingly become the new village centre; the 'just-in-time' approach will predominate; leisure activities will be incorporated on a larger and wider scale; and cross border retailing will expand. Only the very best planned shopping centres that offer a true 'experience' will survive successfully. The retail property industry will concentrate on improving the performance of existing centres rather than building new ones. And town centres, especially in historic towns and cities, will revive as vigorous speciality shopping and leisure districts.
9. There will be a major collapse in traditional city centre office markets. New technologies and new working practices will have a profound and traumatic effect on conventional office occupation. Much has been researched and written about the future nature of work, the forces at play are familiar, but few still dare to think the unthinkable. The crash, or rather the crumble, will come. What was the office market will become highly disaggregated and diversified among smart homes, neighbourhood offices, office hotels, multi-suite executive developments, business and commerce parks and the like. Watch around the millennium for institutional investors to start to lose their nerve.
10. A similar disaggregation, but with more positive results, will happen in the hotel sector. The stratification between full service, limited service, budget, aparthotels, extended stay and luxury hotels will become more distinct. The boundaries between other sectors such as leisure, office, health, education and retail more blurred. Mix and match will be the watchword, and generally the hotel sector will prosper.
11. The so-called 'industrial' sector is already difficult to define, but a couple of significant trends are possible to discern. Research indicates that the most important factor for manufacturing corporations in choosing international and national locations is access to targeted consumers. Not, as so commonly supposed, costs of production. Uncertainty, moreover, is endemic in the global economy and it can be argued that the greater the degree of uncertainty, the greater the case for spreading investment risk as widely as possible. In this way, smaller plants in more locations to replace the conventional factory system makes sound sense.
12. The distribution industry is being revolutionised, and with it the distribution property sector. Logistic theory itself is undergoing almost constant revision, and most management consultants are developing logistic management teams to tackle the new distribution ideas, innovative service demands and enhanced environmental standards that are evolving. Banks are likewise starting to put together groups of logistics experts as finance gains an ever-growing influence on the design, number and siting of distribution centres. Just as traditional stock-holding warehouses are almost a thing of the past, however, so the future of distribution property is extremely vulnerable to all forms of change, especially such issues as road-pricing, 'just-in-time' policies, rail freight economics, handling and packaging technology and resistance to future out-of-town development. The sector, therefore, is likely to remain extremely volatile and risky as parties on both the demand and supply side of the industry re-think their approaches.
13. The next decade or so will witness a signal reformation in the consultancy services provided to decision takers in respect of the economics of the real estate market. Better information, a greater understanding of property market cycles, more transparency in transactions, increased objectivity through independent analysts, a recognition of real individual expertise and a generally heightened level of corporate competition will all contribute to an improved level of service.

Whether or not the decision takers heed that professional advice is another matter. The property professional, however, is going to face more regulation, compliance and external competition. Only the large firms will survive to give a comprehensive property service whilst highly specialist boutique firms will also flourish. The medium sized firm will go to the wall.

4. ENVIRONMENTAL CHANGE

Environmental issues incontestably form a major dimension of change and increasingly dominate the formulation of public policy at all levels. There is, however, a certain 'motherhood' quality to this new environmental agenda. It is intellectually difficult and politically unfashionable to harbour or express serious reservations about the extent to which there is a real problem of economic activity reaching or exceeding the capacity of environmental systems to cope with that activity without Draconian government intervention. There is also a sense that when it comes to the crunch of determining policy priorities for implementation, the strategic character of environmental issues sees them slip down the political preference list in favour of more tactical or local immediacies such as housing, health, education, employment, welfare and crime. Nevertheless, the rise of environmentalism is inexorable, and it has been argued that it is as much 'perceptions' of environmental change, past and future, that are as important as 'actual' environmental change in influencing social and economic policy. (Brindley *et al*, 1996)

4.1 Resources and the Environment

Four basic questions can be posed in terms of examining global resources and the world's changing environment (McRae, 1994):

- (i) **Is there a crisis?** Although there is little evidence of a global resource crisis, indications of regional strains abound. For a generation at least there will be a sufficiency, but inevitably there will be periodic disasters. Political tensions will also be heightened due to disparities in distribution. Food, water and energy being the main pressure points.
- (ii) **Can the world feed itself?** World food output has grown faster than demand for the past thirty years or so, and with a more vegetarian diet there is little doubt as to the capacity of the world to produce enough food for an even larger population. Allocation, and the politics and economics of transfer, is the real issue.
- (iii) **Is there enough water?** As McRae declaims "*A shortage of fresh water is probably going to be the most serious resource problem the world will face in 2020*". Again, the issue is one of uneven distribution not of global shortage. Increase in the amount of irrigated land, urban population growth, limited potential for further dam building and territorial protectionism will combine to make world water shortage worse, especially for such countries as India, China and Pakistan. Water is set to become an economic and political flashpoint in much the same way that oil has been.
- (iv) **Is there enough energy?** While there is no imminent generalised world energy shortage problems surrounding the declining stocks of oil, increased demand from the newly industrialised countries, regional energy scarcities and the deleterious effects of using fossil fuels upon the climate and pollution will surely intensify over the first couple of decades of the next century.

Environmental concerns arising from the exploitation of the world's resources have usefully been summarised as follows (Barton, 1996):

- * **Global Climate:** The increased likelihood of global warming, climate change and rising sea levels resulting from high levels of greenhouse gas emission due to fossil fuel burning and land use change.
- * **Biodiversity:** The progressive loss in the range and extent of wildlife habitats due to the impact of development with the resultant endangerment of rare species.

- * **Air Quality:** Atmospheric pollution causing problems of ozone depletion and acid rain at the global scale, and poor air quality resulting from traffic and industry at the more local scale.
- * **Water:** In some areas there are mounting problems of declining water levels reducing supplies, increased run-off causing flooding and urban and rural water contamination.
- * **Earth:** Loss of soil through erosion, loss of nutrients and soil fertility and problems of land contamination and dereliction.
- * **Minerals:** The high rate of extraction of non-renewable mineral reserves and sterilisation of potential renewable sources.

With all these pressures, it is almost certain that the degradation of the global environment will be a greater preoccupation by the year 2020 than it is now, and not difficult to predict that communities in the developed world will be sufficiently worried about the despoliation in the developing world actively to incite their governments and international agencies to intervene and regulate. Resources and the environment will become an ever inflamed topic of political contention.

4.2 Sustainable Development

The well accepted tenet for future development is that the development must be sustainable development, true growth be sustainable growth. Further, that this 'sustainability' is dependent upon a very much greater emphasis being placed by all concerned upon environmental quality as a critical factor in public and private decision making. Thus, investment and development decisions that satisfy the needs of present producers and consumers should be taken without threatening or compromising those of future ones. "Not cheating on our children", as it has become more popularly known.

Almost everywhere there is a mounting criticism of materialism. Post material politics, moreover, have become the order of the day in developed countries, and now transcend national and international boundaries. A cynical view, but one with more than a kernel of truth, is that increasingly there are votes in it. Politicians are notoriously keen to shifts in public opinion. Words, however, are cheap, and it takes decisive and expensive action to translate political rhetoric into firm government commitment.

One noteworthy consequence of the 'sustainable development' imperative is the regained legitimacy it has brought to planning. It is sustainable development that is now seen to offer a basis for strategic thinking and a new rationale for the relationship between planning and development. The resurrected idea that planning ought to be done, or can be done, on a grand scale is succinctly put by Breheny (1996):

"Up to the 1960's planning had a long, and reasonably creditable, history of visionary ideas. After that date, the public lost confidence in planners, and planners lost confidence in themselves. Subsequently, pragmatism has ruled. However, there is now a fascinating debate underway about the role of planning in promoting sustainable development, and - here we have the big idea - about which urban forms will most effectively deliver greater environmental protection"

In any discussion of sustainable development some mention should be made of the authoritative yet dissenting body of opinion that proselytizes the concept of a steady, stationary or no-growth economy. Challenging the efficiency of exponential growth in both human population and human economy the advocates of a steady state economy set down a new approach towards a kind of environmental macroeconomics which more responsibly relates the two traditional precepts of allocation and distribution with a third principle of scale. The more colloquial message is that beyond some point - perhaps soon for developed countries, and ultimately for all countries - economic growth is both physically and economically unsustainable, as well as morally undesirable (Daly & Townsend, 1993).

Overall, therefore, it can be argued that in order for development to qualify as sustainable, three criteria have to be satisfied (Barton, 1996):

- (i) **Social:** Are human needs being met?
- (ii) **Environmental:** Are environmental limits respected?
- (iii) **Economic:** Is it viable?

From this simple and all-embracing starting point, a whole battery of policies have been framed at national and international levels to translate the basic theory into practice.

4.3 Environmental Policy

Following the publication of the landmark Brundtland report, *Our Common Future* (1987), a decade ago and the Rio Earth Summit (1992) there has been a steady and rising tide in the number of environmental policy instruments introduced at international, national, regional and local levels. Global conventions on such issues as bio-diversity and climate control commit signatory governments to further action on environmental planning, much of which will impact at local level. There is now a substantial body of European Union (EU) environmental policy with a clear direction about the place that environmental considerations must have in all EU policy instruments and legislation, in that they must contribute towards:

- * preserving, protecting and improving the quality of the environment;
- * protecting human health;
- * prudent and rational utilization of natural resources;
- * promoting measures at international level to deal with regional or worldwide environmental problems.

(EC Council, 1992)

At the level of the individual country and national statutory land use planning, the upsurge in environmentalism has provided a fresh challenge and a new opportunity for the regulatory planning system and the planning profession in the general role of environmental protection. It is, however, a role riddled with risk and uncertainty.

An early and familiar example of a pan-European environmental policy measure with distinct local application was the Directive on Environmental Assessment in 1985, inspired by the 1969 National Environmental Policy Act in the United States, requiring environmental impact assessments to be made of major projects, which has now been extended to plans and programmes. At one time expected to be limited to a relatively small number of projects, it looks like becoming a more frequent and routine feature of the development process (see Glasson *et al*, 1994). In like vein, Agenda 21 programmes, published in 1992 as part of The Earth Summit, have encouraged sub-national governments to adopt environmental policies with some enthusiasm. Thus, with over 300 items of EU environment legislation enacted to date, it can be seen that the search for sound and higher environmental standards permeates every aspect of policy, and, as the new European Environment Agency gains experience, the pace is unlikely to lessen.

4.4 Urban Form and Design

The goal of sustainable development has quickened the search for sustainable models of urban form and design. At a strategic or conceptual level cities can be seen as the main arena of human activity and the most voracious consumers of natural resources. Attention, naturally, is therefore being focused upon the shape, density and functioning of cities.

The debate about the most sustainable form of urban development centres around the case for and against the 'compact city' (Jenks *et al*, 1996). In brief, the central issues can be summarised as follows:

- * Compacting the city reduces travel distances thereby abating emissions and greenhouse gases, and consequently containing global warming.
- * Dependency upon the car leads to excessive energy consumption, poor public transport, traffic congestion, road hazards, severance in community living, uneconomic use of time, deteriorating urban design, population dispersal, noise contamination, air pollution, lower standards of health and general social polarisation.
- * Urban infrastructure, overall accessibility and land use is optimised by city compaction.
- * The centralized city enhances the quality of urban life and creates a better business milieu.
- * Decentralisation, conversely, has advocates who claim the compact city concept to be a romantic notion which ignores the hard realities of current economic demands, real environmental sustainability and individual social expectations.
- * A compromise position is to be found adopting some of the centrist arguments favouring tough urban regeneration policies and intra-urban environmental initiatives, but allowing for inevitable decentralisation to suburbs, towns and sites able to support a full range of urban facilities and cause minimal environmental damage (Breheny, 1996).

The indications are that the success, desirability and achievability of the compact city are equivocal (Thomas & Cousins, 1996). Nevertheless, the search for a range of sustainable urban forms which respond to a variety of existing settlement patterns and urban contexts will continue.

An even more radical concept regarding the changing nature of the city is that of the 'non-stop city'. The creative idea is that the clock is used as a resource. A new social architecture of time could address a range of growing urban maladies relating to use of energy, infrastructure, services, utilities, facilities, and plant and equipment. Time, somewhat extravagantly, could be occupied in the same manner as space. In some ways, more flexible working and leisure patterns are already extending the life of the city, and cities ultimately are shaped by work. Treating time as an environmental resource, and thinking the unthinkable about re-organising urban activity around it, has been described as a low-cost solution that can greatly increase the number of jobs, protect the environment and improve the quality of life (Hager, 1997).

One heartening aspect of the changing environment in the developed world is the growing emphasis placed on improved urban design. Government agencies, private investors and developers and actual or prospective occupiers are all showing greater concern for standards of urban design. They may each consider, however, that it is the others job to achieve it. Nevertheless, it has accurately been observed that (DOE/RICS, 1996):

“Under the right conditions, a sustainable quality of urban design can be achieved. The challenge is to ensure that the standard of today’s exceptional development becomes tomorrow’s norm”.

In terms of design, furthermore, there has been a paradigm shift in the emergence of an architecture for the sustainable environment. The new design model employs natural ventilation, the effective use of natural light and the use of a building’s thermal mass to provide comfort conditions in the space provided. The carefully designed shape and orientation of buildings, the arrangement of openings, shading devices and other design elements enhance the potential for using natural ventilation and daylight, help remove the need for air-conditioning and minimise the amount of electrical light and energy needed. Such an approach is said to reduce the impact buildings have on the environment by a factor of five, as well as avoiding the risk of sick building syndrome (Beattie, 1997). In the context of buildings and sustainable development it is further argued that (BREEAM, 1997):

“The challenge is to translate the rather general principles of sustainable development into specific requirements which can direct and influence action. Technical performance criteria for buildings, components, systems and materials are needed together with the development of performance criteria and benchmarks for management systems to ensure that buildings in use continue to perform satisfactorily”.

From a commercial viewpoint, it is becoming evident that there is a financial advantage to producing environmentally responsible property. Not simply in terms of basic cost, but also in respect of general marketability (Keeping & Shiers, 1996).

4.5 Environmental Management

For a mixture of reasons, organisations increasingly are having to demonstrate sound environmental performance, the key to which is the adoption of an effective environmental management policy. Environmental management has been defined as (Alexander, 1996):

“The effective management of an organisations activities, in order to ensure that they meet defined environmental objectives, and the process by which an organisation sustains a healthy, safe and ecologically sound environment to meet it’s strategic objectives”.

In order to achieve this it has been claimed that an organisation must ensure that (Cooper, 1996):

- * its operations and activities comply with environmental legislation;
- * its products or services are procured, produced, packaged and delivered and used, and ultimately disposed of, in environmentally appropriate ways;
- * its expenditure (both in terms of staffing and resources) on environmental protection is timely and effective;
- * its strategic planning for future investment and growth reflects market needs concerning the environment.

To fulfill these obligations fully, an organisation really needs to know the environmental effects not only of its own activities and operations but also the ‘upstream’ production of the resources, its uses and the ‘downstream’ use of its products and services, embracing the Friends of the Earth maxim “Think globally, act locally”.

It is probable that the main implication for real estate, through the field of facilities management, will be a movement away from a basic mandatory compliance towards voluntary responses. In parallel, it has also been said to mean movement away from primarily considering the internal environment in terms of meeting health and safety standards; through a concern for the delivery of healthy buildings; broadening out via the introduction of tools for auditing both the internal and external environment of buildings; towards the strategic management of facilities, both in terms of their impact on the internal and external environments and vice versa (*Ibid*).

An interesting note to conclude this section on changes in environmental management is a quote from Shinroku Morohashi, the President of the Mitsubishi Corporation (1992):

“We believe a business cannot continue to exist without the trust and respect of society for its environmental performance”.

PROPERTY PERSPECTIVES

- 1. The goal of sustainable development now permeates every policy field of government in western economies. Meeting the demand for growth in a manner that preserves the quality of life and the environment is a primary challenge faced by the real estate industry. Characteristics of the emerging field of sustainable development include: increased reliance on site-based utility services for sewage, water and power; advanced levels of building efficiency, whole systems design producing multiple benefits from efficiency or innovative design in specific areas; 'smart building' wiring, combined with built-in, whole-building power protection and healthy building design. The bottom line is that high performance buildings are more profitable, more desirable and more environmentally compatible than conventional buildings. Indeed, it has been suggested that enlightened developers could be the environmentalists of the 21st century (Sackett, 1997).**
- 2. Urban densities will increase. Planning policies everywhere will be directed towards optimising the use of land in existing urban areas and containing sprawl. The promotion of development on 'brownfield' sites is a prime measure in affecting this policy, largely achieved through fiscal incentives, tax penalties 'out-of-town', flexible zoning of uses, a sequential test for development proposals, government assistance with derelict land assembly and servicing and a public transport system favouring centralisation.**
- 3. Environmental quality in urban development will be placed at a premium. The key factors to attaining this will be the promotion of mixed-use development; greater integration and co-ordination of land-use and transport planning; more local involvement from the inception to the completion of projects; the production of effective design guidance reflecting local identity; improved environmental awareness and design training; and, again, the need to embrace higher densities (DOE, 1996). The real estate industry will play its part by taking more pride of place in their projects; measuring the value of quality; seeking more imaginative professional advice; giving more consideration to how their business performance will benefit from investing in quality of urban design; and encouraging house builders and home owners alike to pay more heed to the potential value of design quality (DOE/RICS, 1996).**
- 4. There will be less reliance on the private car. Perhaps the most heroic of predictions, but one which is central to the future nature and form of urban development. Fantasy still for North America in the foreseeable future, but realistic for other parts of the developed world, especially Europe. The principal impetus for reducing car dependency will be the spread of road pricing linked with more efficient and effective public transport systems. Taxation on out-of-town car parking facilities and increased charges on town centre parking will intensify the pressure on car usage. Other economic, fiscal, planning and environmental policies will combine to shift the movement of people away from the private car and on to public transport. Development will be arranged around transportation networks and nodes accordingly. In twenty years time everyone will look back in wonder at the traffic conditions endured today.**
- 5. Mixed use development will be much more common. The changing nature of work, the blurring of boundaries between traditional land use sectors, a growing emphasis upon environmental quality, a shift in planning philosophy and the need for greater flexibility and adaptability in buildings all contribute to an emerging consensus for a greater integration of diverse land and property uses. Developers and investors will increasingly discover that imaginative mixed-use projects will provide robust and rewarding investments, and a new breed of multi-skilled professionals will evolve with experience and expertise in the special challenges of mixed-use development schemes.**

6. The growth of knowledge based business operations will stimulate the development of suburban campus style settings for individual corporations and communities of similar producers alike. Such companies will increasingly seek commercial parks in attractive locations equipped with technological infrastructures of the highest performance, operating on a 24 hour seven day a week basis with top of the line employee amenities and services that foster employee interaction and workplace intimacy.
7. Masterplanned communities, along North American lines, will become a popular feature of urban development. One project that has attracted much publicity is the new community at Celebration, just outside Orlando in Florida, where Walt Disney Imagineering are developing a 4,900 acre site. Not perhaps to everybody's taste, it does lay down five basic planning principles which act as cornerstones for the development of similar settlements - health, education, technology, sense of place and social community. There is a clear trend towards house buyers weighing the quality of community more heavily than the quality of the house in making their purchase decision. New towns, new villages, and new neighbourhoods are an obvious and attractive solution to increased housing demand and changing social preference.
8. Building specification will become increasingly environmentally conscious and conscientious. The recently unveiled office of the future provides a perfect model of what is to come. Its louvred glass slats can be rotated to cast sunlight onto the office ceilings, thus saving on heating costs; it has three tall chimneys that draw fresh air through large vents in each corner of the edifice, obviating the need for conventional air-conditioning; wavy concrete ceilings provide ventilation channels; photo-voltaic solar panels provide power; cold water feeds from a natural well nearby, cooling the recycled hardwood floor; low-energy consumption lights are controlled by versatile devices that allow temperatures to be regulated either automatically or manually; and the whole result is a building that uses 30% less energy than current best-practice buildings. The BREEAM rating system mentioned in the text above will become a standard for the real estate industry and give a commercial advantage to developers that have taken seriously the concepts of sustainable development.
9. Contaminated land sites will be returned to the market. Exciting opportunities will open up in central city areas as a combination of market demand, planning policy, government subsidy, legislative enforcement and development enterprise combine to exploit previously despoiled land.
10. Fiscal measures for urban regeneration will be more popularly applied, but more focused. In particular, the designation of very specific areas and special uses for tax relief will be used by town and city corporations to stimulate investment and development. (The Irish experience is an interesting model).
11. The most futuristic hope is for the environment to be defined as the new common target for defence expenditure, fending off our own deterioration as Handy put it (1994), but sadly turning swords into ploughshares has a poor history.

5. GOVERNMENTAL CHANGE

By far the most significant change in the role of national governments throughout the world is that they are becoming less powerful. This is happening for a combination of reasons:

- * Powers are being passed upwards to supra-national bodies.
- * Powers are being passed downwards to subsidiary authorities at regional, federal, provincial, state or city level.
- * Fiscal and monetary policy is increasingly determined by the world's financial markets.
- * Free trade agreements, formal and informal, limit the scope for governments to control domestic markets.
- * Multi-national corporations exercise even greater influence over business investment decisions.

With increasing mobility in manpower, money and information, coupled with a reduced threat of war between nations, this process is likely to intensify. Governance (a wider term than government, signifying a new process of governing by a more complex system of governmental agencies), however, will naturally continue to form various parameters within which markets, including the real estate market, will operate.

5.1 The Polarisation and Fragmentation of Governance

Several related changes have taken place in world affairs. Changes in information and communications technology have advanced to create what Castells (1993) calls the "informational society"; new forms of agreement between government and business have been forged; new forms of international re-regulation have replaced national deregulation; a growing number of services are traded internationally; and financial markets have become far less dependent on national regulatory systems. These global forces have undoubtedly weakened the position of nation states.

At the same time, it can also be seen that the nation-state has been challenged from below by sub-national agencies and institutions. Decentralisation of political power has been a theme of governmental change in most developed countries over the past decade and more (the UK being a notable exception). Subsidiarity lies at the heart of much political theory, and, since Maastricht, most European Union policy practice. In its truest form, however, it is not so much delegation to the appropriate level of government, but rather 'reverse delegation' by the parts to the centre. Federalism, which seeks to be big or centralised in some things and small or decentralised in others, used to apply exclusively to the set of sub-national parts of a country, but now applies to certain pan-European aspirations, and even further to the aggregation of parts of large organisations in general. Quango's represent another way in which government control has been fragmented. Likewise the privatisation of public services and the growth of public-private sector partnerships are further signs that government is now frequently following modern organisational management aims in re-thinking its core function, and, having set standards and established a framework, choosing suitable contractors to perform the job.

5.2 Government and Society

Developing the above theme, there are a number of significant trends apparent in the way in which governments operate in providing services and setting policies in contemporary society. The can briefly be described as follows (McRae, 1994):

- * There is a general movement to reduce the size of the public sector, shed commercial functions and privatise nationalised industries. Governments will be expected to do less and not more.
- * The aims of government will increasingly be achieved by regulation and not provision. This is true in most sectors of the economy - health, education, infrastructure, communications and, to some extent, even law and order - with the exception of defence, which in any event is diminishing.

- * The electorates of the developed world are showing a marked reluctance to vote for increased taxation, and governments might have reached the practical limits of raising tax revenue.
- * Social security and welfare systems will come under more and more pressure, with a growing tension between those in-work and those not working.
- * User charges for erstwhile free or subsidised public services will be more common.
- * The accent by government will be placed upon regulation to secure effective, efficient and equitable provision of services. This will require an extremely subtle, sensitive and flexible system of regulation that pays close attention to the cost implications of controls.
- * Persuasion will accompany regulation through better public education, public relations and public disclosure.

Overall, therefore, the degree of direct influence that governments will be able to exercise over peoples actions, social problems, economic performance and corporate power is likely to lessen. The price of democracy.

5.3 Governance and Urban Planning

One of the major responsibilities of government at all levels is that of urban land use or spatial planning. It is naturally also one that has a profound effect upon the real estate industry. As already been intimated, having undergone a lengthy period of uncertainty and even disillusionment, planning stands at a threshold of fundamental change as the concept of sustainable development is more widely and deeply embraced.

It has further been argued that planning, having experienced a crisis of confidence, has fragmented into a number of distinct types or approaches (Brindley *et al*, 1996), as below:

- * **Regulative Planning:** Where, under planning legislation, local authorities have the two principal functions of preparing plans and controlling development. This approach has been variously criticised, not least for either following the market too blindly or for not properly understanding and facilitating it.
- * **Trend Planning:** This describes an approach which attempts to reorientate planning to a private sector perspective with plans consciously reflecting market trends in the allocation of resources and facilitating development in line with market demand.
- * **Popular Planning:** Emerged in public reaction to major planning and development proposals which threatened local communities. Popular planning, however, goes beyond defensive anti-development campaigns and seeks formal recognition of the validity of plans prepared by local communities.
- * **Leverage Planning:** The essential ingredient of this approach is the use of public sector finance to stimulate a weak market and generate a greater contribution of private sector investment. It is based upon providing infrastructure or subsidies for, and taking an entrepreneurial stance towards prospective development opportunities, thereby bolstering confidence in the market and the urban area.
- * **Public Investment Planning:** This involves the comprehensive direction of urban change by public sector agencies, and is most familiarly practiced in the development of new settlements and the renewal of derelict areas.
- * **Private Management Planning:** Contrariwise, this type of planning places the responsibility for managing the development of planned new urban areas and undertaking the recovery of deprived and run-down areas upon the private sector, using their skills, methods, experience and resources.

The importance of this typology is that it permits an appraisal and comparison of alternative urban planning policies and practices within different government contexts. It is perfectly possible, indeed probably desirable, that the proper planning of individual towns and cities draws upon many, if not all, of these approaches. Planning, above all, should be a local experience and look to the locality for evidence, ideas and support for future change (*Ibid*).

5.4 The New City State

As the forces abroad in the world described above are pushing power up internationally and down locally away from nations, so cities are emerging as the critical focus of economic activity, of governance and of social organisation for the future. The principal reasons why the historic city state concept has re-emerged from the shadows of mighty nation states has been ascribed to a confluence of events (Pierce, 1993):

- * Telecommunications has become global and instant.
- * Goods can be moved between continents within the day.
- * Trade barriers are crumbling.
- * Nation state macroeconomic policies are constantly being thwarted.
- * Populations are concentrating upon city state metropolises.
- * City states are the focus of global competition - economic not military.

National economies are, in fact, fast becoming constellations of city state and regional hinterland economies, each demanding an individual, specific and customised strategy. Spreading liberalization and the dissolution of trade barriers have become the leitmotif of our times, amplified by the free flow of capital throughout the world. The global economy has thus produced 'global cities' which provide a centre for business, finance, education and culture, but which also, on the downside, display increased polarisation in terms of class, race and opportunity.

Another variation on the theme is the emergence of the 'entrepreneurial city' where innovative policies for stimulating economic development, bringing together public and private sector agencies in partnership and promoting the particular merits of a given town or city, have led to an urban renaissance. A key feature to these 'successful cities' has been the restructuring of the development process, blurring the distinction between public and private sector functions and redefining their traditional roles (Lassar, 1990). The new forms of partnership, joint venture, coalition or co-development which have arisen have produced what has been described as a 'boosterism' in the cities (Newman and Thornby, 1996) where the coming together of disparate interests towards a common goal has resulted in a depth and pervasiveness of change in approach to city governance.

5.5 The Governance of Cyberspace

The transforming qualities of the new information and communications technologies (ICT's), discussed more fully in the next section, have, through the seemingly endless possibilities opening up within the emerging virtual world of 'cyberspace', given rise to new forms and expressions of governance. This has been described as:

"a paradigmatic change in the constellation of power relations between individuals, governments and social institutions arising from the transcending qualities of ICT's as a means to facilitate the demise of modernist forms of governance based upon territory, hierarchical management control of populations, and policing".

(Loader, 1997)

One definition of cyberspace is offered by the cyber-enthusiast Howard Rheingold (1994) as being:

"the conceptual space where words, human relationships, data, wealth and power are manifested by people using computer mediated communications technology".

This presages fundamental change, and in the context of governmental change, the debate about the extent to which ICT's will alter the politics of the planet has really only just begun. Profound questions are being posed about such issues as liberty, identity, privacy, democracy and surveillance in the 'information policy' (Taylor and Williams, 1991). One of the most immediate, though perhaps one of the more prosaic, concerns taxation. With cyberspace increasingly being where the money is, governments all around the world are itching to tax the internet. But as invariably there is no cash, no receipts and no expenditure, there is a significant erosion of the tax base. There are also fewer physical products yet more information related jobs. Data transmission and 'bit' taxes are under consideration, but rather like taxing education, cultural objections are enormous.

Nevertheless, one area where ICT's are playing an increasingly important role is in the regeneration of urban economies (Carter, 1997). Towns and cities rush to be included in the communications revolution with the burgeoning growth of teleworking and teleservices. Many municipalities are well-placed to capitalise on the emerging information economy by developing a critical mass and suitable infrastructure for telematic projects. The priority being to:

“ensure that these technologies become a means for generating economic growth, employment and an enhanced quality of life through the provision of local access to the facilities and services available on the developing information superhighway” (Ibid).

PROPERTY PERSPECTIVES

- 1. The market paradigm which has driven urban policy over recent years will give way to a more socially directed policy framework. What has become known, somewhat pejoratively, as a 'Thatcherite' approach to urban planning and development, fiercely favouring a market orientation, will give way to one more sympathetic to social values and human needs. Property development proposals will be judged as much by their social worth as by their commercial value.**
- 2. Cities will have to compete as businesses, with real estate as one of their prime assets. Therefore, in looking at long-run criteria for commercial property development the first consideration will be an evaluation of a city's management, skill, resource and marketing ability to maintain and enhance its economy. The second consideration will be the inherent strengths of its specialisms and centres of national and international class excellence and expertise. In other words, cities will be evaluated for their economic potential, just as companies are evaluated. These criteria should be added to those of the European Real Estate Monitor (The Harris Survey) where businessmen in Europe rank their criteria for selecting cities in order, with the top three being ease of access to markets, international and national transport links and quality of telecommunications. Nevertheless, the questions for the future type and pattern of demand for commercial property are many and complex, but they are inextricably linked to questions about the future role of the city as a centre of business (Chapman, 1995).**
- 3. In similar vein, the role of municipal governments will increasingly be to promote themselves as specialist towns or cities. In advertising argot they should seek their own Unique Selling Proposition. Present planning policies tend towards achieving a standard package of activities in the search for the ideal of balanced development. Future public programmes might best be aimed at generating economic growth from concentrating upon a selected specialist employment base, along with the provision of complementary and supportive services.**

4. The quality of urban environments will progressively be an important factor in the investment and location decision by both firms and individuals. Local government will be charged with ever greater responsibility for enhancing and maintaining that environmental quality in terms of clean air, safe streets and attractive and accessible open space.
5. The quality of internal environments will also be subject to higher standards through the introduction and enforcements of tighter health, welfare and safety at work legislation.
6. Town Centre Management (TCM) initiatives aimed at enhancing the vitality and viability of town centres will expand until formal TCM schemes become the rule rather than the exception.
7. Partnership arrangements between public and private sector agencies will expand and flourish. In the real estate sector, governments at all levels will benefit from the finance, expertise, agility and entrepreneurship of private sector developers, who in turn will gain from the credibility, facilitation and powers afforded by collaboration with public bodies. Conflicts of interests will inevitably emerge, but co-development of all kinds will form the basis of many exciting property related projects.
8. Urban megaprojects will become increasingly familiar features of city development policies throughout the world. These large-scale schemes usually comprise a mix of commercial, residential, retail, industrial, leisure, civic and infrastructure uses, invariably sited in the inner city and primarily on tracts of former docklands or industrial land. The five critical factors behind their emergence are described as the development and restructuring of the international financial system; the globalisation of property markets; the growth of the transnational corporation; the creation of world social networks; and the increasing mobility and networking of policy makers and professionals (Old, 1997). These modern citadels will represent the most striking urban forms to emerge in the early years of the 21st century.
9. Governments in older developed economies, notably Western Europe, will confront the issue of traffic congestion and inadequate transport planning policies. Motorists will face a battery of legislation relating to motor taxation, parking charges, road tolls and private car usage that will ultimately affect the nature, location and form of new urban development projects.
10. New strategies towards obsolescent buildings and abandoned land will be devised by city governments based upon a better understanding of the urban development process, the sharing of best practice initiatives, more focused use of fiscal powers, a broader appraisal of the true costs of greenfield site development and a creative approach towards the formation and support of a variety of urban development agencies.
11. International standards and regulations regarding professional practice in the real estate industry can only get higher and more exacting.

6. TECHNOLOGICAL CHANGE

Technological advances permeate every aspect of modern society, with a succession of new industries based on electronics, computers, information, bio-technology, energy, waste, materials, pharmaceuticals, and the like, jostling for the high ground of economies.

It is often thought that technological progress is moving so fast that life in the developed world will be transformed beyond all recognition by inventions and innovations of which we presently know nothing. That there will be profound changes in the way we live, and more specifically in the way we work, is assured. It is argued, however, that the technologies involved a generation hence will largely be the ones that already exist, and the main issue is which ones will have practical commercial applications and which will not (McRae, 1994).

6.1 The Scope of Technological Change

The all pervasive nature of technological change defies simple summary. The accent of this section, therefore, is placed upon the climate of change prevailing in the field of information technology. Other fields of technological change, however, should not be forgotten. These include:

- (i) **Gene Technology:** The revolution taking place in genetics is arguably even greater than that occurring in information technology. When Crick and Watson first unveiled the mystery of the double helix that helped explain genetic transmission in Cambridge in 1953 they surely could not have envisaged the power they unleashed. With the technology for manipulating DNA codes now available, and the inherently democratic nature of DNA in terms of 'mixing and matching', almost anything seems possible.
- (ii) **Energy Technology:** Issues here are driven by two overwhelming considerations: first, the emergence or otherwise of significant greenhouse warming; and second, the future of petroleum as a primary source of power. Relatively little of a revolutionary nature seems to be taking place in the energy field except for improvements in the recovery of oil and natural gas, marginal advances in wind technology, battery development and some success in solar energy. A revival in nuclear power is also forecast by a heretical few.
- (iii) **Materials Technology:** Industries are learning more and more about materials, their structures and characteristics. In an almost hidden revolution, there have been massive developments in both organic and inorganic materials science and technology. More can be manipulated and a wider variety assembled, so that now a range of desired characteristics can be set and then materials designed to meet them. Advances in the area of ceramics, for example, are astounding. The material attracting the greatest interest in terms of research and development, however, is concrete, which has enormous and exciting ramifications for the construction industry.
- (iv) **Brain Technology:** Almost in the realms of science fiction, but fast becoming science fact, are the breakthroughs taking place in neuro-science. The next generation of research development will certainly witness major advances in the area of 'brain technology, operating pharmaceutically, chemically, electronically or phonetically, and moving beyond mere medical applications.
- (v) **Robotics:** It is the age of the smart machine. Computers generally have revolutionised the work of organisations and will continue doing so. Smart organisations, however, see smart machines as aides to smart people.

6.2 The Pace and Direction of Technological Change

One of the most interesting questions is the extent to which technological change will be an incremental advance or a radical shift (McRae, 1994). Put simply, it is claimed that essentially 'mechanical' technologies will be comparatively slow to change, whereas, those which can be classified as 'electronic' will be very fast. Over the next generation until around 2020 the emphasis will be not so much inventing new technologies but on creating new and cheaper ways of applying existing ones.

Travellers in 2020, for example, will still be using broadly the type of trains, buses and planes presently built in the later 1990's. The array of non-electronic consumer goods will be much the same. And there will be little change in the basic sources of energy.

Efficiency will be watchword, however, and production and operating costs will fall progressively. Other keynotes will be quality, reliability and service, which had been diminishing, but are now beginning to re-emerge with ever-added weight being placed upon consumer values and the cost effectiveness provided by advances in information technology. A return will be made to repair instead of replacement; durability will gain in importance; and customisation will come more and more into vogue. In terms of production, industrial plant will become smaller, with fewer workers, offering better conditions and being less location specific.

By far the most manifest change will result from advances in information technology. Put colloquially: *"We ain't seen nothing yet!"* The electronics revolution has only just begun. The widespread laying down of fibre optic networks over the next ten years has the potential for dropping the bottom out of the cost of telephony. It might well be virtually free by 2005 in many developed countries. The Fibre-Optic Link Around the Globe (FLAG) providing high capacity information infrastructure connecting developed nations and major metropolises should be in place by 2015. Mobile phones and associated services will soon be the norm.

The growth in the capacity of computers, according to Moore's Law, continues apace, both in terms of what they can do and the time they take to do it. The Law, ascribed to one of the founders of Intel, asserts that there is a doubling in the capacity of computers every 18 months, which is likely to endure for the next ten years. Capacity thereby increases about tenfold every 50 months. One of the revolutionary changes for this technological progress is that in terms of decision making and production, more and more things are brought into 'real time' management. The process of data collection - data analysis - and change, becomes continuous. Everything, moreover, is getting its own micro-processor and thus becoming 'smart'.

One area of development deserving of mention is that of food technology. There are two prime directions of technological change. First; genetic engineering which is improving crop quality, yield, preservation, nutrition, diversity, sturdiness and special characteristics. And second; packaging, which is now considered to be the central driver in the food chain. Even 'smart food' is on the way!

6.3 The Interactive Society

The technological tools of a society becoming ever more interactive through information and communication are increasingly available and will be commonplace if not indispensable over the next generation. From telephone and television, through personal computer and fax machines, to Internet and E-mail the interactive society is developing fast. Many forecasts now promise a brighter, easier and fuller future in this coming interactive society (Eder, 1997). These promises include:

- * An increase in free time.
- * An ability to screen-out unwanted information.
- * Easier learning for all activities from a wide range of sources.
- * More effective education, using the best teachers and information bases.
- * An enhanced environment with much greater comfort and resource efficiency.
- * More convenient shopping and consumer services.
- * Greater participation and democracy in government.
- * A wider range of personal contacts.

On the reverse side of the coin, there will be a number of problems such as fragmentation of family life, the blurring of work and leisure, continued stress, more isolation, loss of privacy, questionable gains in education and a decline in civility. The overall prospects, however, have been summed up as follows:

"In the future interactive society, I believe we can expect continued frenzied demands on our time, our wealth, and our commitments. But we will have greater control over what we are willing to pay - in terms not only of money but also of revealing our background, our lifestyles, and our needs, goals and satisfactions." (Eder, 1997)

6.4 Information Technology and Work

Society is on the threshold of a period that will change the working environment and the way in which people work beyond the imagination. The challenge, especially for the real estate industry, is to recognise that there is no choice; these workstyle changes will happen and have an increasingly dramatic effect on users demand for office space. Property people need to become more aware of the changing space needs of businesses, and how new technologies will influence workstyle and workplace.

Corporations are responding to an increasingly dynamic business environment by creating flexible networked structures characterised by the emerging 'virtual organisation' described earlier. Information technology and improved communications services are what enable these more dynamic virtual organisations to operate. They provide the intelligent corporate network and communications system available 24 hours a day, so that operations are no longer governed by time, space or the physical need for people to be together, but by the network that links the virtual corporations partners for that particular project. It has been explained that all of this gives endless flexibility to these virtual organisations allowing them to be loose, transient agglomerations joining together to create new products and services, and dissolving and reforming in different formats (White, 1995).

The trends in new work practices resulting from advances in information technology are by now fairly familiar but can usefully be summarised as follows (Gerald Eve, 1996):

- * **Hot Desking:** Where workstations are provided on an as-needed basis for those who have clearly defined, tightly managed jobs.
- * **Homeworking:** Estimates of teleworking or telecommuting vary enormously, but recent surveys in the U.S. forecast an existing 4% of the workforce engaged in 'distributed' work could rise to 20% by 2005 and 40% by 2020.
- * **Satellite Offices:** These are said to offer a viable alternative to the loneliness of the long-distance worker, combining the advantages of teleworking with the social role of the office.
- * **Neighbourhood Offices:** An extension to the local business centre, offering a business address, a professional answering service and a full office support system.
- * **Hotelling:** Private business space, technology and support services, are booked by the individual through a 'concierge' on a licence for hourly, daily, weekly or monthly periods.
- * **Virtual Companies:** Where individuals and teams from different organisations contract together for the duration of project, and interact mainly through communications technology.
- * **Wireless Communications:** Meaning mainly mobility through personal numbers, voice recognition systems, smart workstations, sophisticated visual communications and E-mail.
- * **The Stretched Week:** Shift work and 24 hour operations are becoming more commonplace alongside flexi-time, job sharing, three day weeks, eight day fortnights, as well as annual hours and zero hour contracts, often influenced by the need to optimise time, space and I.T. facilities as well as reduce costs. (The eight day week has even been suggested (Hager, 1997)).
- * **Outsourcing:** Where organisations hand over part of their business to an outside contractor so that they can concentrate on their core activity, often as a result of specialised I.T. services.
- * **The Club Centre:** The new concept of the central office as a working club for organisations where most of the workforce normally have somewhere else to be, which provides a congenial as well as efficient business environment.

As it is information, and the ever-increasing power of I.T., which lies at the heart of most businesses, so the business environment itself is becoming increasingly dependent upon the effective development of facilities information management systems (FIMS) to support the proper facilities management (FM) of a firms property and associated services. The nature, scope and operation of FIMS is explained elsewhere (see for example, Joudah, 1996), suffice it to state that the role of information management in the practice of FM at all levels of a business is of crucial and growing importance. It has been argued, however, that most organisations want the benefits of I.T., but not all are willing to allocate top management time and attention to achieve it (Alexander, 1996). This will change as businesses and professional lives are seen to be transformed by the successful, and for that matter unsuccessful, application of information technology to facilities management.

Part of the FIMS approach is the recognised need to provide a better building management system (BMS). This must be of sufficient complexity to enable control and use of the accommodation in the most efficient manner; be flexible enough to enable it to react to changes in the organisation and internal office layouts; yet simple enough to be understood and operated. With increasingly expensive, mobile and scarce people resources, it is imperative that a conducive working environment is produced and maintained (White, 1995).

In terms of the future office, it is not difficult to predict that a wireless environment is around the corner, with voice recognition software occupants, intelligent workstations recognising their transient users, and life size video conferencing. Paper will steadily reduce in quantity as on-line disk storage becomes the norm and electronic storage more economic. E-mail will include video sequences, face to face messaging, multi accessing, and voice activation; and again disc storage will make all this practical on a human scale without the barriers of hardware, software, time and space (*Ibid*). As B.T.'s Chairman, Sir Iain Vallance, has neatly put it:

“The competitive edge will be gained by those corporations giving their people the most natural access to new technology to blend workstyle and lifestyle.”

6.5 Information Technology and Corporate Infrastructure

A fascinating and perceptive paper by Michael Bell (1997) of the IDRC, presented perhaps somewhat ironically in Disneyland, examines a model of corporate infrastructure which responds to two critical, and competing needs of the business organisation in a globally dispersed operating environment. First, the need for organisational 'proximity' and second, the growing competitive need for organisational 'mobility'. The model further lays down two primary corporate resources to meet their infrastructure requirements: 'occupancy resources', such as land, buildings, interiors and alternative workplaces; and 'connectivity resources', such as public and private communications networks, local area networks, individual communication and information technology tools, and travel resources. The model reveals that:

“the potential for coherent, integrated, global infrastructure strategy that is aligned with the strategic intent of the organisation and its operations and which infers the rational allocation of resources (capital and operating expenses) to occupancy and connectivity that are explicitly co-ordinated and integrated, measurable and sustainable.” (Ibid)

The concept of such an integrated infrastructure strategy clearly has significant implications for both the real estate and the I.T. industry, as well as the travel industry. What Bell calls for is enlightened civic leadership to forge public/private sector partnerships to transform regional infrastructure to compete as “smart communities” of the next century.

6.6 Information Technology and Urban Structure

The core technologies upon which economies are founded have always played a prime part in determining urban form and structure. The industrial revolution was driven by the steam engine and spawned railways. Subsequent industrial development was based upon the internal combustion engine and electricity. Current leading edge technologies are those fostered by information technology. Each of these technological epochs heralded changes in the urban landscape.

In examining the present and likely future impact of I.T. upon urban structure, the work of Lusht and Farber (1996) provides an excellent insight. Here the authors identify certain centralizing and decentralizing pressures which they argue will exert an influence upon changes in urban structure.

Because much of I.T. will have the effect of reducing the need for physical accessibility, the strongest case is made for decentralization as follows:

- (i) Improvements in public and private transport, the likelihood of alternatives to the internal combustion engine, the possible development of 'smart' highways and the construction of new airports should all reduce cost and sustain outward movement from the city centre.
- (ii) It is less and less important to have a physical presence for many functions as the emerging technologies substitute electronic for face-to-face communication and geographic or spatial distance becomes increasingly irrelevant.
- (iii) The control, production and distribution processes in business and industry are becoming separated with telecommuting and the use of teleports gaining in popularity.
- (iv) Houses are becoming more information and communication dense so that the home will no longer be simply a place to eat, sleep and socialise, but more a place to work, shop, be educated and be entertained, so that again locational dependency is loosened.
- (v) Some decentralization will occur as a result of business users needs for specialised space that will accommodate I.T. and access to certain forms of communications networks will be the critical location factor.
- (vi) Changing retail distribution patterns bringing the product to the customer through interactive technology could mean that physical accessibility of shops to shoppers will be less important.

While the general effect of advances in I.T. will be to encourage decentralization Lusht and Faber (Ibid) point to a few important exceptions, such as:

- (i) The gradual movement towards a non-stop city.
- (ii) Penalties on polluting transportation systems could increase travel costs and reduce urban sprawl.
- (iii) Dispersal of production and distribution processes made possible by I.T. will, in fact, require central and centralised control.
- (iv) Information and communication technologies are often being developed first in central locations.
- (v) Producer services, which have grown rapidly, are inherently face-to-face activities despite reliance upon I.T.
- (vi) Some towns and cities will develop as high amenity urban areas and attract a concentration of knowledge workers seeking a social and cultural milieu.

On top of these pressures for centralization there is, of course, the governmental dimension through the land use planning system seeking a 'compact city' of the future to consider (Jenks *et al*, 1996). Nevertheless, it is clear that property investment and development decisions will increasingly be driven by technological imperatives.

PROPERTY PERSPECTIVES

- 1. Real estate at every scale is going to get smarter and smarter. There will be the 'smart city', the 'smart community', the 'smart park', the 'smart mall', the 'smart office' and the 'smart house'. Technology is increasing the spread of information, the speed of communication and the flexibility of production and provision of services. It will allow for more participation and control in the management and operation of almost every aspect of modern living, including the field of real estate. Better informed consumers have greater power to demand that their increasingly diverse accommodation needs are met by property professionals. And property investment and development decisions will progressively be driven by technology. It will be common, moreover, to find wide variations in performance due to differences in the technological capacity among properties competing in the same market. The degree of 'smartness' will thus become a critical factor in the economic worth and thereby market value of property.**
- 2. Buildings will have to be ever more flexible in terms of structure, use, expansion, divisibility, access and heating, lighting, ventilation and communication services.**
- 3. Real estate professionals, especially those working in the corporate realm, will be compelled to learn the economic and operational trade-offs between 'occupancy' considerations (location factors, building configuration and real estate economics) and 'connectivity' considerations (communications access, power availability, cellular service availability, cable distribution and broad band network access). Likewise, I.T. professionals will be compelled to assess the impact on what has been called 'enterprise network configuration' on building location criteria, building infrastructure, and the trade-offs between mobility services and building based communication services. It has also been claimed that new financial and accounting models will evolve to assess and monitor total infrastructure costs and human resource productivity in the context of an integrated business system (Bell, 1997).**
- 4. The 'virtual enterprise' will burgeon, with profound effects upon the demand for and supply of real estate. Until recently the issue of technology-induced space redundancy was considered to be decades away, now it is only a question of how soon, how much, and where? The need to work, shop, take leisure and have recourse to services remains, but the way it is performed is fast changing. Activity and place are being decoupled. Property investors and developers will have to analyse the impact of teleworking, on-line shopping and computerised services, and create strategies for both new high-tech buildings and, more challengingly, re-using existing properties. It has been argued, moreover, that information technology will affect a property's acquisitions price, increase its holding costs and impose a legacy use discount on disposition (Borsuk, 1997).**
- 5. Prefabrication and customisation will assume more and more importance in the construction and development processes. Time, cost and performance standards will all be improved by introducing industrialised production methods, combined with ready-wired and smart flexible new materials for tailor-made designs into the development process.**
- 6. The role of Facilities Management (FM) in the broad field of property is bound to grow. FM entails the integration of the dimensions of people, technology and support services so as to achieve an organisations mission. Of these, the technological dimension of FM is expanding at a rapid rate, and will demand and deserve greater attention by all parties to the real estate industry.**

7. **Property market research will be transformed by advances in information technology. The evolution of real estate markets and the increasing availability of information are inextricably linked. All kinds of data will become rapidly and inexpensively accessible regarding economic forecasts, building inventories, sales and lettings, vacancies, investment yields, comparable occupancy costs and a whole range of valuations for various purposes. The Internet alone will change the way property information is presented and priced. A significant premium will increasingly be placed upon judgment and creativity in the provision of professional services.**
8. **Geographical Information Systems (GIS) will be applied to a wider range of property related issues. A major opportunity exists for GIS, with their inherent ability to integrate spatial information, to create a 'system' around which to base all planning and development processes and operations. Sub-systems designed for specific real estate purposes such as retail trade area analysis, residential development opportunity identification or infrastructure assessment and design are already gaining in usage.**
9. **Property marketing will be revolutionised by the Internet in no time at all.**
10. **Project management, which at heart is about information, communication and judgement, will be radically altered so as to facilitate the flow of the first two in a form to release the energies and focus the attention of the project manager upon the third.**
11. **Property portfolio management will continue to be enhanced by the application of information technology to investment analysis.**
12. **In all aspects of real estate decision making the use of expert systems will assist in improving the formulation and implementation of investment, development, management, valuation and even marketing strategies.**
13. **As to changing technologies effect upon how people live it is worth considering the recent master planned community Celebration developed by Disney mentioned earlier. Here, a broadband, fibre-based optic network is planned to link the town's homes, school, healthcare facilities, office park, civic organisations, and retail establishments. The network carries voice, data, and video communications, providing the opportunity for high-speed communications among all the residents. The community 'intranet' will supply on-line E-mail, chat rooms and bulletin board service, as well as Internet access (Kessler, 1997). What effect this will have on community life remains to be seen. In a similar context, however, the director of real estate services for one of America's largest property consultancies predicts that since tele conferencing and community networks are among the rising stars, 'satellites' - cellular broadcast sites, antenna farms and the like - will become the most valuable pieces of real estate on the planet (Evans, 1997).**

CONCLUSION

It would be foolhardy and presumptuous to try to draw any substantial conclusions from a paper of this kind. It is nothing much more than a patchwork quilt of other peoples ideas eclectically stitched together with a few coarse threads of the authors own random twines of thought. From a personal point of view, nevertheless, it is seen as a starting point.

Imagine, however, the position of a fund manager of a leading international property investment trust, or perhaps the chief executive of a major real estate practice or management consultancy firm faced with decisions regarding the future. What might they divine? The need to:

- * Establish or strengthen an international network of contacts in the global finance, corporate business and professional real estate communities.
- * Work towards a new cultural and environmental ethic that respects diversity and promotes sustainability.
- * Attach more importance to building form, its flexibility and adaptability, rather than simply its traditional locational attributes. Space over place.
- * Recognise health, education and leisure as major sectors of the real estate industry possessing enormous potential for property investment, development and management enterprise.
- * Disengage surreptitiously from traditional office markets. Focus on the more specialist serviced sector and the creative re-use of redundant space.
- * Appreciate that quality of management and service provision, in all its guises, will be the key to continued success.
- * Participate selectively and sensitively in civic affairs at the city scale to foster collaboration and forge partnerships.
- * Be prepared for property tenure to become more transient.
- * Seriously consider the 'housing' market as a radically new field of investment and development to accommodate work, health, leisure and education demands.
- * Take account that shopping centres without leisure, entertainment, and even health and financial services, will struggle to prosper.
- * Reflect that 'middle class' values will increasingly dominate in terms of safety, security, service, style, shopping and satisfaction. Quality of lifestyle and living standards will prevail.
- * Accept that the political mood will turn against the private motor car, and recognise the vulnerability of car dependent developments.
- * Anticipate that regulation, accountability, assurance and compliance will all heighten.
- * Get 'smart'!

The title of this paper was somewhat whimsically devised as a pun upon time and vision. But at the risk of striking a discordantly sonorous final note, that is perhaps exactly what is required of the real estate profession - a vision for our time.

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