

# *The role of Information Technologies in improving Universal Access to Clean Water*



*by Lars Føleide*

*Social Entrepreneurship Researcher*

*with 15 years of higher education in Computer Science, Marketing, Entrepreneurship, Finance and Economics.*



# Agenda

- Introduction
- Information Technology
- Innovation Management
- Time Banks, Pension Funds & Higher Education
- Clean Water Scarcity: Challenges & Possibilities
- Discussion and concluding remarks



# The Speaker

- Lars Føleide already as a teenager decided after extensive research into the existential to dedicate his life to Social Entrepreneurship, having already since 1995 used internet as a tool for research and making documents with references
- Lars did his first Bachelor in Computer Science, followed by a second Bachelor in Marketing. After a year in Spain and Germany, he established himself in Oslo for doing a master in Innovation and Entrepreneurship at University of Oslo



# The Speaker

- In 2008, Lars moved to Bergen for doing an MBA at Norwegian School of Economics, and returned back to Oslo in 2010 for doing a PhD in Innovation and Entrepreneurship at BI Business School
- Which brought him to Berkeley, California for collecting data, where he narrowed his research towards Social Entrepreneurship, returning back to Norway after 4 years in the US and currently pursuing a role as a Social Entrepreneurship Honorary Research Fellow at Fil. Dr. Jan-U. Sandal Institute

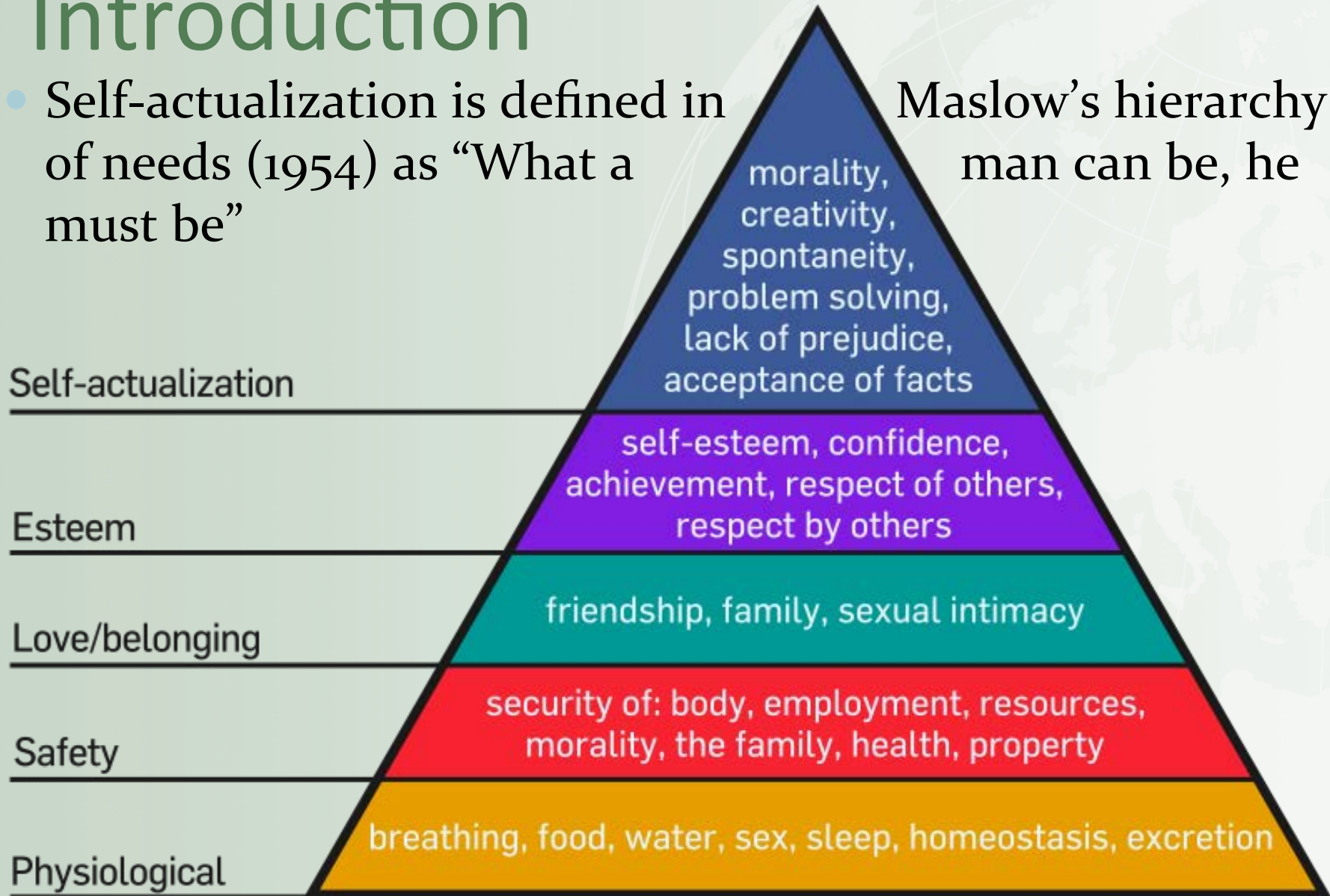
# Introduction

- Access to clean water is a universal human right
  - .. yet 780 million people lack access to safe water, a number which is expected to grow into billions according to World Water Development Report
- Access to clean water is a governance issue that can be solved with Information Technologies in combination with Innovation Management
- Scientists warned about limits to growth 40 years ago
- Integrity Management in the form of a supplement to traditional retirement savings
  - Built on the foundation of successful aging
- New combination formula for a more sustainable economy
  - Brain research on longevity
  - Time Banks applied to volunteering
  - Focus on Universal Access to Clean Water

# Introduction

- Self-actualization is defined in of needs (1954) as “What a must be”

Maslow’s hierarchy man can be, he



# Information Technologies

- Population growth and population dense areas need systems for efficient governance
- In 1972 scientists warned us about the limits to growth, urging for early adoption of sustainable practices to allow for a smooth transition – instead of the projected overshoot and collapse
- The opposite happened, as decoupling of the US dollar to gold also decoupled our economy to limited natural resources causing a dramatic population growth measured in absolute numbers



# Information Technologies

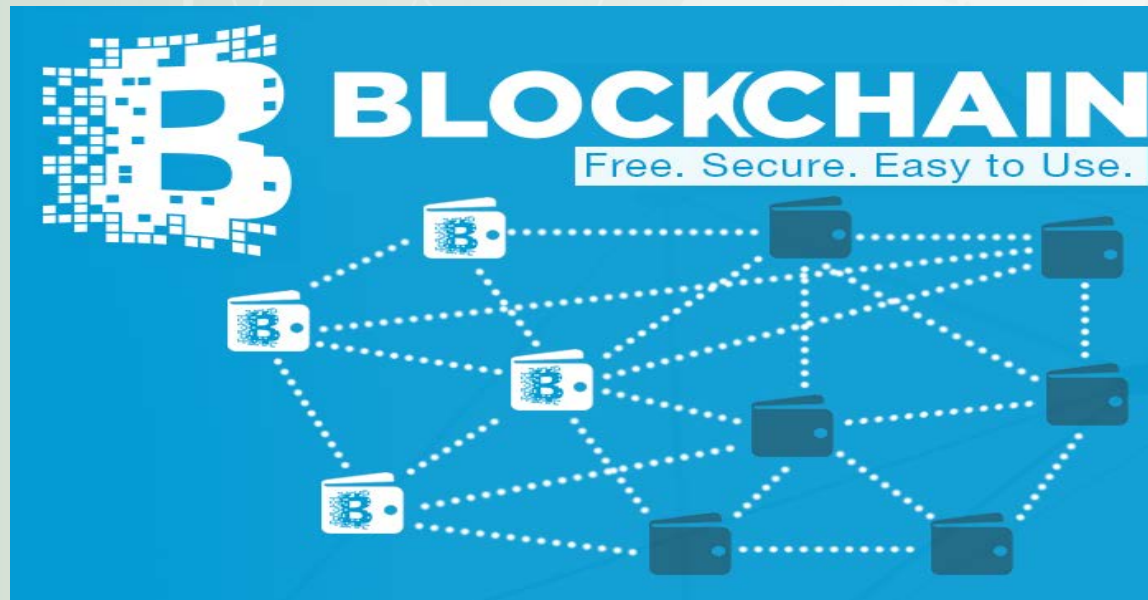
- Information technologies and more women entering the workforce gave a significant growth in productivity
- .. without much consideration given to the fact that we just borrow this planet from the next generation
- An obsession with short-term profit maximization will deplete natural resources
- BitCoin appears in 2009 as a distributed currency that within a few years reached a market valuation of several billions of dollars





# Information Technologies

- At the core there were an invention called BlockChain
  - a secure wallet that can store any type of coins – not just crypto-currencies
- A solid foundation for introducing the WaterCoin exists already
  - the challenge is how to properly conduct the Innovation Management



# Innovation Management



- It is established that the water crisis is actually a crisis of governance
- Innovation Management relates to governance
- Doing the right thing even when nobody is looking can be defined as having integrity
- To solve the water crisis, we need to design, develop and deploy a system for life planning with focus on integrity

# Brain Research

- Brain researcher and professor at UC Berkeley, Dr. Marian Diamond (88) has concluded with 5 factors that constitute longevity



# Brain Research

- It is the responsibility for each everyone of us to ensure adequate fulfillment of all factors for optimal function
- These factors are:
  - 1) Healthy Food
  - 2) Physical Activity
  - 3) Challenges
  - 4) Work Variation
  - 5) Love

# Brain Research



**My Love Affair With the Brain: The Life and Science of Dr. Marian Diamond (Episode 1)**

# Six Human Needs

- 1. Certainty
  - assurance you can avoid pain and gain pleasure
- 2. Uncertainty/Variety
  - the need for the unknown, change, new stimuli
- 3. Significance
  - feeling unique, important, special or needed

# Six Human Needs

- 4. Connection/Love
  - a strong feeling of closeness or union with someone or something
- 5. Growth
  - an expansion of capacity, capability or understanding
- 6. Contribution
  - a sense of service and focus on helping, giving to and supporting others

*Developed by Life Coach Tony Robbins*

# Higher Education



- Time Banks
  - An established system in many locations for tracking hours
- Pension Funds
  - In need of new investment categories, like infrastructure, in order to meet future obligations
- Higher Education
  - In need of transformation, becoming more applied and developing the information technology of tomorrow
    - Alytus College has both English speaking students of computer science and business, which make for ideal conditions
    - A population in decline gives a sense of urgency



# Clean Water Scarcity



- Challenge
  - United Nations revealed in the 2009 World Water Development Report that nearly half of the global population will be living in regions of high water stress by 2030
- Possibility
  - Freemium, the blend between premium and free, a simple business model in which 1% pays and the remaining 99% enjoy the service for free
  - By installing water purification systems in the developing world, tourists from the developed world can access an environmentally friendly option to buying bottled water while being confident that the water is safe to drink through proper development of a global brand

# Conclusion

- Access to Clean Water is a Human Right
- Information Technology makes it possible to engage, motivate and coordinate efforts efficiently for making Universal Access to Clean Water possible
- A Social Entrepreneur is necessary to design, implement and deploy such a system – in collaboration with institutions of Higher Education throughout the world



A dynamic splash of blue water droplets and bubbles against a white background, framing the central text.

**Thank you!**

Visit:  
**Water.Gift**

.. for more information

