

Marianne Kuhlmann – Research Project

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Research focus: Organizational strategies and capabilities for successful circular economy adoption

Introduction and framing

In the recent years, the concept of a Circular Economy has been gaining increasing attention from practitioners, policy makers and academics alike as a tangible pathway to operationalize the concept of sustainable development and depart from our currently prevailing linear economic system (Geissdoerfer, Savaget, Bocken, & Hultink, 2017; Ghisellini, Cialani, & Ulgiati, 2016; Kirchherr, Reike, & Hekkert, 2017).

In the transformation towards the circular economy, business takes on a central role. Essentially, firms must adapt their business in order to minimize the consumption of resources and waste production in their business and essentially decouple revenue generation from virgin resource consumption (Bocken, de Pauw, Bakker, & van der Grinten, 2016).

Potential ways to achieving this are manifold. They range from reducing material input for production, extending the useful life span of products, and recycling materials from products after the use phase to recover materials and loop them back into the production of new products (Bocken et al., 2016; Ellen MacArthur Foundation, 2015b; Ghisellini et al., 2016).

But although the needed change in business activities are huge, so may be the potential benefits. Indeed, many practitioners see the transition towards a circular economy as a business opportunity, where environmental and economic benefits can be achieved simultaneously (Accenture, 2014; Ellen MacArthur Foundation, 2015a, 2015b; EY, 2015).

But if especially practitioners see CE as a means to boost innovation and even growth, why is it then that the actual uptake of circular economy practices has been low, and even more so examples of genuine efforts to holistically transform an organization according to CE principles?

Scholars and practitioners have started to look at potential barriers and challenges that companies seeking to transform their business to become more circular are facing (Kirchherr et al., 2018; Pheifer, 2017). While most papers focus on conditions external to the firm, e.g. lack of established markets for used products, adverse regulations and lack of data, some have also started to look at barriers within the company itself that need to be overcome (Kirchherr et al., 2018; Pheifer, 2017). In a recent survey, Kirchherr et al (2018) asked business representatives about the major barriers to circular economy. All top 3 barriers related to the cultural aspects, the number one barrier being 'hesitant company culture'.

Other studies are also pointing at the direction that adopting circular economy approaches within the company is a challenging task that requires specific organizational capabilities. For example, Weissbrod & Bocken (2017) argue that to develop ideas for CE and actually implement them, organizations need to develop experimentation and fast learning capabilities and find that a prevailing corporate mindset that strengthens the status quo and existing processes and hinders rapid test-and-learn approaches has direct influence on the organization's ability to successfully adopt circular business ideas.

Overall, it seems that even organizations that actively seek to explore circular economy opportunities are facing multiple internal barriers touching a variety of different topics, be it prevailing culture and mindsets, skills and capabilities and rigid but less suitable organizational structures, that are hampering their realization.

These indications in previous academic research are also in line with my personal experience from my work as a consultant on the topic and personal exchange with representatives from a variety of corporates on circular economy adoption. In many discussions corporate representatives have repeatedly pointed to internal barriers – e.g. skill, resources, culture, rigid processes – as the main impediments that they face when seeking to implement circular economy approaches.

It is therefore this internal perspective that I seek to adopt for my dissertation.

Research focus

Given the short time since the starting point of my doctoral studies, I am currently in an explorative phase and my research focus and approach are not yet thoroughly defined. But as laid down, I seek to focus on what is often perceived as internal barriers to adopting CE and to explore their nature, causes and remedies.

More specifically, I seek to explore the processes and methods companies can use to develop CE ideas and implement them, and on a more holistic level, how to anchor CE within the organization. I am currently exploring multiple angles but focusing especially on a capabilities perspective, e.g.

- What are central internal capabilities that enable an organization to develop ideas for CE, potentially unconnected from or even opposing the current business logic, and then also implement these ideas? How can companies build these capabilities? Is this different from innovation capabilities more general?

This may include focusing on the current innovation process, organizational design, organizational learning, change management among others, with a capabilities lens.

Additionally, potential focus points could be

- How can an organization successfully do open innovation for CE/ source ideas from outside the organization and then successfully implement them internally?
- How do (internal and external) partnerships influence the likelihood of success and how can an organization build those that are crucial for success
- The user as innovation partner: How can an increased user focus help companies to adopt CE?

I will use the next weeks to further detail out the research question, based on further literature research along the detailed lines. To answer the proposed question, I then seek to do qualitative case studies with organizations. I'd also be particularly interested in exploring options to do Action Research if the more refined research question and related project/case study is especially suitable for this kind of research approach.

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