

Book summary - Cradle-to-cradle: remaking the way we make things - Group 2

Cradle-to-cradle: remaking the way we make things, was written in 2002 by William McDonough and Michael Braungart. This book introduces ideas on how to design better, and shift from a take-make-waste paradigm to a circular one. The authors explain how it all started and how we ended up here where we are today.

The Industrial Revolution brought us to a linear, cradle-to-grave model that dominates modern manufacturing, which is known for its bad effects on the environment and people's health. The incentive to address these issues was to invest into making the industry more eco-efficient and « less harmful ». The authors here explain how in reality this approach is counterproductive to being environmentally friendly.

Mass production uses universal design solutions to make products attractive, affordable, that meet regulations and performance standards. Through different examples, this book tells why diversity on all different levels is so important and why the solutions should be adapted to local needs and resources. For instance, nature uses the most effective cradle-to-cradle system of nutrient flow and metabolism, where waste is no such thing. The authors suggest we should learn to imitate nature more, just like it was in the pre-industrialization world, where nothing was wasted, everything was reused to create value.

The book provides concepts and tools for a more sustainable future. However, some of them can be questioned. The cradle-to-cradle model is very ambitious and can be seen as too idealistic and difficult to reach in our current society. In the book, the authors envision eco-efficiency as ineffective in terms of sustainability. However, it can also be viewed as a first step towards the circular revolution of the design and manufacturing process. Even though eco-efficiency increases economic outputs, it still decreases some of the impacts of nature. It's a good start for companies that want to initiate a systemic change in their design and manufacturing processes.

In the last chapter, the authors provide a set of guidelines for the readers. After having an overall view of the current situation in the first five chapters, these guidelines can be seen as the light at the end of the tunnel, a call for hope and action. They give a set of suggestions to help consumers and designers, shifting from a cradle-to-grave model to a cradle-to-cradle model. For instance, the book suggests that instead of improving old systems, it is better to design new ones that don't exist yet. We must shift our current design and consumption paradigm, to evolve beyond. Be in synchronization with nature, instead of going against it. In short, design in a way that can feed both biological and technical metabolisms.

Change is difficult and messy. It takes courage, vulnerability as well as extra investment of time and material to shift a whole system. It's the quest of a lifetime. «*This is going to take us all, and it is going to take forever. But then that's the point.* »