SBS Viceland – 3rd Feb.

Jeremy Rifkin

**Third Industrial Revolution – Direct Connection**

<https://www.sbs.com.au/ondemand/video/1165831747733/the-third-industrial-revolution>

A new smart infrastructure

Global Internet of Things

* Communication Internet
* Renewable Energy Internet
* Automated Transport Internet

Designed to be collaborated, laterally scaled (not vertically integrated)

Political struggle – ensure equal access, network neutrality, big data

Sensors in all devices – monitoring…collecting data

Ubiquitous by 2030

The Dark Net – the risk

Security

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**Background..**

3% aggregate efficiency – USA

18% Germany

Economists theories – based on Newtonian metaphors on physics

Better machines and better workers – 14pc of productivity

Robert Solo

All the energy in the universe is constant – no new energy created or lost since the big bang

It always change

From hot to cooled off

From available to unavailable

Entropy

Open system

Closed system

Isolated system

Earth in relation to sun and solar system

We extract energy

Through our value chains we convert natures resources and step it through society

We have to input energy, but w

2 Laws of Energy that govern the universe

**Aggregate efficiency – potential work v useful work**

Convergence of communication, energy and X

Second Industrial Revolution infrastructure – maximum 20% aggregation

Aggregate Efficiency

What is your money doing? Our At the end of your money, people and places are suffering, pretty severely.

Bank Australia

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The Dark Net v The Bright Net

Use big data and analysis

ZERO MARGINAL COST SOCIETY

Reduce marginal costs to near zero – Optimal markets – sell at marginal cost

Share economy – first new economic system to enter since

Since Napster – entire industries have been disrupted in 17 years

Give rise to

No profit margin required

Zero marginal cost – individual getting 1 billion views on YouTube

Eg. Wikipedia - Democratisation of information

Free online education

Central to decentral

Geothermal and solar is everywhere – power to the people

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32% of all energy in Germany is solar and wind – past 10 years

Time to invest – exponential curves

Intel chips are XX every 2 years

Next big bubble – oil and coal

Electricity co-operatives (competing with big energy companies – producing less than 7% of power)

25 year transition – big companies help thousands of co-operatives to manage their activities via big data analyses, etc. - Performance contracts

Energy Services and Construction – Installing renewable energy technology, insulation, retrofit buildings, Charging stations, battery cells, etc.

Transform dumb electricity grid to smart

Financed by energy savings

Nodes connect – transport hubs, wifi, etc.

Change Consciousness

Sharing economy – dissolves ownership, status, waste, etc.

Focus on experience and community

To be free and enlightened – (how can I flourish to the full extent of my capabilities – I connect with community and access inclusivity and networks)

Power is horizontal, not vertical – open source

Perception about identity to community

(A different sensibility about power – 1 to the money (pyramid down) previously – freedom, independence, autonomy, island unto oneself, sovereign unto ourselves, competing with each other for scarce resources in a zero sum game)

Ecological footprint

New biosphere consciousness (v XX) – all chemicals on the earth interact to produce the biosphere.

Three top contributors to global warming

1. Building
2. Meat - cows
3. Transportation

John Hopkins research – NFP

Central authority – follow orders, be efficient in using the machinery of the factor

Crowd source the knowledge of the school – sharing

Knowledge is not power – Knowledge is the experience of community

Empathic World (no Eutopia) – understand each other’s frailties, nurture the empathic – don’t have to worry about fraud

George Frederic Hagel – happiness are the blank pages of history, because they are the pages of peace

Co-operatives – never mentioned in business school – engine/vehicle for

Organic agriculture – move away from chemical agriculture

Lack of electricity keeps women in slavery and out of school

Have them be educated, and they have fewer babies, etc.

Women in Africa – starting electricity micro grids – social preneurs