OSCE

**Organization for Security and Co-operation in Europe
Secretariat**

Conference Services

DISCLAIMER

26th OSCE Economic and Environmental Forum
Concluding Meeting
Prague, 5-7 September 2018
Session V: Harnessing opportunities and addressing challenges for human capital development in the digital era
Prof. Alessandro Bogliolo, University of Urbino, Italy

EEF.NGO/23/18
7 September 2018

ENGLISH only

Unveiling Human Digital Skills: An Educational Challenge

Alessandro Bogliolo
University of Urbino - Italy
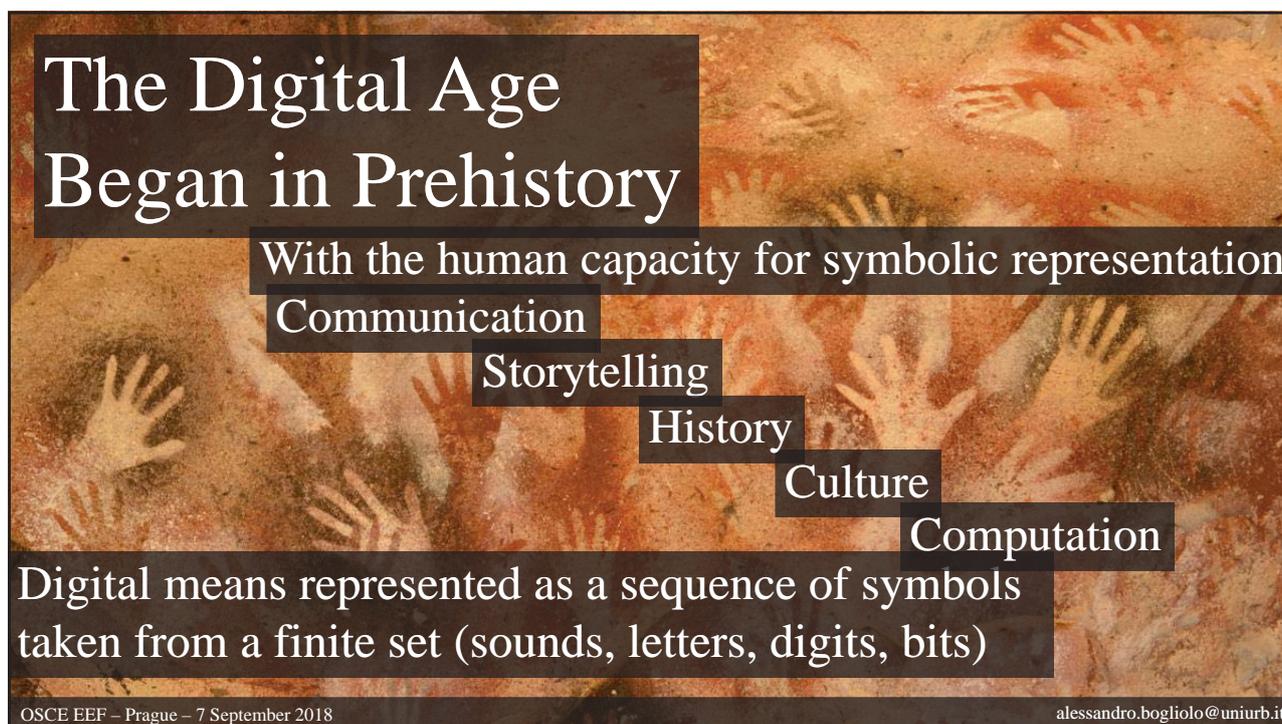
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The Digital Age Began in Prehistory

With the human capacity for symbolic representation
Communication
Storytelling
History
Culture
Computation

Digital means represented as a sequence of symbols
taken from a finite set (sounds, letters, digits, bits)

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Writing Is
a Digital Technology

Any age has its own digital technology
Spoken language
Writing
Typography
Telegraph
ICT

Computer Programming
Is a Matter of Delegation

Computers and robots are ideal performers

Delegating the execution of a task to an ideal performer entails a full understanding of its algorithmic solution

Algorithms Are Forever

Algorithms are among the highest cultural achievements of humanity

A problem with a known algorithmic solution is no longer a problem

Coding Provides the Fastest Path to Innovation

It makes ideas come true by writing new lines of code
for the tens of billions of existing programmable objects

Computational Thinking
Is a Matter of Self Empowerment

Computational thinking does not require technology

Technology does require computational thinking

Everybody Can Experience
The Thrill of Creating with Code

Intuitive and engaging visual programming tools

Unplugged coding activities

Empowering Teachers Is Key to Invest on the Human Side of Digital Technologies

Take immediate actions targeting a durable impact

http://codeweek.eu/ – 6-21 October 2018

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