



Volatile

- Great speed and turbulence in the dynamics of change



Uncertain

- It spans over unfamiliar territory where outcomes are unpredictable



Complex

- It creates multiple interdependencies amidst global interconnectivity



Ambiguous

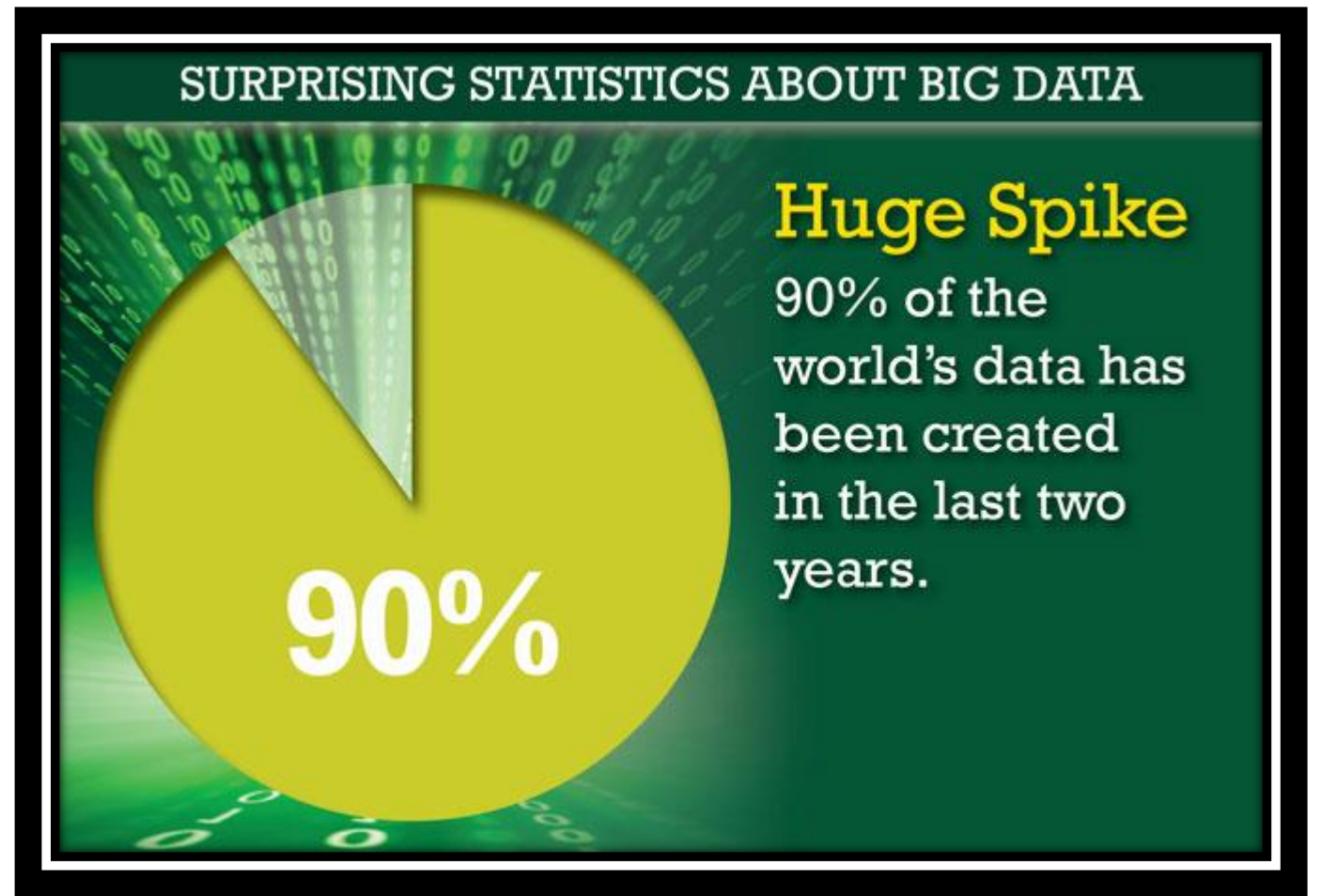
- It produces multiple scenarios with different perspectives and interpretations

The World of **Globalization** is VUCA

2003 = 5 Exabytes (5 Billion Gigabytes) of data in 1 year

2010 = same amount in 2 days

2013 = same amount in 10 minutes



People who have funding power love Big Data

Hence, emphasis on STEM: Science, Technology, Engineering, Mathematics

The World of Data is Divergent

Do we need Convergence?

Interconnection/ Interdependence /Interrelation



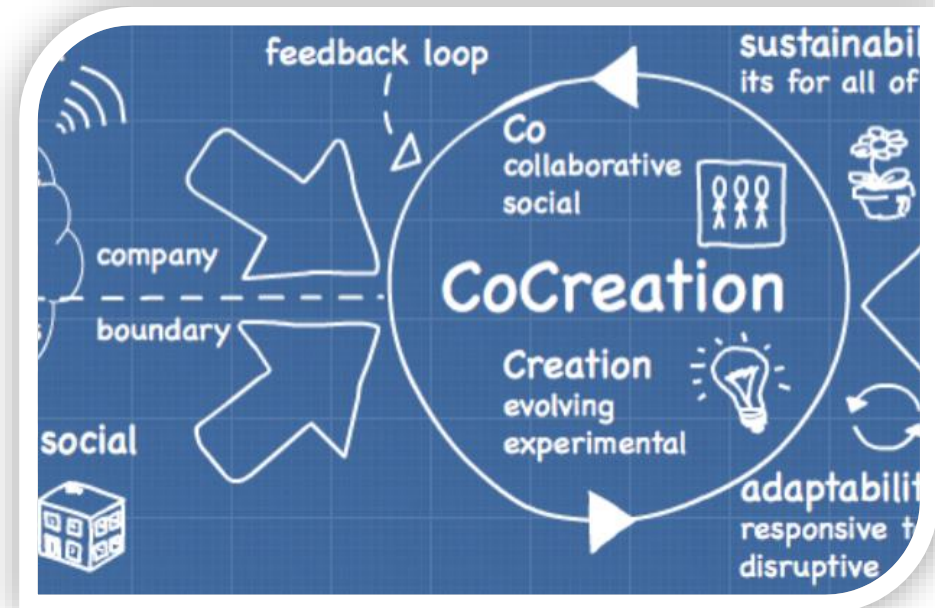
The 21st century confronts us with a new paradigm of knowledge, complex and variable.

This challenge must be addressed effectively and is leading us to question educational systems, based on a historical separation between SSH and the so-called Hard Sciences.

Our future requires **co-creation mechanisms** to re-conduct ideas differently. Co-creation is a collaborative process that transforms visions and requirements into high-potential social innovation concepts.

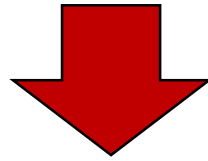


Co-creation
methodology: Human
Centered Design
Process



STEM

Science, Technology, Engineering, Mathematics



STEAM

Science, Technology, Engineering,
Art, Mathematics

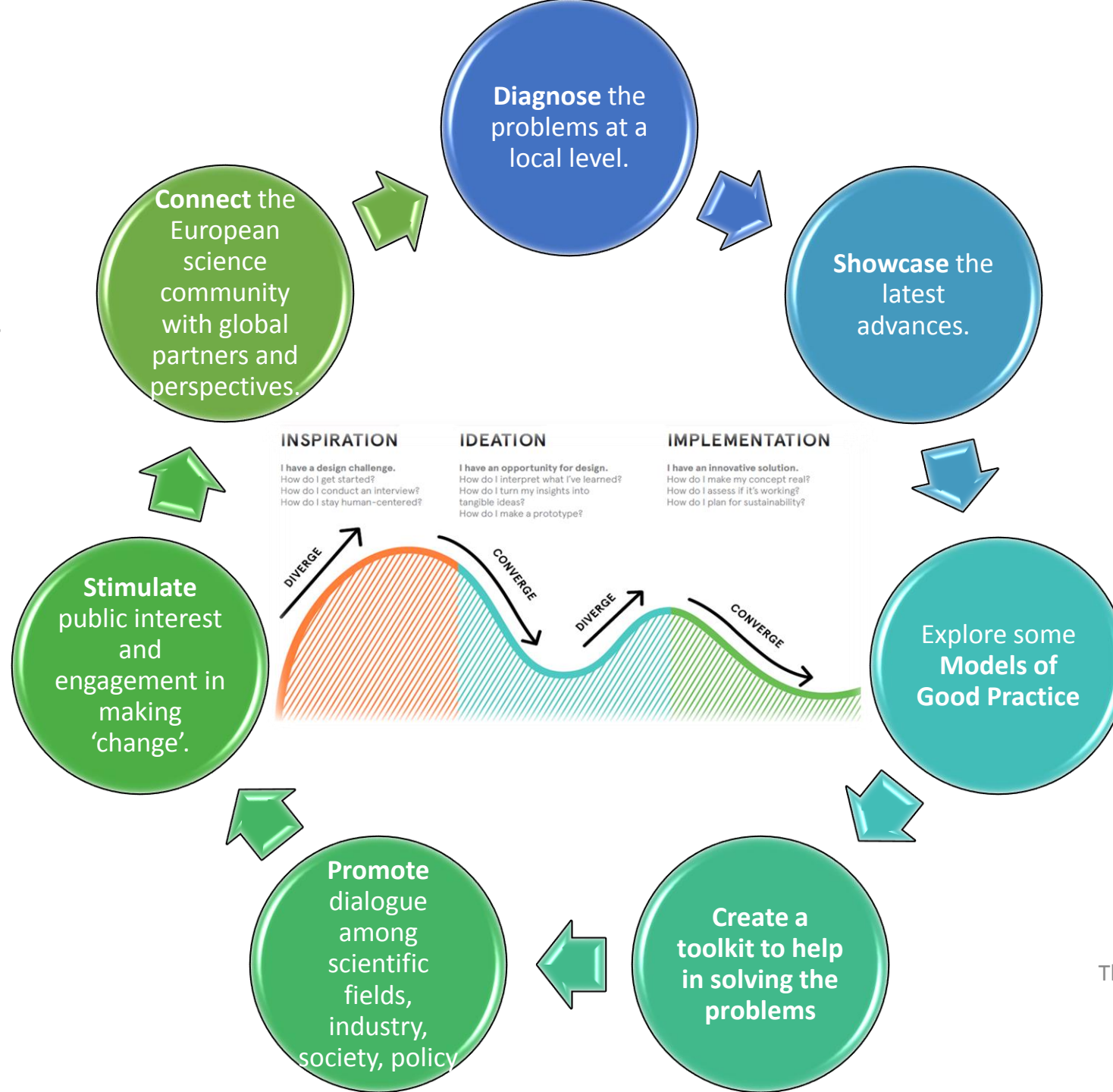
Convergence is important in order to deal positively and productively with 21st-century global challenges (i.e. environmental crisis, migratory movements, the interaction between diverse cultures etc.)



**To support the
integration of
STEM and the Arts,
this paper**

- Offers a diagnosis of the problem (i.e. statistics, CEO's insights, etc.);
- Suggests a methodology (Human Design Thinking) for prototyping solutions;
- Creates an order of operations and offers some models to turn problems into solutions/opportunities (Soft Skills, RRI);
- Tries to integrate some feedback/takeaways > evaluate/evolve/improve the prototype

Co-creation methodology: Human Centered Design Process



The Human Centered Design Toolkit is
available for free download at
www.designkit.org