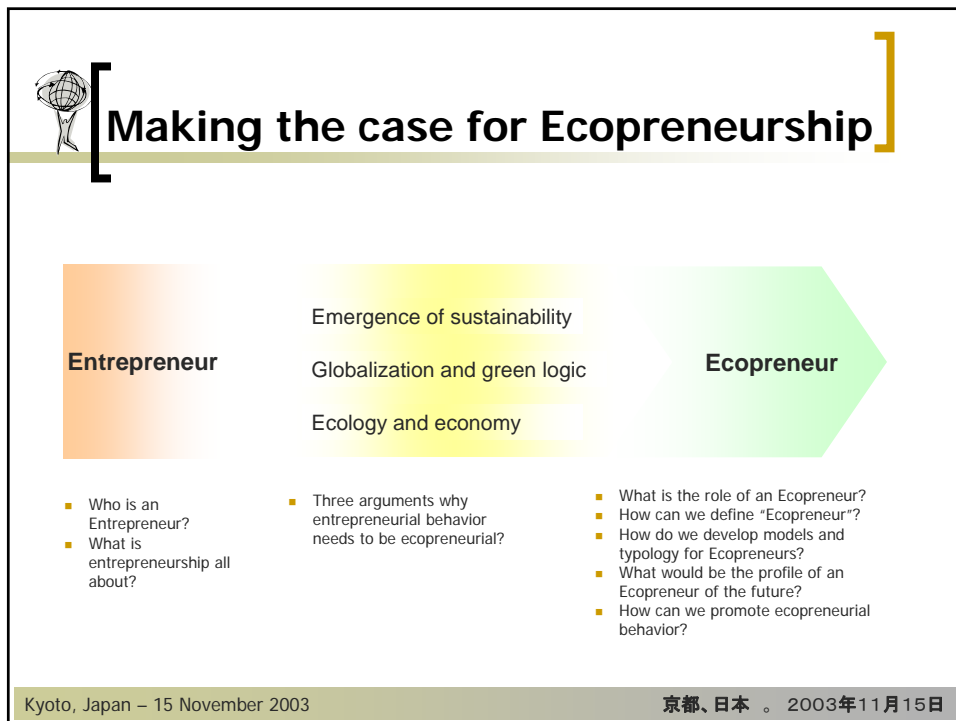


ECOPRENEURS

The Changing Role of Entrepreneurs

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Making the case for Ecopreneurship

Entrepreneur → **Ecopreneur**


Emergence of sustainability
Globalization and green logic
Ecology and economy

- Who is an Entrepreneur?
- What is entrepreneurship all about?

- Three arguments why entrepreneurial behavior needs to be ecopreneurial?

- What is the role of an Ecopreneur?
- How can we define "Ecopreneur"?
- How do we develop models and typology for Ecopreneurs?
- What would be the profile of an Ecopreneur of the future?
- How can we promote ecopreneurial behavior?

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[Making the case for Ecopreneurship]

Entrepreneur

- Who is an Entrepreneur?
- What is entrepreneurship all about?

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[An Entrepreneur]

- Schumpeter (1934) examined what were the internal “energetic” sources of economic change (within a system of innovation).
 - Led to notions of entrepreneurship and creative response.
- Schumpeter considered entrepreneurs as strategic factors in economic development (or economic evolution of modern capitalism).

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[An Entrepreneur]

- Entrepreneurship was considered as the capability for creative response.
- “Spontaneous behavior” was what made “creative response” from an entrepreneur possible.
- Creative response implied a response that was neither predictable nor determined.
- An Schumpeterian entrepreneur:
 - Type of response – Creative
 - Behavioral Attitude – Leading
 - Motive for action – Visionary
 - Mode of action – Spontaneous
 - Type of change – Discontinuous

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[An Entrepreneur]

- Schaper (2002): Entrepreneurs conceive new business opportunities and take on the risks required to convert ideas into reality. They
 - Identify new commercial ventures
 - Incubate ideas
 - Champion their adoption
 - Assemble resources (money, people and technology) to bring the idea to commercial reality
 - Launch and grow the business venture

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[From Entrepreneur to Ecopreneur]

- Entrepreneurship acknowledged to be engine of economic growth.
- Innovations made by entrepreneurs are strategic factors in economic development and central factors in trade cycle.
- Growth and preservation of nature do not go hand in hand.
 - Pollution, loss of biodiversity, land degradation, climate change, etc.
- Implies increasing need for environmental responsibility in entrepreneurship = **ecopreneurship!**

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[Sustainability & entrepreneurship]

- Adoption of environmentally responsible business practices leads to
 - Development of new products and services
 - Improvements in efficiency
 - New methods of marketing
 - Reconfiguration of existing business models and practices
- Entrepreneurs can play a crucial role in eventual adoption of green business practices by demonstrating the economic benefits that come from being “green.”

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Making the case for Ecopreneurship


Entrepreneur

- Emergence of sustainability
- Globalization and green logic
- Ecology and economy

- Three arguments why entrepreneurial behavior needs to be ecopreneurial?

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Emergence of Sustainability

- World Commission on Environment and Development (1987) / Gro Brundtland
 - Development of the concept of **sustainable development** to reconcile economic growth, environmental and social issues.
- Rio Earth Summit 1992 – Agenda 21
 - Sustainable Development seeks to resolve the environmental problems of affluence and social problems of poverty.

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“Sustainable Development”?

- **Sustainability** – requires a new different ethical thinking; it must encompass the notion of change over time and the notion of maintenance of the system without change. However, the center of **environmental sustainability** is not on existing human beings or institutions or on present conditions and relationships but on future generations of human beings and natural non-human environment.
- **Development** – can it be something other than economic growth? e.g., the proliferation of goods and services for the “happiness” of human beings? something that could endure forever or for at least as long as the human species can sustain it? **It cannot be expansion of the human footprint.**

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Why environmental responsibility?

- Finite resources
 - Organizational survival requires biological survival
- Growing population
 - Growth in consumption; over-consume per capita and over-pollute
- Natural resources degradation
 - Economies act as linear systems – material & energy is taken from natural environment, used briefly and then become waste
- Biodiversity loss

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Globalization and Green Logic

- Globalization – massive, competitive pressure for short-term adaptation.
 - instant financial and information flows; maximize short-term returns as a vehicle for stimulating macro-economic growth and to hedge against insecurity.

- Green Logic is a counterpoint.
 - Humanism, cultural integrity and civilized planning.

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Green and Green-green Business

Isaak (1999) states:

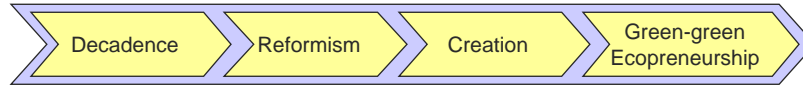
- **Green business** is one that discovers the cost, innovation and marketing advantages, if not the ethical arguments, for greening their existing enterprise.
 - 3M's 3P program which saved them US\$750m since its launch in 1975

- **Green-green business** are started by counter-culture entrepreneurs who wanted their business to be environmentally responsible and to make a social statement, not just make money.
 - The Body Shop

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Time and Risk Management



- Present oriented
- Secularized, democratic
- Contentment: instant gratification
- High risk taking
- Short-term oriented
- Greening of existing firms
- EMAS certification
- Risk moderating
- Medium-term oriented
- Epitomizing green values, green screens, green careers
- Risk targeting
- Long-term oriented
- Green start-ups, green growth
- Sustainable humanism
- Radical, risk-reducing

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Ecology and Economy

- There is no painless path to sustainable growth.
- Walley & Whitehead (1994) state:
 - Easy environmental problems have been fixed;
 - As environmental challenges become more complex, costs are rising;
 - Costs are destined to increase even more, especially since the increase in regulations shows no sign of abating;
 - New policy instruments such as tradable permits, pollution taxes, and quotas require in-depth cost-benefit analysis and complicate the manager's decision.

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Sources of Opportunity

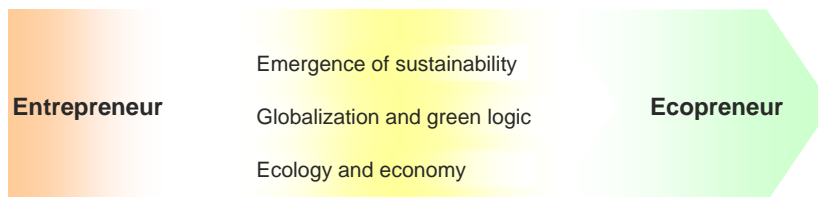
- The nature of **homo economicus** and market failures:
 - Entrepreneurs, consumers and citizens are not oblivious of environmental concerns;
 - Disequilibrium brings extra-ordinary profits; entrepreneurs are catalysts of market disequilibrium;
 - Market failures due to wrong choices (e.g., technology).
- The push factors – regulations, costs of waste disposal and scarcity of natural resources.
- The pull factors – consumers' demand and green partnerships.

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Making the case for Ecopreneurship



- What is the role of an Ecopreneur?
- How can we define "Ecopreneur"?
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Role of an Ecopreneur

- Volery (2002): Bring a shift from a techno-economic “trajectory” based on exploiting natural resources – soil, water, biodiversity, climate – that, once lost can never be replaced, to **one that could lead to a future that preserves and conserves these resources.**
- Long term sustainability will require more **eco-efficiency.**
 - “Eco-efficiency is the delivery of competitively priced goods and services that satisfy the human needs and bring quality of life, while progressively reducing ecological impacts and resource intensity throughout the life cycle, to a level at least in line with the earth’s estimated carrying capacity.” (WBCSD, 1997)

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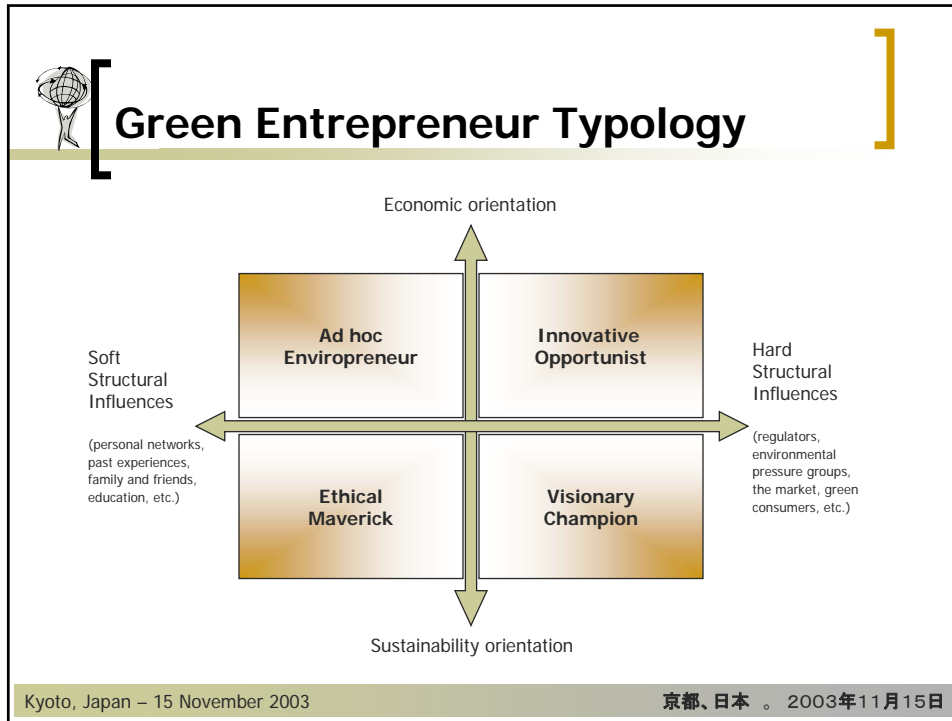


An Ecopreneur “defined”

Isaak (1999) defines the **Ecopreneur** as a person who seeks to transform a sector of the economy towards sustainability by starting business in that sector with a green design, with green processes and with the life-long commitment to sustainability in everything that is said and done.

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- ## Environment-conscious Ecopreneurs
- Aware of environmental issues, but **not in the environmental marketplace**.
 - Opportunities:
 - Business-centered with environmental dimensions;
 - Origin – shocks to already existing markets;
 - Mode of exploitation – corporate venturing initiatives (new division, new subsidiary, joint venture) or de novo start-ups.
 - Industry:
 - All industries (specially cosmetics, chemical, energy and mining, car manufacturing, transportation).
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Green Ecopreneurs

- Aware of environmental issues, and **in the environmental marketplace**.
- Opportunities:
 - Environment-centered with profit prospects;
 - Origin – shocks that generate opportunities for establishing new markets;
 - Mode of exploitation – in general, de novo start-ups.
- Industry:
 - Typically the “environmental industry” (recycling and solid waste disposal, remediation of polluted areas, air pollution control, organic agriculture, water treatment).

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Common to all Ecopreneurs

- Strive for Sustainable Development;
- Innovate to create marketable solutions to sometimes conflicting demands;
- **Healthy products**: use of natural ingredients, environmental safe sourcing and packaging;
- **Healthy processes**: cleaner production, eco-efficiency, environmental audits;
- **Healthy values**: vision, corporate culture, social responsibility agenda, involvement in community environmentalism.

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Commercial & Social Ecopreneur

Pastakia (1998) defines:

- **Commercial ecopreneurs** as those who seek to maximize personal (or organizational) gains by identifying green business opportunities (i.e., eco-friendly products and processes) and transforming them into viable business ventures.
 - Dean Kamen who invented Segway, the Human Transporter.
- **Social ecopreneurs** are those who seek to promote eco-friendly ideas, products or technologies either through market routes or non-market routes.
 - Dr. Atara's application of the science of *Ayurveda* to plants (*Vrikshayurveda*) to increase their productivity.

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Tomorrow's Ecopreneur

- **Morality** – Environmental ethics as a virtue
- **Technology** – Living lightly upon the Earth
- **Stewardship** – The responsible person

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Morality

Personal worldview imperative

- Understanding **environmental ethic**
 - From “Profit” to productively, successfully.
 - Understanding the difference between “sustainable” and “unsustainable” activities.
 - Distinguish between the microcosm and macrocosm perspectives.

- Newton (2003) proposes three hypotheses:
 - No combination of available political “means” to the “end” of sustainability in economic activity will be effective in attaining the end.
 - No combination of happiness-seeking and rule-abiding can orient human life to a proper relationship with the environment.
 - Search beyond Utilitarian and Kantian ethical values as environmental ethics seeks to extend the sphere of moral concern to an indefinitely (not infinitely) large community of living things, with principles of action that cannot always be described as “rational.”

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Virtues of an Ecopreneur

Personal integrity values

- Wisdom (including sensitivity to natural processes);
- Courage (including patience);
- Temperance (indulging frugality);
- Justice (including respect for that which is other than ourselves);
- Love or fidelity (including care and compassion);
- Community, simplicity, humility;
- Responsibility, accountability and a disposition to carry out effectively stewardship of that which is in his / her care.

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Relationship to natural processes

If we design our artifacts to appropriate scale, operation, and relation to the world and to their human operators, the natural environment will benefit and so will we.

In *Small is Beautiful*, Schumacher (1973) raises some relevant issues:

- “appropriate technology” – the engineering of things and processes to cooperate with the processes of the Earth, for the mutual advantage of the Earth and its human inhabitants.
- “materialism” – an attitude to life which seeks fulfillment in the single minded pursuit of wealth – materialism – does not fit in this world, because it contains within itself no limiting principle, while the environment in which it is placed is strictly limited.

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Natural Capitalism

Changing the mindset

- In *Natural Capitalism*, Hawken (1999) projected “Capitalism” as acceptable as long as it took care of all capital – financial, industrial, human as well as the *natural capital*.
- *Natural Capitalism* joins the growing literature on possibilities of organizing capitalism to protect the environment. It is suggested that environmentally sound practices would yield spectacular savings.

Case of Green Automobiles, Green Houses, Sustainable Water, Green Waste, Green Consumption.

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Emergence of Triple Bottom Line

Elkington (1997) in *Cannibal With Forks* proposed the **triple bottom line** – the requirement for financial responsibility, ethical responsibility and environmental sustainability (instead of challenging “capitalism”).

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Steward

- Someone entrusted with something.
- Steward's job is to protect it from loss or injury, care for it, enhance it if possible.
- Responsibility entails Stewardship. Responsibility for
 - Ourselves, our minds and bodies;
 - Our families, our communities, our inheritances of culture and tradition;
 - Our laws, the rights of citizens, courts, polity and the whole infrastructure of freedom to protect;
 - The natural world.
- Must strive to change the world!

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Simplicity – Changing the world

- **Spiritual simplicity** - resolution of the tensions within the human soul into an ordered unity experienced as personal serenity;
- **Cultural simplicity** - the rejection of the individualistic competition and distraction of modern life in favor of simple community;
- **Political simplicity** - the rejection of corporate exploitation of the poor in the form of economic imperialism and war in favor of a life close to the land and dedicated to world justice;
- **Economic simplicity** - the rejection of fast track jobs and high profile consumption in favor of a slower pace of life, lower income and lower spending, more time for family and neighborhood;
- **Environmental simplicity** - the rejection of the high consumption, high waste lifestyles of the developed world, in favor of a life that will leave as light as possible a footprint on the earth.

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Private Sector Initiatives

Private sector incentives can foster green start-ups. Businesses can be encouraged to:

- Create their own world of value by setting limits;
- Search for green strategic innovations;
- Use green marketing, adding distinction by understatement;
- Promote green brainstorming to reduce costs;
- Encourage green networking in the community to generate free publicity;
- Use social ecopreneurship as an extraordinary motivator.

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Public Strategies

Public strategies to encourage ecopreneurship might be:

- Changing tax incentives to reward the creation of green jobs and to punish resource use;
- Build creativity and ecopreneurship incentives into standards for public-sector management;
- Use ecopreneurship as a strategy for boosting civic competence and social capital;
- Start a public campaign to de-legitimize non-sustainable business results.

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Evolution of Ecopreneurship

From a research and practical perspective, we need to focus on:

- Defining what constitutes a **green entrepreneur**;
- Determination of the **barriers** and **triggers** to environmental entrepreneurship;
- Policies to foster ecopreneuring; and
- Learning from examples!

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Thanks!

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