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Unlocking sustainable business model innovation for a post-crisis economy

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Abstract

In this impact paper we argue that sustainability paradigms such as degrowth offer an inspiration for a post-crisis economy. There is increasing demand from politicians, civil society and industry for programmes that do not just protect and revive business as usual, 'whatever it takes,' but provide new ideas to motivate more ecological, social, and resilient businesses. Business model innovation, combined with sustainability paradigms such as degrowth, is introduced as a promising contribution to an innovation and management toolbox for a post-crisis economy.

Keywords: business model innovation, business model patterns, sustainability, degrowth

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Unlocking sustainable business model innovation for a post-crisis world

Surviving the crisis (and the future)

The world faces an unprecedented crisis due to the global spread of the SARS-CoV-2 virus. While governments are being challenged to save human lives and keep the spread of the virus under control, companies from all industries are facing unseen supply risks, market risks, and, as a consequence, the risk of insolvency. Some respond to this crisis with new and sometimes very innovative solutions: farmers, restaurants, and retailers of all sorts are experimenting with delivery services and are switching from business-to-customer to business-to-business models; book stores and artists are using digital media to reach out to their customers and audiences; and entrepreneurs are forming local alliances to support each other or coordinate their new online retail channels jointly.

The Corona crisis does put companies' resilience to the test. Many are forced to innovate or even transform themselves to survive, which opens the door to new ways of doing business. *Could this also open the door to a better, more sustainable post-crisis economy?* We argue that a post-crisis economy that is more ecologically sustainable and socially just must build on business models for sustainability, i.e. organisations and networks that create value for their stakeholders by following sustainability principles such as circularity, inclusiveness, local and green supply chains, or sufficiency (Lüdeke-Freund et al., 2018, 2019b). Following such principles to stabilise and revive companies could make industries and whole national economies more diverse and inclusive and provide a foundation for more economic resilience in the face of future crises.

More recent debates have introduced the notion of degrowth as a normative framing for such a sustainability-oriented transformation of companies, industries, and national economies (Kallis et al., 2018). The current situation, in which companies around the world are forced to rethink their ways of doing business, together with the notion of degrowth, can inspire thinking about post-crisis business models for sustainability. If the billions of Euros from economic recovery programmes were used to support such business models *now*, as change, disruptions, and transformations occur due the Corona crisis, the economic development of Europe and the world could be put on a trajectory that brings us closer to the normative ideal of sustainable development and contributes to reaching the United Nations Sustainable Development Goals.

Learning from the past and moving towards sustainable business

Learning from the past

Saving the lives of those who are most vulnerable (e.g., elderly people, people with medical conditions, people in need) and developing vaccines and therapies are without doubt the most important tasks during this crisis. In parallel, the political debates about how to stabilise the economy now and how to revive it after the lockdown are intensifying on a daily basis. Millions of jobs and hundreds of thousands of companies are at risk of losing their basis of existence. In Germany, for example, key industries such as automobile manufacturing slowed down to the point where all operations were stopped for weeks. Traditional companies like

Lufthansa, Germany's largest airline group, face bankruptcy and need state support, countless small and medium-sized businesses, micro firms, and self-employed people are lacking up to 100% of their income (e.g., hotels, restaurants, theatres, event organizers). The list goes on, and with each new entry we must ask ourselves: what can we learn from other crises and disruptive shocks to handle the current situation?

To begin with, after the corona crisis we will still be in the middle of an ecological and social crisis – climate change. Many programmes to deal with the financial crisis of 2008 were set up to secure the survival of banks (which were causing the crisis) and revive consumption. This was paid for with increasing levels of resource consumption and greenhouse gas emissions. Moreover, economic inequality is rising worldwide (if to different degrees) – a trend that was neither significantly altered nor sufficiently addressed after 2008. Such tendencies must be avoided this time. Many politicians, industry experts, and researchers have already made the point that fiscal policies, for example, should be bound to criteria such as greenhouse gas emissions or social responsibility in supply chains.

Societal shocks can create windows of opportunity – yet only if they fall on fertile ground. The Chernobyl disaster in 1986 was a profound shock that gripped our global society. Yet, while it triggered a worldwide debate, it did not directly change the energy landscape. By contrast, in 2011 the Fukushima disaster took place at a time when the preconditions for change were more advanced and established. This time, public discourse, new societal narratives, and the availability of innovative solutions gave shape to what we nowadays call the 'energy transition' ('Energiewende'). At least for a certain period of time, the Fukushima shock accelerated a profound change in Germany's energy industry – a flourishing of both technological and social innovations, for example, in the form of more decentralized community renewable energy projects.

Moving towards sustainable business

Referring to degrowth against this backdrop stands to reason inasmuch as it is a discourse that emerged in view of crises. Sustainable degrowth is a transformative quest towards a more equitable socio-economic setting, as well as a reasonable level of economic throughput that, taken together, improve the quality of life while respecting planetary boundaries (Kallis et al., 2018). Hence, degrowth is explicitly not what we are experiencing due to the Corona crisis, namely a disastrous economic recession or depression deteriorating social conditions (e.g., destroying jobs or limiting access to healthcare). Still, degrowth questions economic growth and profit generation as indicators of social wellbeing and companies' contribution to society (ibid.).

Comprehending economic activities' potential and actual diversity beyond merely monetary and reciprocal transactions and relationships is essential in order to imagine, creatively experiment with, and implement new solutions to pressing sustainability challenges. Research into degrowth highlights what we otherwise often turn a blind eye to: our economy already includes local sharing, repairing and self-provision, unpaid family care, and many other potentially non-commodified activities. Likewise, the book "Degrowth: A vocabulary for a new era" (D'Alisa et al., 2015) presents and discusses a diverse collection of approaches that can potentially contribute to the objectives of degrowth. These are, amongst others, simplicity, bio-economics, commoning, and co-operatives.

In light of a degrowth vision, governments and businesses can use the Corona crisis to profoundly rethink their approaches to supporting and doing business and use sustainability

paradigms such as circularity, inclusiveness, local and green supply chains, or sufficiency as an inspiration for reviving and redesigning business activity during and after the crisis. In addition, as consumers are forced to focus on what is really important to them, their routines and habits are possibly more accessible for sustainable change.

Resilience and sustainability transformations for a post-crisis economy

Companies are being challenged to develop new modes of creating value for and with stakeholders, as well as new ways of relating to their technical and socio-ecological environments. We are seeing a window of opportunity here to offer ideas for more sustainable business models that do not repeat past mistakes.

It is our conviction that a sustainable transformation of companies, industries, and national economies is urgently needed. But instead of pushing single entrepreneurs, managers, or customers to make the transformation happen, we are calling for simultaneous and joint changes in various domains: tax laws and labour regulations, cultural institutions, higher education and vocational training, industry associations and business consulting – just to name a few. These institutions are massively shaping our understanding of a ‘good life,’ ‘good business,’ and a ‘well-working economy.’ Thus, they have a great influence on what is being done on a daily basis – and whether we contribute to sustainable development, or not.

Because of all of the fates, the following argument must be made with greatest care and empathy: *The Corona crisis opens a door to a sustainable transformation of companies, industries, whole national economies, and global economic culture. And to be clear: It is not the crisis itself that is a good opportunity; it is the way out of it that is the opportunity.* While crises and societal shocks hold potential for sustainability transitions, it is our current and past unsustainability which put us into a risk society in the first place – a society in which we move from one crisis into the next. This is why our economy must become a post-crisis economy that is ecologically sustainable and socially just.

Crises and aspired transitions bring the perspectives of transition management and resilience to the fore. Resilience refers to a system’s ability to handle disturbances and shocks in robust, creative and adaptable ways, allowing it to maintain its functionality (Palzkill and Augenstein, 2017). In addition, we can understand companies’ ability to contribute to a sustainability transition as their capacity to find new and viable ways of utilising resources, competences, and processes contributing to a more sustainable development. An ability that becomes all the more urgent when existing ecological and social conditions become untenable.

Reflecting on the lessons learned from crises and shocks, as they have been discussed above, and in line with insights from transition as well as resilience research (cf. *ibid.*), we propose four essential lessons for navigating a sustainability transition:

- As the financial crisis shows, we need to learn our lessons from the past. Recipes used in past crises are not necessarily useful in current or future crises. Selling more cars may help for a moment, but it burdens future generations.
- As the shocks of Chernobyl and Fukushima show, we need shared and actionable narratives and knowledge to make effective use of windows of opportunity to motivate real change, such as with Germany’s ‘Energiewende.’
- As the environmental and social crises in light of degrowth show, we need diversity of available ideas, institutional logics, and practices for both resilient responses to

environmental shocks and to facilitate alternative, more sustainable transition pathways.

- As the Corona crisis shows, we need inclusive approaches. Only a handful of (often digital) companies will survive the crisis without problems or even be stronger than before. A great many people are ordering at Amazon, but doing little to support local grocery stores, restaurants, or cinemas.

While companies like Amazon may be very resilient, are they sustainable? We argue that diversity is needed instead of industrial monocultures to contribute to a future-fit and resilient post-crisis economy. Here, the notions of sustainable business model innovation and business model patterns come into play.

Sustainable business model innovation and business model patterns:

Tools for the post-crisis economy

Like any type of innovation, business model innovation is a means to alter and extend the ability of firms to act effectively and efficiently. With its focus on proposing and creating value, business model innovation has become a major technique to develop new, and change existing forms of, organizational value creation. The emerging field of research and practice on sustainable business models has taken up this approach in order to understand and develop new forms of value creation that offer sustainable value propositions to customers and all other stakeholders, and that allow firms to capture economic value while they maintain or even regenerate natural, social, and economic capital (e.g., Dentchev et al., 2018; Schaltegger et al., 2016). Sustainable business model innovation can be understood as a way of translating sustainability strategies into actionable 'blueprints' of value-creating activities of companies. Based on a decade of research on this topic, we define this approach as follows (cf. Lüdeke-Freund et al., 2019b): sustainable business model innovation improves a company's ability to create, maintain, or regenerate natural, social, and economic capital beyond its organisational boundaries by changing the value proposition for its customers and all other stakeholders and/or the way how value is created, delivered, and captured.

A broad knowledge base about the diverse forms sustainable business model innovation can take has been developed in several research projects and publications, partly conducted at ESCP (Lüdeke-Freund et al., 2018, 2019a, 2019b, 2019c). This knowledge base, presented as various classifications of business model patterns, can serve as a source of inspiration and a tool to help companies develop better post-crisis business models. These classifications often follow Alexander's understanding of what a pattern is: "Each pattern describes a problem which occurs over and over again in our environment, and then describes the core of the solution to that problem, in such a way that you can use this solution a million times over, without ever doing it the same way twice." (Alexander et al., 1977, p. x)

We see at least three features that are useful for business design in general and business model innovation in particular: first, a pattern describes a problem-solution combination and thus contains a statement about a problem that is perceived as important and a statement about a potential solution to that problem; second, it is about a recurring problem; and third, there is a generic and adaptable solution to that problem. As such, patterns are also discussed and used by business model scholars and for business model innovation in practice. Transferring the concept of patterns to business models, we see that it is about problem-solution combinations that are proposed to support business model developers and innovators in accomplishing their design tasks. For the case of sustainable business

model innovation, we found 45 patterns with the potential to create ecological, social, and economic value. These were arranged in eleven pattern groups (Lüdeke-Freund et al., 2018):

- “Pricing & revenue”
- “Financing”
- “Eco-design”
- “Closing-the-loop”
- “Supply chain”
- “Giving”
- “Access provision”
- “Social mission”
- “Service & performance”
- “Cooperative”
- “Community platform”

Using and developing patterns for a post-crisis paradigm: Degrowth

In line with the need to learn our lessons from the past and make knowledge actionable, the concept of Alexandrian patterns offers a heuristic device to systematically capture knowledge of experience-based best practice solutions for sustainability: “A sustainable business model pattern describes an ecological, social, and/or economic problem that arises when an organisation aims to create value, and it describes the core of a solution to this problem that can be repeatedly applied in a multitude of ways, situations, contexts, and domains. A sustainable business model pattern also describes the design principles, value creating activities, and their arrangements that are required to provide a useful problem–solution combination” (Lüdeke-Freund et al., 2018, p. 148).

Moreover, business model patterns can function as empowering communicative devices. If done well, patterns make expert knowledge understandable and useful for laymen. This can essentially contribute to making business model design processes more democratic and inclusive, resulting in shared narratives and activities for a sustainability transition.

Last but not least, collecting, discussing, and sharing patterns can greatly contribute to the perceived and actual diversity of our economy. The theoretical conception is that patterns relate to, embellish, and support each other (Alexander et al., 1977). Pattern collections for a certain domain, such as business models for sustainability, turn into pattern languages once their number and the knowledge about how they relate reaches a level of maturity and saturation. Still, pattern languages are living languages reflecting diversity, growing organically, and allowing ever-new answers to complex problems to take shape (Alexander et al., 1977; Lüdeke-Freund et al., 2019a).

To give an illustration, a concrete and new pattern we propose is ‘community presumption’. In research on degrowth, Bloemmen et al. (2015), for instance, present a corresponding case of community-supported agriculture. The pattern takes place in a socio-economic *context* in which citizens are considered as mere consumers of what companies produce, while intermediaries, such as supermarket chains, are positioned in between these two parties. The *problem* is that this form of economic relation and practice does not convey non-material and non-monetary forms of value creation. It disconnects consumers from the conditions of production. Furthermore, it puts producers in fierce competition with each other and, hence, makes the individual vulnerable to poor local conditions (e.g., a dry season). A *solution* then

is to share the risk with local citizens who pay a fixed yearly amount, regardless of how successful the production is. Moreover, local citizens engage in local manufacturing or harvesting, build social connections, experience mutual learning processes, and spend leisure time, for instance, in a green environment. Hence, economic relationships are diversified, monetary exchanges are, to a certain degree, deprioritized, and consumers eventually turn into 'community prosumers.' This reduces producers' workload and frees up time to invest in the quality of organisational processes.

Outlook

The Corona crisis once again raises critical questions about how we collectively want to overcome crises and where we want to go. Governments, educational institutions, consultants, local businesses, and all the other actors who shape our society should rethink what post-crisis economies and businesses should look like and whether business as usual is a reasonable way to move on, or whether lessons can be learnt from those who are already experimenting with alternative business paradigms. The necessary actionable knowledge is available in various repositories of sustainable business model patterns. It just has to be used. The example of degrowth, given here as an illustration, points to the rich avenues and inspiration this sustainability paradigm can offer in the search for sustainable business models for a post-crisis economy.

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