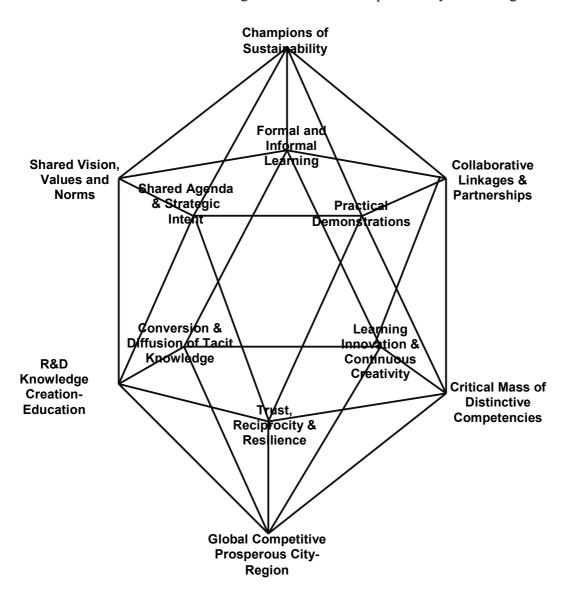
Centre for Excellence in Tropical Design Knowledge Networked Clusters © CDET 2004

The Underlying Conceptual Model

Andrew McEwen: Manager Economic Development City of Thuringowa



9

A Centre for Excellence in Tropical Design: Sustainability and Innovation

Developing a prosperous and sustainable city-region in the 21st Century requires both increasing the knowledge intensity of the economy and its resource efficiency (Ohame, Porter, Hawkins & Lovins). Cities, regions and communities need not only to capitalize on their unique competencies and IP, but they also crucially need to drive down the cost of doing business across the value chain by radically increasing resource efficiency, if they wish to remain globally competitive.

Leading edge and global best practice dictates that the pattern of adaptive responses must change to meet the needs and requirements of the networked society (Manual Castells). This is difficult for many people and organizations, because it implies a fundamental changing in paradigms and modus operandi (Barker, Mertens). Being competitive in the 21st Century requires differ forms of leadership, organization and webs of relationships. Strengthening globalisation, the shift to a knowledge economy & demands for sustainability requires a shift in thinking (paradigms) and practice:

From Low knowledge intensity	To High knowledge intensity	
Education and skills	Continuous learning and innovation	
High energy intensity	Low energy intensity	
Unsustainable design & living	Sustainable design and living	
Commodity exports	Knowledge and service exports	
Manufacturing and services	Services, learning and culture	
Structured silos & boundaries	Collaborative partnerships & networks	

The model underlying the centre assumes that there are *champions of sustainability* principles, who operate outside of narrow corporate self interests for the wider social good. They are the guardians or stewards (Black, Chappell) of constructive change and innovation, who coalesce as a critical minimum core of people and organizations around a genuinely shared vision, values and norms. They typically represent all walks of life, business, commercial, community, government and academia. Typically such processes are informal and occur through time, so that mutual understanding and respect can develop. They cannot be imposed or controlled by one level of government or one sector or another.

Through time, a commitment to a share vision allows for a shared agenda and strategic intent to develop. The concept of the centre and its agenda grew out of critical collaborations between people, who grew to trust each other based on a shared commitment to the primacy of principles of sustainability. In this context, trust cannot be demanded, it has to be earnt (Fukuyama). Key to the successful emergence of the network cluster is in the short terms *developing practical demonstration* projects or as Ifor Ffowcs Williams characterizes picking the low fruit, these will be typically across sectors and bear fruit for all respective partners

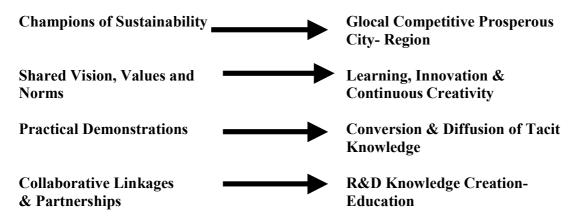
Such processes form increasingly dense and strong partnerships, collaborations and linkages between organizations, people and sectors that transcend narrow agendas, organization politics and dysfunctional turf wars (Maynard & Mertens). Such webs or relationships open up broad avenues for formal and informal learning that are critical for innovation and sustainability. Being in the "flow", being spontaneous, humorous and creative in such situations generates high levels of trust, reciprocity and resilience. The underlying mindset is one of "abundance" as distinct to a "scarcity" mentality.

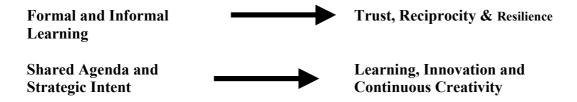
Such partnership allow for a *R&D agenda and knowledge creation process* to emerge from practical collaborations, problems solving and novel thinking. A shared research agenda informed by practical problems and a field of relationships embracing diverse perspective in turm affects the quality of education. The free cross flow of information through a dense series of networks and relationships allows, as in Silicon Valley a *rapid conversion and diffusion of new tacit knowledge that emerges from practical ingenuity*. This two way flow from research institutes to practitioner and from practitioners to research and learning bodies allows for a *process of learning, continuous innovation and creativity*, which is at the core of today and tomorrow's global competitiveness.

With the shared vision and strategic intent's trajectory (Hamel and Prahalad) a *critical* mass of distinctive competencies can emerge that allow for the development of a globally prosperous and sustainability City-region.

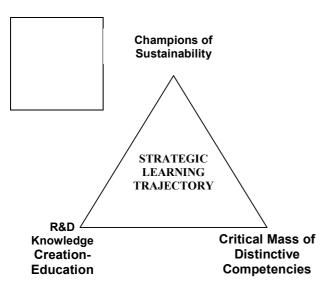
In short pursuing global preeminence in sustainable tropical design and innovation involves a cultural shift (Gunderson & C. S. Holling), which embraces fierce collaborations, intense competition and a commitment to Dr Ell yards Quadruple Bottom Line (Social, economic, cultural and environmental)

Key relationships in the model





Structural Relationships-Triads.



STRATEGIC LEARNING TRAJECTORY

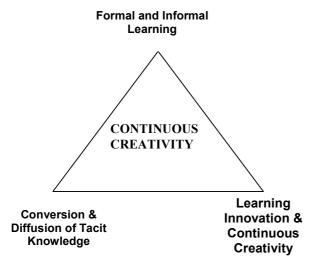
The drive passion and energy of the champions of sustainability strategically work collaboratively with stakeholder to devise the *research agenda* from which the critical mass of distinctive competencies can emerge.

Shared Vision, Values and Norms GLOCALISATION Global Competitive

GLOCALISATION

The development of a genuinely shared vision, values and norms provides the basis for the establishment of Collaborative Linkages & Partnerships, which are at the core of the networked clusters.

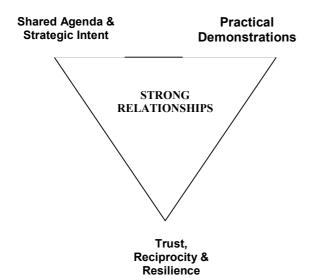
The work of O'Riordan et al, argues that this is the critical precondition for cities-regions to take control of their own agenda and to operate competitively in a global economy. The combination of local vital culture of adaptation, resilience and flexibility in a global economy is defined contemporarily as a process of *glocalisation*.



CONTINUOUS CREATIVITY

Novel ideas and radical breakthrough thinking came from inspired intuition, which is fueled by a context of formal and informal learning, the rapid and widespread conversions and diffusion of tacit knowledge in explicit knowledge (Ikujiro Nonaka and Hirotaka Takeuchi).

Such operational cultures form an environment within which learning, innovation and continuous creativity abound. (Hamel)



STRONG RELATIONSHIPS

Well functioning knowledge industry networked clusters develop a shared agenda and a strategic intent with stretch goals (Hamel and Prahalad) that drive their direction. Practical demonstrations cement strong working relationships, which build trust and reciprocity and resilience into their operations.

The overall process reinforce strong relationships, which underpin the flexibility, adaptability and resourcefulness of the network.

Bibliography CETD Sustainability and Innovation

Paradigm Change

Joel Arthur Barker "Paradigms: The Business of Discovering the Future." (Harper Business, 1993, USA)

Daniel Bell "The Coming of Post Industrial Society ." (Basic Books, 1973, USA) Manuel Castells "The

Information Age: Economy, Society and Culture Vols 1- Vol 3." (Blackwell, USA, 1997)

Manuel Castells "The Internet Galaxy: Reflections on the Internet, Business and Society." (Oxford University Press, UK, 2001)

Thomas Clarke & Stewart Clegg "Changing Paradigms: The Transformation of Management Knowledge for the 21st Century." (Harper Collins Business, UK, 1998)

Barry Commoner "Making Peace with the Planet." (Pantheon, USA 1990)

Peter Drucker "Post Capitalist Society." (Harper Business, 1994, USA) Robert L.

Paul Hawken "The Next Economy." (Angus Robertson, AUS, 1983)

Paul Hawken, Amory Lovins & L. Hunter Lovins "Natural capitalism: The Next Industrial Revolution". (Earthscan, UK 1999)

Heilbroner "Vision of the Future: The Distant Past, Yesterday, Today and Tomorrow." (Oxford University Press, UK 1995)

Charles Handy "The Age of Unreason." (Arrow Books, UK, 1990)

Robert L. Heilbroner "An Inquiry into the Human Prospect." (Norton 1975 USA)

Thomas S. Kuhn "The Structure of Scientific Revolutions Second edition (University fo Chicago Press, 1972)

Nicholas Imparato & Oren Harari "Jumping the Curve: Innovation and Strategic Choice in an Age of Transition." (Jossey-Bass, USA, 1996)

Barry Jones "Sleepers, Wake! Technology & the Future of Work." (Oxford University Press, AUS, 1983) Naomi Klein "No Logo." (Flamingo, UK, 2001)

David Korten "When Corporations Rule the World" (Kumarian Press, Canada, 2001)

David Korten "The Post-Corporate World." (Berrett-Koehler Publishers, San Francisco, USA, 1998)

William Knoke "Bold New World: The Essential Roadmap to the Twenty First Century." (Kadansha, 1996, USA)

Krishan Kumar "Prophecy and Progress: The Sociology of Industrial and Post-Industrial Society (Penguin, AUS, 1981)

George Land & Beth Jarman "Breakpoint and Beyond: Mastering the Future Today." (Harper Business, 1992, USA)

Marshall McLuhan "The Gutenberg Galaxy." (Routledge & Kegan, Canada, 1967) Herman B. Maynard Jr & Susan E. Mehrtens "The Fourth Wave: Business in the 21st Century." (Berrett-Koehler Publishers, San Francisco USA 1993)

Kenichi Ohmae "The End of the Nation State: The Rise of Regional Economies." (Harper Collins, UK, 1995)

Jeremy Rifkin "Entropy: A New World View." (Bantam, USA, 1980)

Jeremy Rifkin "Algeny: A New Word – A New World." (Penguin, 1984 UK)

Jeremy Rifkin "Biosphere Politics: A Cultural Odyssey from the Middle Ages to the New Ages." (Harper, USA 1992)

Jeremy Rifkin "The End of Work: The Decline of the Global Labor Force and the Dawn of the Post-Marker Era" (Tarcher-Putman, USA 1995)

Jeremy Rifkin "The Biotech Century." (Tarcher-Putman, USA 1998)

Jeremy Rifkin "The Age of Access: How the Shift from Ownership to Access is Transforming Capitalism." (Penguin, UK, 2000)

Don Tapscott & Art Caston "Paradigm Shift: The New Promise of Information Technology." (McGraw-Hill 1993, USA)

Don Tapscott "The Digital Economy: Promise and Peril in the Age of Networked Intelligence." (McGraw-Hill 1996, USA)

Peter Ellyard "Ideas for the New Millennium." (MUP, AUS, 2001)

Alvin Toffler "Future Shock." (Pan Books, UK, 1976)

Alvin Toffler "Powershift: Knowledge, Wealth and Violence at the Edge of the 21st

Alvin Toffler "The Third Wave: The Revolution that will change our lives." (Bantam, USA, 1990)

Andre Gorz, "Critique of Economic Reason." (Verso, UK 1989)

Robert Ornstein and Paul Ehrlich "New Worlds, New Mind." (Touchstone, USA 1989)

Karl Polanyi "The Great Transformation: The Political and Economic Origins of Our Times." Beacon Press, UK 1957)

Theodore Roszak "Where the Wasteland Ends: Politics and Transcendence in Post Industrial Society." (Faber 1973 UK)

Theodore Roszak "Person/Planet." (Grenada, UK 1981)

Theodore Roszak "Unfinished Animal." (Faber, 1975, UK)

Lester C. Thurow "The Future of Capitalism: How Today's Economic Forces Shape Tomorrows World." (William Morrow, 1996, USA)

Lester C. Thurow "Creating Wealth." (Nicholas Brealey, UK, 1999)

Shoshanna Zuboff "In the Age of the Smart Machine: The Future of Work and Power." (Basic Books, 1988, USA)

George Soros "The Crisis of Global Capitalism: Open Society Endangered." (Little Brown, 1998, UK) Henry Skolimowski "The Participatory Mind: A New Theory of Knowledge and of the Universe." (Arkana-Penguin, 1994 UK)

Identity, Globalism and Glocalisation

Eva Cox "The Civil Society." (ABC, AUS, 1976?)

Amitai Etzioni "The New Golden Rule: Community and Morality in a democratic Society." (Basic Books, 1996, USA)

Amitai Etzioni "The Spirit of Community: The Reinvention of American Society. (Touchstone, USA, 1992)

Boris Frankel "From the Prophets Deserts Come: The Struggle to Reshape Australian Political Culture." (Arena, AUS, 1992)

Thomas Friedman "The Lexus and the Olive Tree. (Harper Collins, USA, 1999)

Jonathan Freidman "Cultural Identity and Global Process." (Sage, UK, 1994)

Frances Fukuyama "Trust: The Social Virtue and the Creation of Prosperity." (Hamish Hamilton, UK 1995)

Leila Green & Roger Guirney Eds "Framing Technology, Society, Choice and Change." (Allen Unwin, AUS, 1994)

David Harvey "The Condition of Post Modernity." (Blackwell, UK, 1990)

Jane Jacobs "Systems of Survival: A Dialogue on the Moral Foundations of Commerce and Politics." (Vintage Books, 1994, USA)

Ed Tim O'Riordan, "Globalism, Localism & Identity: Fresh Perspective on the Transition to Sustainability (Earthscan, UK, 2001)

Howard Rheingold "The Virtual Community: Homesteading on the Electronic Frontier." (Addison-Wesley, USA, 1993)

Richard Sennett "The Fall of Public Man." (Cambridge University Press, 1974, UK)

"Our Global Neighbourhood." The Report of the Commission on Global Governance." (Oxford University Press, USA 1995

Sustainability

Sustainability and Philosophy

Murray Bookchin "The Ecology of Freedom: The Emergence and Dissolution of Hierarchy." (Black Rose Books, 1991, USA)

Fritjof Capra "The Hidden Connections: A Science for Sustainable Living." (Harper Collins, USA, 2002) Fritjof Capra "The Web of Life." (Anchor, USA 1996)

Bill Devall & George Sessions "Deep Ecology: Living as if Nature Mattered." (Gibbs Smith, USA 1985) Evan Eisenberg "The Ecology of Eden." (Alfred A. Knopf, USA, 1998)

Warwick Fox "Towards a Transpersonal Ecology: Developing New Foundations for Environmentalism." (Shambhala, 1990, USA)

Edward Goldsmith "The Way: An Ecological World View." (Rider, 1992, UK)

Willis Harman "Global Mind Change" (Warner Books 1988, USA)

Peter Marshall "Demand the Impossible: A History of Anarchism." (Harper Collins, 1992, UK) Charles Reich "Opposing the System." (Little Brown, UK 1995)

Theodore Roszak "The Voice of the Earth: An Exploration of Ecopsychology." (Bantam, 1993 UK)

Peter Russell "The Global Brain: Speculations on the Evolutionary Leap to Planetary Consciousness." (Tarcher, USA 1983)

Peter Russell "The White Hole in Time: Our Future Evolution and the Meaning of Now." (Harper San Francisco, 1992, USA)

Sustainability and Futures

Hartmut Bossel "Earth at a Crossroads: Paths to a Sustainable Future (Cambridge University Press 1998, IJK)

Doug Cocks "Future Makers, Future Takers: Life in Australia 2050" (NSW Press 1999

Richard Eckersley & Kevin Jones Eds. "Challenge to Change Australia in 2020." (CSIRO, AUS, 1994)

Peter Ellyard "Ideas for the New Millennium." (Melbourne University Press, AUS, 2001)

Duanne Elgin "Promise Ahead: A Vision of Hope and Action for Humanity's Future" (Harper Collins, 2000, USA)

Robert Theobald "Reworking Success: New Communities at the Millennium". (New Society, Canada, 1997)

Sustainability, Management and Business

Peter Block "Stewardship: Choosing Service over Self Interest." (Berrett-Koehler, USA, 1993)

Tom Chappell "The Soul of a Business: Managing for Profit and the Common Good." (Bantam Books, USA, 1993)

James G. Collins and Jerry I. Porras "Built to Last: Successful Habits of Visionary Companies." (Harper Business, USA, 1994)

Graham Dowling "Creating Corporate Reputations: Identity, Image and Performance." (Oxford University Press, USA, 2001)

Dexter Dunphy & Andrew Griffiths "The Sustainable Corporation: Organisational Renewal in Australia." (Allen & Unwin, AUS, 1998)

Arie de Geus "The Living Company: Growth Learning and Longevity in Business. (Nicholas Brealey, UK 1997)

Gary Hamel "Leading the Revolution." (Harvard Business School Press, 2000, USA)

Gary Hamel and C.K. Prahalad "Competing for the Future" (Harvard Business School Press, 1994, USA)

Paul Hawken "The Ecology of Commerce: A Declaration of Sustainability." (Harper Business, 1993, USA)

Roger Lewin and Birute Regine "The Soul at Work" (Orion Business Books, UK, 1999)

Michael, Malley "Creating Commitment." (John Wiley & Sons, USA, 2000)

Herman Maynard Jr & Susan Mehrtens "The Fourth Wave: Business in the 21st Century (Berrett-Koehler, USA 1993)

James F. Moore "The Death of Competition: Leadership & Strategy in the Age of Business Ecosystems." (Wiley, UK, 1996)

John Naisbett "Mega Trends."

John Naisbett "Re-inventing the Corporation." (McDonald, 1985, UK)

Ikujiro Nonaka and Hirotaka Takeuchi "The Knowledge Enabled Company." (Oxford University Press, USA, 1995)

Richard Hames and Geraldine Callanan "Burying the 20th Century: New Paths for New Futures." (Business & Professional Publishing, AUS, 1997)

Richard Hames "The Management Myth.: Exploring the Essence of Future Organisations." (Business & Professional Publishing, AUS 1994)

Richard L. Nolan and David C. Croson "Creative Destruction: A Six Stage Process for Transforming Organisations." (Harvard Business School Press, 1995, USA)

Michael Porter "The Competitive Advantage of Nations." (Free Press, USA, 1990)

Fons Trompenaars and Charles Hampton-Turner "21 Leaders for the 21st Century" (Capstone, 2001, UK)

Sustainability and the Environment

Herman E. Daly & John B. Cobb Jr. "For the Common Good: Redirecting the Economy Towards Community, the Environment and a Sustainable Futures." (Beacon Press, USA 1989)AUS)

Paul Eherlich & Anne Eherlich "Healing the Planet: Strategies for Resolving the Environmental Crisis." (Addison Wesley, USA 1991)

Paul Elkins, Mayer Hillman & Robert Hutchison "Wealth Beyond Measure: An Atlas of New Economics." (Gaia Books, 1992, UK)

Mark Diesendorf and Clive Hamilton "Human Ecology, Human Economy." (Allen & Unwin, AUS, 1997) Jerry Mander and Edward Goldsmith Eds "The Case Against the Global Economy and for a Turn Towards the Local" (Sierra Club Books, 1996 USA)

Paul Lance Gunderson & C. S. Holling Eds. "Panarchy: Understanding Transformation in Human and Natural Systems." (Island Press, USA, 2002)

Hazel Henderson "Creating Alternative Futures: The End of Economics." (Berkley Windover, USA, 1978) Bill Mollison "Permaculture: A Designers Manual." (Tagari, AUS, 1988)

Robert Theobald "Turning the Century." (Knowledge Systems, USA, 1992)

Thomas Homer-Dixon "Environment, Scarcity and Violence." (Princeton University Press, USA, 1999)

John Humphreys "The Great Food Gamble." (Coronet Books, UK, 2001)

Michael Jacobs "The Green Economy." (Pluto Press, 1991, UK)

Ticky Fullerton "Watershed: Deciding Our Water Future." (ABC Books, AUS, 2001)

Clive Hamilton "Running from the Storm: The Development of Climate Change Policy in Australia." (UNSW Press, AUS, 2001)

Clive Ponting "A Green History of the World." (Penguin, 1991, UK)

Walter & Dorothy Schwarz "Breaking Through: Theory and Practice of Wholistic Living." (Green Books, UK 1987)

Wolfgang Sachs Ed "Global Ecology: A New Area of Political Conflict." (Zed Books, Canada, 1993)

The Bernard Salt Report "The Big Shift: Welcome to the Third Australian Culture." (Hardie Grant, AUS, 2001)

David Suzuki "Time to Change." (Allen Unwin, AUS 1993)

David Suzuki and Amanda McConnell "The Sacred Balance: Rediscovering our Place in Nature." (Allen & Unwin 1997, AUS)

David Suzuki "Earth Time." (Allen Unwin, AUS, 1998)

David Suzuki and Holy Dressel "Good News for a Change: Hope for a Troubled Planet." (Allen & Unwin, AUS, 2002)

Luca Tacconi "Biodiversity and Ecological Economics: Participation, Values and Resources Management." (Earthscan, 2000, UK)

Ed Jackie Venning & John Higgins "Towards Sustainability: Emerging Systems for Informing Sustainable Development". (UNSW Press, AUS, 2001)

K. J. Walker "The Political Economy of Environmental Policy: An Australian Introduction." (UNSW PRESS, 1994, AUS)

Building Sustainable Global Competitive Advantage by Getting to the future first!

"The role of knowledge network clusters in scenarios for future global competitiveness"

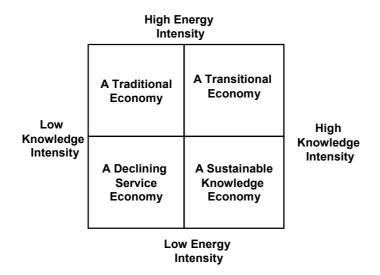
Andrew McEwen

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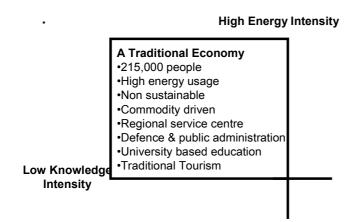
City of Thuringowa

Presentation to the Launch of a Vision Statement for a Centre of excellence in tropical design and Innovation 2/12/2004, South bank Townsville

Four Scenarios for the Twin Cities for 2015



Four Possible Scenarios for 2025 "Business as usual"



Four Possible Scenarios for 2025 "Loss of adaptability & flexibility"

Low Knowledge Intensity

A Declining Economy

-200,000 people
-Declining commodity production
-Less value adding
-High cost of unsustainable energy
-Service and Defence Centre
-Limited conversion of R&D into business
-Education Centre

Low Energy Intensity

Four Possible Scenarios for 2025 "Something Different Emerging"

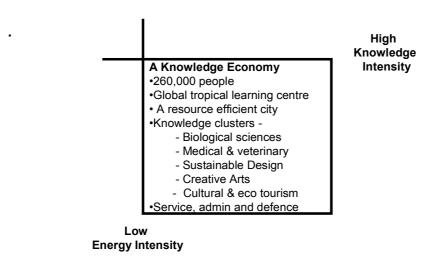
High Energy Intensity

A Transitional Economy

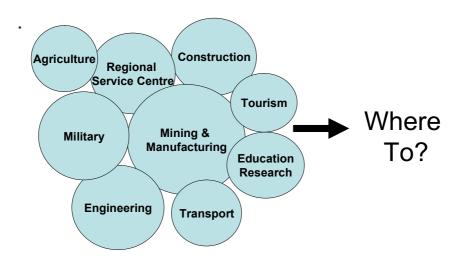
- •225,000 people
- •High energy usage
- •Less sustainable
- •Commodity driven
- Service centre
- •Defence & public administration
- •Emerging knowledge industries

High Knowledge Intensity

Four Scenarios for the Twin Cities for 2025 "A Globally Competitive Learning Tropical City"



2004 industry agglomerations



2015 globally networked sustainable knowledge clusters



Success factors for regional economies in Australia

National Economics 2004

- Creativity & knowledge industries (3.6% VS -2.1%)
- Educational role (2.3% vs. 1.4)
- Non retail dominance (+1.6 vs. -3.1%)
- Supply chain role (QNI, Transport) Logistics) (1.5% VS -3.6%)
- Population Growth (1% VS -6.1%)

Challenges for globally of competitiveness cities and businesses

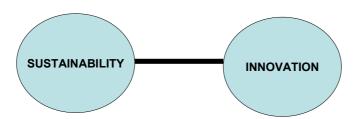
- Critical turbulence & power of futures thinking
- Hypa competition Hypa collaboration
- Third wave globalisation
- Continuous innovation as the strategic baseline
- Continuous creativity fundamental 0.68% QGDP
- Dominant Asian GDP > GDP USA
- De-massification of the economy
- Resource efficiency as a key competitive advantage

2010-2025 business opportunities

The Twin Opportunities of Sustainability and Knowledge Economy

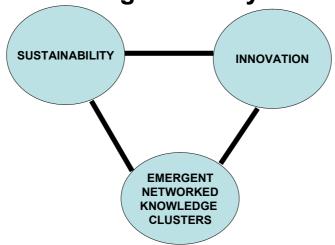
- Smart city transport
- People efficient buildings and communities
- Resource efficient infrastructure
- Retrofitting buildings (\$300m p.a.)
- Energy efficiency
- Socially & cultural capital formation
- Cost effective business infrastructure

Core Propositions

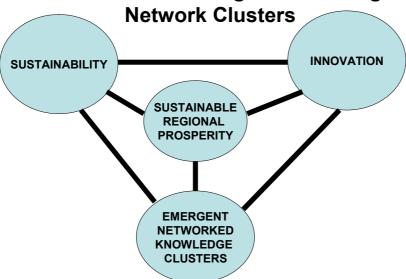


- ■Intrinsically linked
- •Are global emergent knowledge industries
- •Are critical for global competitiveness
- ■The Entry cost for 21st century industry
- ■Productivity & innovation = Competitiveness

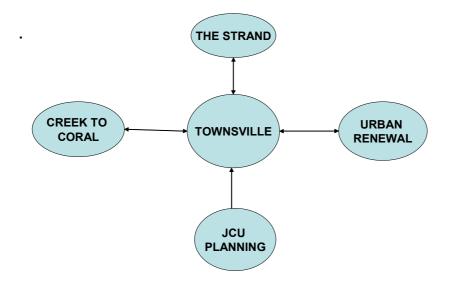
Are linked and are the basis for the emergence of networked knowledge industry clusters



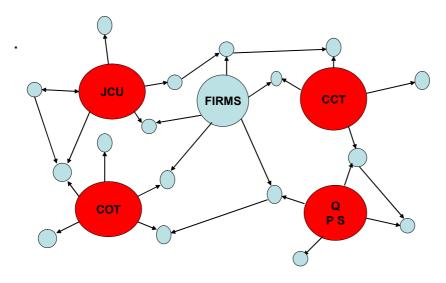
Prosperity is linked to Sustainable Innovation and Emergent Knowledge



LEARNING HUBS



LEARNING NETWORKS



KNOWELDGE INDUSTRY NETWORKED CLUSTERS Centre for Excellence in Tropical Design

Competitive Advantage of Knowledge Industry Networks

- Provide for a distributed network of hubs of learning and innovation
- Provide focus for a shared strategic intent
- Generate & share intellectual capital
- Provide process for continuous innovation
- Provide a focus for competitiveness
- Develop distinctive global competencies
- Commercialise and export global services

Properties of emergent knowledge network clusters

- Multi nodal networks with high level of linkage and connections both locally & globally.
- Have high levels of trust and reciprocity based on shared vision and strategic intent and co-operative projects.
- Organised through formal and informal partnerships, collaborations & strategic alliances.
- Enjoy a free flow of information across networks with high levels of conversion and diffusion of tacit knowledge into organised learning and practice.
- Cuts across traditional boundaries and includes financial, business, community, government and educational organisations.

Building Industry Cluster Networks

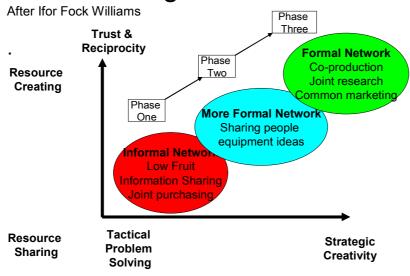
- Based on practical first steps that generate trust & reciprocity
- Partnerships & cross sectorial networking
- Targeted research agenda
- Growing technical & management capacity
- From continuous improvement to continuous Innovation systems
- Generation of new business start ups

Collaborations & Partnerships for Successful Innovation

"....in developing a culture of innovation, a fourth dimension is required, which is collaboration and cooperation between industry, business, universities and research organisations and Government.

"Innovation Direction for Queensland" (P 15, 2001, Queensland Innovation Council)

Cluster Navigators © 2004



Third Wave Networked Clusters

© Ecolore Pty Ltd 2003

· Industrial Clusters	Post Industrial	Knowledge Economy
Aggregation	Co-opetition	Networked Creativity
Industrial Place	Consortium	Cross Sectorial Networks
Alfred Marshall	Michael Porter	Manuel Castells
National-International	Globalised World	Glocalised World
Scale & Efficiency	Competitive Rivalry and Co-operation	Continuous Creativity

Future Proofing

- How we model the world is what we see and do!
- If we see the future as a continuation of the present, we will arrive at the future unprepared.
- If we establish a genuinely shared preferred future based on emerging models of the new economy, we will arrive prepared and prosperous
- The choice is between envisioning future options or betting that the future is no different from now.
- Being successful in the 21st Century for cities and business is about flexibility, adaptability and resourcefulness

Michael Porter Harvard University

"Paradoxically, the enduring competitive advantage in a global economy lie increasingly in local things – knowledge, relationships, and motivation that distant rivals cannot match"

"Clusters and the New Economics of Competition"

Harvard Business Review November-December 1998