



The circular economy as a new way of thinking

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The economy that everybody recognizes is linear and follows a “take - make - dispose” approach where waste is considerable. It is fundamental to do something practical to use resources in a more productive and constructive way and the circular economy might be a step in this direction. It implies a significant change in the mindset and the way of thinking about the economy as a whole that has been explored in this session of the INSMEAcademy by one of the major experts in the field: Mr. Ken Webster, Head of Innovation at the Ellen McArthur Foundation.

Linear economy is part of an old fashioned mechanistic world view which is made up of two main phases: production and consumption. Following this approach economy is a mere exchange of goods, services and money between firms and households where the transaction does not include raw materials, energy and waste.

The transition towards a circular economy is more important than ever in today’s world as economy is going through important changes. Population has always been a clear mover in terms of demand of resources but wages have stagnated over decades. This caused productivity to go up but the return to labour stood still. While income for median families remained the same, costs for education, health, housing and rent have increased disproportionately. On top of this, there is a widespread underemployment or unemployment. The ability to pay for services seems to be lacking for some people and this makes the future extremely uncertain.

Circular economy can optimize the whole system. Circular economy builds on the assumption that economy is an interdependent system which takes the social and environmental contexts into account rather than just a simple flow of goods and money. The solar energy system has been used as a metaphor to understand how the circular economy model might look like: a system in which energy flows through and materials cycle endlessly and in the long term what is lost the most is heat into the environment as energetic waste. The circular economy works in a similar way: it focuses on the reusing of goods to bring them to a new functional status.

Mr. Webster stated that in order to make the system more effective, responsive, reliable and reach sustainability, circular economy is more about circulating value rather than extracting it. With this in mind, maintaining capital becomes more important than recycling it as this extends the life of the product and as a consequence decreases the demand for the replacement of goods and therefore waste. In this way the economy would work according to closed loops in

which things/items can be reused, remanufactured or recycled. The speed of these circular loops is also fundamental as slowing the flow would allow to get more uses out of items, objects etc.

In this process of changing the way of thinking about the linear industrial economy, the digital revolution plays a fundamental role. Digitalization would enable to disrupt the old fashioned system as it allows to track material, maintain a machine while it is functioning, substitute services for goods etc.

For businesses there are multiple opportunities to benefit from. These opportunities can be exploited if the private sector:

- keeps close to the small loops/inner circle;
- circles goods longer;
- cascades use across industries;
- makes materials pure to be reused.

Finally, Mr. Webster analyzed the building blocks of a circular economy helping businesses in identifying the factors that influence successful circular economy initiatives. According to the building blocks:

- businesses should start designing products and components differently considering that goods will be reused in the future;
- businesses should implement innovative business models fitting the circular economy;
- businesses should identify processes to get products back in a way they could be reused;
- Governments should set favorable conditions in place for those businesses doing things in a circular way. This could be achieved for example by avoiding taxing human labor while taxing non-renewable resources.