

## ONE HEALTH Transformative Enterprises, Well-being and Education in the Knowledge Economy of the Digital Age

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## **Preview**

| When you leave for Ithaca,<br>may your journey be long<br>and full of adventures and knowledge.                     |
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| May there be many a summer morning, and may ports for the first time seen bring you great joy.                      |
| Ithaca has already given you a fine voyage; without Ithaca you would never have parted.                             |
| you have grown wise and lived an intense life, and that's the meaning of Ithaca.  (Konstantinos P. Kavafis, Ithaca) |

The transformation is a journey to Ithaca, as recounted by the Greek poet Constantine Kavafis (1863-1933). Greek mythology tests the barrier between men, the gods, and nature by resorting to transformation, which often involves profound and definitive change. Successive waves of shock during the 2000s uprooted businesses and jobs. In order to be reborn, both have to transform themselves in the footsteps of Deucalion and his wife Pyrrha, who, after the flood caused by Zeus, revived humankind by throwing stones behind them as they walked. The stones grew into men and those of Pyrrha into women. Humanity was thus born anew.

With its thought leaders whose exploratory mindset enables them to turn an occasion or incident into a transformative experience, the Innovation Value Institute, a multidisciplinary research institute based at the University of Maynooth, is committed to digital transformation intertwined with two other transformations: ecological and behavioural. This triad constitutes a "Grand Transformation" conducive to entrepreneurial transformation and, hence, the emergence of transformative enterprises.

Debating the concept of transformative enterprise is nothing new; it is a dive into the great sea of entrepreneurial history. Among the scholars of this history, we recall the authors (Landes, Mokyr an Baumol) of a must-read book, *The Invention of Enterprise*.

In archaic trade, entrepreneurial individuals played a key role, the "truck and barter", as Adam Smith said. Medieval Italian commenda and compagnia and the Arabic mugarada practice administered money or inventories from their backers. Renaissance Bottega (today, translated as co-working space) nurtured talents. New techniques and artistic forms came to light; artists were competing and ready to work together. With the industrial revolution, the transformation of the enterprise took place with Frederick Taylor's (1856-1915) scientific management and Fordism, the system of mass production pioneered in the early 20th century by the Ford Motor Company. Towards the maturity of industrialisation still based on atoms, the enterprise revolves around shareholder primacy and profit maximisation in the wake of Milton Friedman. With the blossoming of the bits - more generally, of the digital economy - and the emergence of the ecological conundrum, we are faced with a new transformation. It is a return to the future: the Renaissance workshop reappears as an entrepreneurial enterprise instead of the managerial one. People are cocreators and intrapreneurs rather than mere performers of tasks assigned top-down. Neither geniuses nor solitary rebels, intrapreneurs are generators of cognitive conflicts that contribute much to breaking entrenched rules.

## Four guiding principles of transformation

- Transformations must reflect the peculiarities of nature, as highlighted by polymath Pierre Simon Laplace (1749-1827): Infinitely varied in its effects, nature is simple only in its causes, and its economy consists in producing a great number of phenomena, often very complicated, by means of a small number of general laws (www.santafe.edu/research/projects/feldstein-program-law-history-and-regulation).
- Reliance must be placed on experimentation rather than on experience and predictions. Modes of experimentation with explanations (the "whats", "whys", and "hows") replace or complement the methods of forecasting the directions to be taken.
- Empty spaces need to be designed where companies, products and services can move, otherwise inconceivable because they are contrary to common sense.
- Qualities of intuition and foresight to give free rein to the opportunities hidden in the folds of transformation are at stake.

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During the past industrial revolutions, the search for a better life, in the sense of material well-being, for oneself and one's family progressed. Human conduct has focused on one's private and material interests, and the public good has been neglected or thought to descend from the providence of personal passions and ambitions. This belief has been shaken by the emergence of digital public goods, the formation of sharing communities that leverage the virtual to achieve virtuous results (as in the case of social streets whose conduct opens the door to accessing and sharing goods and services), and new visions of biology encompassing the economic environment and its effects on business and society. On the side of 'who controls who', the outcome of the battle for power reckons with the value placed on the exchange between the desire to fulfil one's wishes and the relinquishing of control in favour of the hidden persuader. We need only think of Zuckerberg's Metaverse and other foundational technologies underpinning Web3 on which the edifice of new desires is being built. The balance will hang on the side of desires before the force that will urge to possess an increasing quantity of new objects. If we continue to listen to and pander to common voices and opinions, the quantity will continue to rule everything. With the quantity criterion measuring everything because of prejudices, the few feudal lords of foundational technologies will dominate. To fully understand the value of what is at stake, the transformations we are experiencing should be read by combining technological discourse with philosophical thought, starting with Socrates, who did not allow himself to be seduced by objects - today we say technological devices capable of excessively fulfilling our desires.

The assault of desires that translate into consumption increases man's impact on the planet. Hence, the space available for other species continues to shrink, as naturalists Edward Osborne Wilson (1929-2021) and Thomas Eugene Lovejoy (1941-2021) never ceased to denounce. The distinction between civic, public and private goods and the shift from ownership to the service provided by a product both reverse the course of human behaviour. The automobile is a case in point. After Henry Ford (1863-1947) pioneered assembly-line production at the beginning of the 20th century, the invention of the internal combustion engine gave millions of people the mobility. Today, this technology raises benefit of unprecedented greenhouse gas emissions that cause climate change. Cars are on the move only for a small fraction of the time available. If the habit of vehicle ownership were to be replaced by greater sharing facilitated by digital technologies, a significant reduction in the global carbon footprint of transportation could be achieved by more intensive use of the existing stock of cars and their longer life.

There is a desire that detaches itself from the others. It is well-being that is freedom from suffering. Well-being concerns the universe of living species and their cultures, and it encircles the three transformations -

digital, ecological and behavioural. The design and implementation of One Health hinge on these three transformations.

One Health is an attempt to voluntarily construct the future using intelligence that recognises how intrinsically linked the economy and the health of humans, all other living animal and plant species on Earth and "natural objects" such as rivers, lakes, seas, and mountains are. Since the Earth is a closed system, economics must also accord with the physics of closed systems. In this new scenario, the many certainties of the past fall away. In economics, work and enterprise are no longer such well-defined categories as highly reassuring. As early as the 1970s, the German artist Joseph Beuys (1921-1986) argued against a clear separation between work, art and science. According to Beuys, we are all artists whose thinking is the invisible material that values work and reconciles it with nature. In our field of life, each of us can no longer plough a precise and straightforward furrow of decisions that begins in school, continues in professional activity, and ends in retirement. On the business side, sectorial boundaries are being blurred by transformative enterprises, those operating at the intersection of advanced technologies and the health of our planet. Therefore, we must pay close attention to all that makes a difference in making things happen. Because of this complexity, "One Health" is a construct that unfolds slowly and needs revision following a probabilistic process.

To ONE HEALTH: Transformative enterprises, well-being and education in the knowledge economy of the digital age, IVI researchers and thought leaders collaborated with partners from the open innovation communities with which IVI is associated. We hope that the traces left by this work will be helpful to those who venture further down the path of human activity performing in harmony with nature.

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