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# Ο ρόλος της ΤΝ στην προώθηση της ηγεσίας (leadership) & της επιχειρηματικότητας (entrepreneurship)


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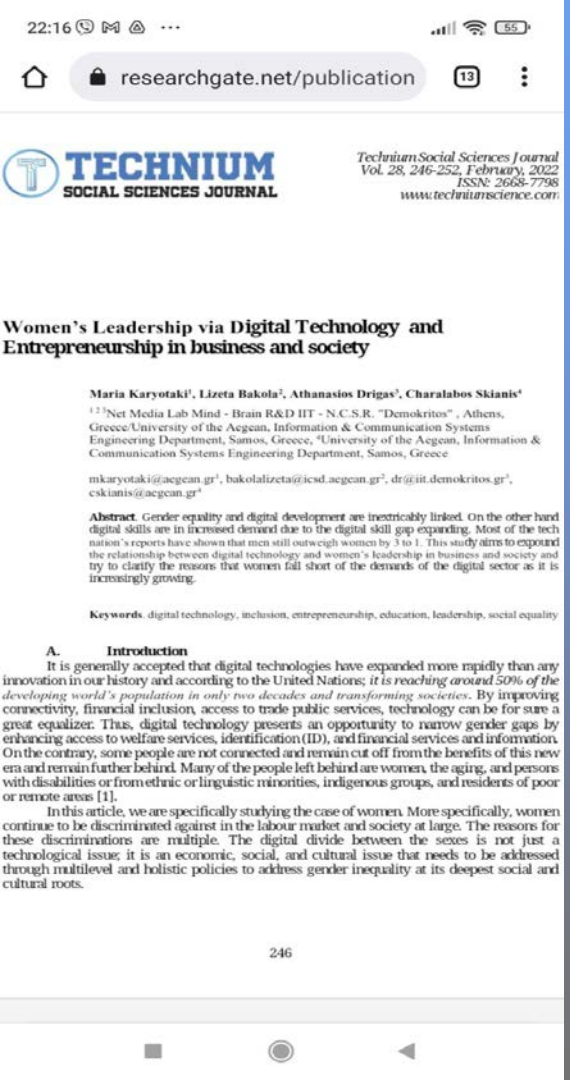


# Women's Leadership via Digital Technology and Entrepreneurship in business and society [1]:

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# Entrepreneurship: a key to employment, eurostat 2012

- 9 out of 10 enterprises in the EU employed fewer than 10 persons (micro-enterprises): the highest shares have been recorded in Greece (96.7%).
- Micro-enterprises accounted for the largest share of persons employed with proportions above 40% in a number of Southern EU Member States: Greece (58.6%).
- In the EU, 70.8% of newly-born enterprises had no employees, 26.4% 1 to 4 employees, 1.9% 5 to 9 employees and 0.9% 10 or more employees.
- At EU level, large enterprises were the first employer (accounting for 33.0% of all persons employed), followed by micro-enterprises (29.2%), small enterprises (20.8%) and medium enterprises (17.2%).

# AI Technology [2]:

Classification, analysis and prediction from data sets, using a set of rules called algorithms.

The ability of an AI system to improve automatically through experience is known as Machine Learning (ML). AI can assist in several fields, such as:

- Health
- Marketing
- Education
- Human Resources Management

# AI Technology, Gender Equality as background of entrepreneurship [3]:

In general, Artificial Intelligence can assist in:

1) Finding and receiving customized information

2) Getting interactive communication and assessment tools to reflect on a problematic situation

3) Inducing autonomy

4) Detecting patterns of gender differences, such as detecting and warning if inequities exist or make the gender inequality visible.

5) Improving their decision making

# AI & Underrepresented groups [4]:

- Human rights activists
- Social justice activists
- People of color
- Girls, women
- Adolescents
- Members of the LGBTQI+ community
- People with disabilities
- Poor
- Undereducated

# Algorithmic divide[5]:

Stems from lack in individuals' capabilities and skills eg. awareness, access, affordability, availability, adaptability, resulting in a vicious circle of:

- algorithmic discrimination,
- algorithmic deprivation &
- algorithmic distortion.

# Algorithmic divide in Information[6]:

- Word embeddings exacerbate existing gender stereotypes.
- Problematic data could amplify real-world biases by creating self-reinforced feedback loops.
- With inappropriate data fed as either input or training data, these algorithms will be biased against the excluded populations.

# Algorithmic divide in Health [7,8]:

In the US healthcare system, an algorithm for determining healthcare risk and the need for extra medical care, was found to have a racial bias, favoring the extra care of white over black patients.

Artificial Intelligence (AI) applications can serve as a means to address the need for gender equality in the field of Precision Medicine and especially, in the formation of the prediction models of a certain disease, encapsulating sufficient demographic information on every sex and every gender.

# Leadership, Entrepreneurship & AI [9, 10, 11]:

For Artificial Intelligence (AI):

- the demand for more experts and professionals in the industry is expected to be ejected,
- experts and professionals need to acquire cross-sectoral and applied skills, such as leadership, empathy, creativity/critical thinking, communication, teamwork/collaboration and complex problem solving.

# Algorithmic divide in Entrepreneurship [3, 11, 12]:

- The majority of workers holding jobs that face a high-risk of automation, such as clerical, administrative, bookkeeping and cashier positions, are women.
- Massive job losses, especially in developing countries.
- More women need to enter the innovative technologies sector as only 22% of AI professionals globally are female, compared to 78%, who are male. This accounts for a gender gap of 72% yet to close.

# Leverage AI to Stimulate Leadership & Entrepreneurship [13]:

Entrepreneurship Education and Training (EET) Programs supported by AI can elevate the accessibility to entrepreneurship and thus, to economic empowerment. These programs ought to be inclusive and for that reason, they need to take into account persistent gendered occupational norms, perceptions and roles, which impact levels of engagement in entrepreneurship activities.

# Leverage AI to Stimulate Leadership & Entrepreneurship [14]:

A first step in this direction is to establish adequate policy and legislation frameworks, to help direct the vast potential of AI towards the highest benefit for individuals and the environment, as well as towards the achievement of the SDGs.

# Leverage Machine Learning to Stimulate fairness & equity [2,15]:

Without the inclusion of information from the world's most vulnerable populations that are on the unfortunate side of the algorithmic divide, *any algorithmically generated analyses will likely be of limited or no use to addressing these problems.*

Societal resilience is also promoted by the implementation of AI technologies adapted to the cultural background and the particular needs of different regions.

# Leverage Machine Learning to Stimulate fairness & equity [4]:

- AI-powered gender-decoders help employers use gender-sensitive language to write job postings that are more inclusive in order to increase the diversity of their workforce.
- Use simulations to assess how virtual societies may respond to changes.

# Algorithmic Bias Considerations [3]:

Educate future engineers and computer scientists to develop ethically aligned design of AI systems (A+ Alliance, Alliance for Inclusive Algorithms, AI for neurodiversity, the Data and Feminism Lab at MIT).

# Algorithmic Bias Considerations [3]:

- Definition of data streams and techniques to remove bias,
- Ethical use of data with confirmation agreement if required,
- Confidence level measurement through testing and deployment usage,
- Corrective algorithms to counteract imbalance of predictive capability and
- Conscience algorithms to counteract heteronomy (actions that are influenced by a force outside the individual),
- Flag abuse,
- Remove overstimulation within the AI (through adversarial behaviours),
- Develop intelligent data-acquisition strategies and compression algorithms,
- Create transfer-learning models for low-resource languages,
- Facilitate machine learning with limited computational capabilities and utilize decision support systems

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# Further Reading


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# Σαζευχαριστούμε