Circular Venture Building

Emerging Fundamentals



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Emerging Fundamentals of Circular Economy

On April 1, 2024, the Netherlands had used 'its fair annual share' of resources. According to the calculations of 'World Overshoot Day', we would need at least four planets a year to continue the country's current living standards.

News items like this remind us of the urgency to move away from extractive use of the earth's resources, and to develop a society that is based on renewable energy and regenerative use of resources and materials.

The development of a circular economy, which strives to minimize the use of virgin materials with strategies like Recycling, Product Sharing, Re-Using or Repurposing, is an essential part of that desired sustainable transition.

Yet implementing a circular economy is easier said than done.

The current linear economic and financial systems are powerful and addictive. The system has become very effective in delivering high profits and year-on-year growth. And although we understand that this extractive system must run into the earth's limits one day, we are all part of this system and conditioned accordingly.

The success of the linear economy makes it very difficult for the pioneers of circular economy – the circular ventures – to develop earning capacity within truly circular chains. And without a revenue model, circular initiatives will eventually be eaten by the linear system.

So where to start? There is no blueprint for creating economic value in a circular chain. The only thing that we know for sure is that it will take a collective effort to establish and safeguard circular chains.

Like these circular chains, the field of Circular Venture Building will be shaped by cocreation and shared learning. That's why we started by bringing together a diverse group of scholars and practitioners and asked them: what do we already know and what do we still need to learn?

From these discussions, we distilled the Emerging Fundamentals of Circular Economy, which can be applied today by venture builders, investors, and their ecosystem partners.

This publication is also a starting point for the development of new methodologies and approaches. It should serve as an invitation for many more practitioners and scholars to actively contribute to the emerging field of Circular Venture Building.

Circular Ventures at the Heart of the Circular Transition

During the 2023 Circular Economy Week, we published an overview of ten specific challenges faced by circular startups in developing, financing, and scaling their business. We framed the experiences, frustrations, and successes of circular entrepreneurs as a clash between two fundamentally different value systems:

the current linear economy, and an emerging new economy based on regenerative principles and renewable sources of energy and materials.

With this insight comes the demand for additional or alternative methodologies of venture development. These address these specific challenges to develop healthy companies which create earning capacity in this budding Circular Economy. And that is where this new study kicked off.

The Field of Circular Venture Building

Methodology development requires a rigorous process of theoretical and practical analysis of the present situation, a formulation of hypotheses and innovative approaches to be tested in (action) research, and will likely need a few learning loops before they become truly effective. (Figure 1)

From our earlier work, we distilled the fields of expertise that would likely be required to **frame and develop the field of Circular Venture Building**: Innovation strategy, financial models, sustainable business models, transition theory, market development, consumer behavior, and macro-economics.

What do we already know and what do we still need to find out? We selected open-minded scholars and practitioners from the relevant themes and asked them to engage in a discussion on the challenges of Circular Venture Building. They shared their expert views on potential routes forward and possible consequences. Summaries of these deeply engaging conversations are the basis of this report.

Multidisciplinary approach: we will need to integrate and combine elements of all ideas put forward. On April 24, 2024, we gathered the experts around the table and challenged them to formulate the fundamentals of an integrated methodology and to reflect on next steps.

In Autumn 2024, we will organize the first conference on 'Circular Venture Methodology', to further develop this field of theory and practice. **This is an invitation to join this field of Circular Venture Building.**

FIGURE 1: Schematic overview of the workflow of methodology development for Circular Venture Building (inspired by the 'Theory of Change' approach of NWO)

PROBLEM STATEMENT

Circular Ventures (CV) are not successful enough to accelerate circular transition.



CV require 'non-linear' development approach to be successful. HYPOTHESIS

Based on our 'our' expertise, we believe doing 'this' will make CV more successful.

CONCLUSION Implement or abandon new methodology or define next research loop. RESULTS & DISCUSSION What are the results of the circular methodology (compared to linear). ACTION RESEARCH Apply the circular methodology to selected

ventures or value chain.

The start of a new field?

Circular ventures are essential to thrive in harmony with the earth's boundaries. Our earlier work (De Sevaux, Rensma, Wierenga, 2023) concluded that circular initiatives fail when we try to fit them into standard linear startup and business building methodologies. The Circular Economy is fundamentally different from the current 'linear' society and its learned behavior. In this project, we combine emerging insights from different fields to shed a new light on Circular Venture Building.

The success of circular startups is directly related to the reciprocity, viability and longevity of their circular partner network, or 'ecosystem'. How to build a successful venture based on collaborative principles, without being swallowed by complexity? We asked ten renowned experts from handpicked business-related academic fields.

These interviews delivered tangible outputs: we identified several frameworks suitable for both existing and evolving scenarios, that provide grip to circular venture development; we hypothesized how existing business school concepts can be adapted to support circular venture building; and we touched upon the fundamental challenges for policymakers and financial institutions to stimulate a thriving circular economy.

An academic roundtable with seven of the interviewees allowed us to integrate the different perspectives into a kaleidoscope view. That view portrays the circular transition as an organic process, where everyone plays their role. Circular economy practices start in small transformative arenas and spread through all kinds of (human) connections.

There are two key challenges for circular initiatives. The first is our own ambition and sense of urgency. Bringing too many people to the table, scaling too early, or too many pilots at once are the pitfalls for transformative impact. The other trap is our addiction to extractive profits. Viable circular ecosystems exist by shared value creation and reciprocity. As soon as one single party extracts more than their fair share, the magic is gone.

With the experts, we feel the ambition to take these emerging fundamentals further – to apply them to specific sectors, develop programs and initiate research projects to validate our hypotheses. That means that this project is not the end, but rather a starting point for further work and an invitation to join this emerging field of Circular Venture Building.

Dr. Anieke Wierenga

THE FIVE THEMES

INNOVATION STRATEGY AND VALUE CREATION

Productive circular businesses are created by redirecting present assets, capital, and capabilities towards regenerative material flows. Circular ventures can only create value through co-innovation and co-creation with existing ecosystem players. As the shape of these productive circular chains evolves, it is important to develop a discovery driven approach. Successful circular ventures don't aim for a big successful exit - they take a long-term view and create real options through aligning minimal viable ecosystems with innovation partners. This obviously requires a patient investor strategy.

LEGAL STRUCTURES AND FINANCIAL MODELS

Current structures and models are built for a linear economy in which value is created by transactional sales of products or services. The essence of a circular chain is that products are re-used, refurbished, repaired, etc. ('R-strategies) and that the partners in that chain deliver services to optimize that regenerative use. To develop a productive circular system, new company structures are required to formalize shared risks, returns and activities for flow, sustainability, and ethics. Implementation requires complex long-term multi-stakeholder alignment.

MARKET DEVELOPMENT, BRANDING, CONSUMERS

Who will pay for it? Circular ventures can only thrive when there is a market. Developing a valued regenerative market over one-time-use options is a complex game with many stakeholders. Consumers want to buy sustainable products but face hurdles, like rising prices or inconvenience. The current markets favor linear solutions, but some circular ventures are successful through smart stakeholder management. Technical or idealistic founders of circular ventures tend to overlook the importance of brand building and market development, as well as playing a part in changing regulations.

SOCIETAL CHANGE AND TRANSITION

Circular venture building is part of a societal transition. Topics like scale, market development, time-to-market, and value all become multi-layered. The development of a regenerative economic system based on the existing fossil-based is a multi-stakeholder game with players from different disciplines and organizations. To make sense of the venture challenges and thrive in opportunities, a working knowledge of transition theory is required.

MACROECONOMICS

The current key parameter for Economic Welfare is defined by the number and size of economic transactions; this focus drives companies to maximize profitability – often at the expense of natural systems. By definition, a circular economy cannot be based on companies that maximize profitability. At the same time, companies in the circular economy need to provide for sufficient sources of income for their employees, financiers, and shareholders.

THE EXPERTS



Jan van den Ende is

(emeritus) professor of management of technology and innovation at Rotterdam School of Management, Erasmus University (RSM), and was also Professor of Horticulture Innovation.



Jan Jonker is a business expert, consultant and was professor of sustainable and circular entrepreneurship. Wrote, co-wrote, and edited over 25 books. Appointed as an officer by HRH Willem-Alexander in 2019.

Peeter Verlegh is Professor of Marketing and the Head of the Marketing Department at VU. He holds a PhD in Marketing and an MSc in Food Science from Wageningen University.







Niels Sprong is a senior lecturer in Business Innovation and researcher at the 'Economy in Common' professorship at Avans University of Applied Sciences. Has published on the influence of social enterprises.



Hans Vermaak is an independent consultant, senior research fellow at the Dutch School for Public Administration, extraordinary councilor at the Dutch Safety Board, and associate partner of Sioo and Twynstra Gudde.





Murat Tarakci is Professor of Innovation Strategy at the Rotterdam School of Management, Erasmus University, to create a positive impact by inciting innovative organizations to address the world's current challenges.

Rita McGrath is a bestselling author, speaker, and longtime professor at Columbia Business School. One of the world's top experts on innovation and growth, she ranked among the Global Top 10 management thinkers.

Elisa Achterberg is the co-founder of the Circular Finance Lab. Learning the principles of living systems made her realize that there exists a major gap between our financial system and the real economy.

Ellen van der Werff is Associate professor environmental psychology at the University of Groningen. Researcher of key factors influencing consistent pro-environmental behavior and strategies.

Lucas Simons is a thought leader in the field of system change and transmission. Founder of NewForesight consultancy firm focusing on transition to sustainable economy, as well as speaker, trainer, facilitator, and author.

Hans Stegeman is chief economist at Triodos Bank, responsible for the economic & sustainability research on impact strategy. Believes in the crucial role of the financial sector in changing economic systems.

CIRCULAR ECOSYSTEMS

"If you want to scale, you'd better have a full perspective."

Prof. Dr. Murat Tarakci and Prof. Dr. Ir. Jan vd Ende

Rotterdam School of Management

Not many startups have the perspective of being part of an ecosystem. Instead, **in their search for product-market fit, startups typically only look one step before and after their own position in the value chain.** In terms of the (Ellen McArthur) Butterfly Diagram, they don't look at the wings but only at the abdomen. From research we did in the telecom industry, we found that startups that aligned with a larger company in the existing ecosystem have a better chance of success than startups that don't. Startups that operate on themselves have a weaker position in respect to the existing ecosystem.

We believe that an ecosystem-based startup methodology will make (circular) startups more effective in their market introduction.

The training program that we are building (in collaboration with GCNE), aims to support the startups to:

- 1. See: Map their innovation ecosystem: identify (relations between) actors and stakeholders beyond their direct customers and suppliers
- 2. Seize: Identify the critical partners or complementors and formulate and test hypotheses for joint value creation
- 3. **Sustain**: Develop and maintain those critical partnerships and grow the other ecosystem relations.

The one mistake that startups will make is to approach all possible partners in their ecosystem. Instead, you need to figure out which party is likely to be the bottleneck. Pick the potential bottleneck that you need to align first. Then you can go to the next partner. And so on. Then so.

Ecosystem innovation requires a different kind of leadership. Before, startups were taught about Porter's Five Forces, where it's all about squeezing more from your customers, from your suppliers. But the Porter playbook falls short in an ecosystem world where leadership should **emphasize joint value creation rather than an egocentric approach,** where it's all about you, your own business model and market share.

To be effective in creating partnerships with these large incumbents, startups also require **alliance building capabilities**. There is always the risk that you're eaten or not treated well.

CREATING CIRCULAR OPTIONS

"Venture capital in its current form didn't exist even 50 years ago. Today it is competitive, and that has brought the returns to investors down. Investors will have to figure something new."

Prof. Dr. Rita McGrath

Capital right now has created a bunch of mini booms in the digital economy. All that opportunistic investment activity creates the infrastructure on which the next generation of technologies can be born. But here's the but: **you have to extract the capital from the casino economy into the production economy.**

1. Identify the likely platforms for future growth

The pattern you want to look for is (1) the identification of an existing capability or space, (2) the willingness to do patient experimentation in that space, and (3) the ability to tag on to a market that does exist.

Let me explain with a story. About 15 years ago, the CEO of United Paper Mills noticed that the global trends in paper usage were negative: he realized that beyond paper milling, one of the core skills they had developed over years was enzymology. He split the company and dedicated the new part to the biofiore business, made modest investments upfront, and experimented in new market applications. They are now a global player in enzymatic treatment of biofuels.

2. Base your investment strategy on the option value of the startup

As you know, in an early-stage venture, conventional financial metrics mean nothing. Instead, you want to look at the option value of a startup, which is determined by the upside, downside, and scalability of the startup.

3. Discovery Driven Planning (or DDP)

The idea of DDP is that you plan a next set of learning activities called checkpoints. This means you keep your funding as lean as you possibly can until you validate assumptions.

A Productive Investment strategy requires a long-term view.

Most VCs give startups too much money, too early. It becomes a predictable issue: VC money is spent on (expensive) company foundations and the startup runs out of cash before the actual scaling even starts. In contrast, Amazon will only embark upon ventures with a 5-year time horizon. To assess the project, they will put themselves in the position of five or six years in the future, and then they'll write a press release and a FAQ about the product as if it existed. Then they'll have a big debate whether that's worth pursuing, and work backwards.

That's the way VC funds need to be thinking, because the wish of starting today and become a \$2 billion business in two years, well, it seldom works out that way.

CHOOSING CIRCULAR

"That policy nonsense <mark>of</mark> talking about a 50% circular economy by 2030 is such crap that it really gives you a p**ai**n in your stomach."

Prof. Dr. Jan Jonker

We will not abandon the linear economy. We can work to radically reduce the negative side-effects of the linear economy by making it more 'sustainable'. And next to that, we would like to extend the use (and re-use) of natural resources, products and components within that economy. The circular economy complements the linear economy. We need them both. We can only shape the circular transition if we make some radical and fundamental choices.

It is time to agree which part of the economy is best suited for circularity.

It seems more than sensible to start a debate about this and then create policy accordingly. The primary product groups for circular transition as identified by the Ministry of IenW can be a good starting point.

In our transition towards more sustainable material use however, circularity can never be the only criteria. I advocate looking at four topics at once: Sustainability, Circularity, Quality of Life and Biodiversity. Call them 4 focus points. Imagine that you would want to work on the introduction of bio-based building materials. Then that should not be at the expense of the meadow birds – to use a silly example.

To tackle these four problems, **you should design and implement new chains at once and at scale**. That means that we get away from the concept of an incremental growth model that is based on pilots which scale linearly. This approach will force us to find new ways to cooperatively organize and scale through novel business entities: a circular cooperative.

Today, neither the Chamber of Commerce nor the bank will not allow an entrepreneur to register a 'chain' or a 'loop'. But **the circular entrepreneur who will start on his own will fail** - he will need commitment from chain partners to close the loop together.

Inspiring examples of such **cooperative alliances** are cooperations like ones in Mondragon and Emilia-Romagna, or the wood pulp chains in Finland. We can learn a lot from these frontrunners about integrated chain management and cooperative principles.

The ideal legal structure of a circular alliance combines organizational structures of a value chain, circular loops, and a network. We don't know yet what business models and revenue models in such a circular cooperation will look like. **How will such a cooperation create value and how will the members benefit?** That topic requires a fundamental economic debate.

CIRCULAR SPREADSHEET

"Without a model for Excel, the perspective for the investor remains far too vague."

Elisa Achterberg

Product-as-a-Service (**PAAS**), a fundamental principle in the Circular Economy, **does not fit within existing financial structures**. The biggest challenge: pay-back time of an investment is much longer than in a transaction model. Instead of 'simply' selling a product, a PAAS business will earn money over time. To evaluate the viability of a PAAS model, a financier will look beyond the P&L or Balance Sheet, and want to know: will this entrepreneur be able to retain its customers? Will the product be sturdy enough to survive the lifetime of the contract?

In most cases, finance requests for PAAS models will end up at the "Financial Lease" Desk. But **PAAS is not Lease, and that means that financing usually fails.** Lease constructions do usually not consider the full lifetime of the product and therefore underestimate the economic value of a PAAS construction. This means that viable PAAS models do not get financed.

A very successful example of a PAAS model is Swapfiets. The business model of Swapfiets will only work if the bikes are robust and do not require a lot of maintenance. To develop the most sustainable bike ever, Swapfiets will need to collaborate with partners like the tire supplier and the battery producer.

For Swapfiets and two chain partners, we created the **CiSe (Circular Services) participation agreement**, in which chain partners formalize their collaboration in a joint revenue model. This way we organize **transparent sharing of risks and returns** such that circular incentives are spread through the value chain. We are currently testing this instrument with Swapfiets and other PAAS chains.

It works as follows: The CISE foundation owns the assets that are related to Service (e.g., bike, tires, battery) and administers the transactions within the chain. Each partner can only claim the cashflows that are generated by the assets that they financed. The CISE fund is not specific for one chain, in the future it could cover a portfolio of, say, 20,000 bikes, 80,000 phones and 30,000 headphones.

The CISE foundation requires a multi-stakeholder business model. It will not work if the chain is not circular. It allows project-based finance of circular chains between companies, also if participants stay linear outside these projects.

The key part of the structure is the administration of transactions, based on the block-chain principles. Standardization and simplification of these tools is essential to make Circular Business Models tangible and investable for financiers.

BRANDING CIRCULAR

"Communication only works if your message gets through."

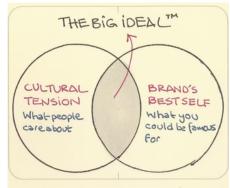
Peeter Verlegh

At some point, startups will need to start selling a product or a service.

One can only live off an idea for so long. But then you need to consider: What do I really offer? How does that fit with the story that I am telling?

The most important thing is to convince the market of the benefits of your product.

Advertising is truth well told. Do not promise things that you cannot deliver. **You cannot sell a vision.**



I believe in a combination of the 'branding perspective' and 'consumer marketing' approach. It is important to tell the story of your brand in a way that resonates with the experience and perspective of the customer. Borrowing from the Big Ideal model of Ogilvy (pictured): on the one side, you have the brand's best self (say: the startup which has developed a cool new technology) and on the other side, you show the cultural tension that your customer experiences. Examples of cultural tension could be the concerns about Climate Change or Social Inequality.

A strong concept combines these two into a strong, relevant, offering. A favorite example? That would be 'de Koffiejongens', they allow me to continue to use my Nespresso machine without feeling regret over the environmental burden of recycling aluminum cups. They solve a very concrete problem for me.

Brand Activism, in which brands publicly take a stand on a social or political issue, would fit startups with a circular mission. The trick here is that you may want to develop really creative strategies to convey your message: how do you create and tell stories that make your brand relevant or interesting. How do you become word-of-mouth?

An inspiring example is WasteCraft, which effectively communicates the issues around plastic waste by production of skateboards, furniture and other products in which the plastic waste is still recognizably visible.

It would be interesting to see what happens if circular startups would seriously develop a proper brand (activist) communication strategy.

ACTIVATING CIRCULAR "Change is only real if you start doing it."

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Prof. Dr. Ellen van der Werff

From our studies, we know that **most people are concerned about climate change**, would like to contribute to a better environment, and are willing to act environmentally friendly. In practice, however, not much comes of these good intentions. People say: **I am willing to change my behavior, but not YET.**

In my work, I have mainly studied consumer behavior with respect to the environment, but we can try to look at some of my research findings and explore their relevance for the development of new circular chains.

We see that the degree of Environmental Consciousness of one's social sphere has a big effect on the activation level of environmental behavior.

If an employer clearly advocates sustainability and has embedded a strong *Corporate Social Responsibility* culture, then you often see that employees relate their own behavior to that mission. Apparently, people think: "I am part of an environmentally friendly organization, that makes me environmentally friendly." As a result, they often adopt more environmentally friendly behavior.

A mechanism that drives the pro-environmental behavior Is Dynamic Norm Information: information indicates that a growing number of people are behaving pro-environmentally. We noticed that effect when studying the impact of subsidies on electric cars. Even though most subsidies ended up to people already considering buying an electric vehicle, the passive majority received a clear signal that electric driving was here to stay. More people started saying "In the future I will also drive an electric car" – electric cars became more acceptable.

Most people behave more pro-environmentally at home than at work, probably because they feel more in-control in a private setting.

How to Stimulate Circular Citizenship in a Business setting?

To stimulate pro-environmental behavior in a company, two things are essential:

- 1.**Top-Down**: The CSR message needs to be taken seriously, broadly communicated, and adhered to by the management.
- 2. **Bottom-up**: Research shows that direct behavior change is more effective if initiated by peers than by the boss.

Until now, research on in-company behavior was focused on extra-role behavior. It would be interesting to study how that behavior translates to in-role decisions.

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CIRCULAR MARKET CREATION

"Understanding how all parts are connected and who does what - that is crucial when scaling disruptive innovation."

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Niels Sprong

Circular ventures require circular markets. But how do you create a new market?

Markets are not only shaped by supply and demand, but also by institutions and other players (consultants, investors, market parties) that jointly develop a set of formal and informal rules and norms. Within the marketing discipline, there is an emerging trend towards research on how markets really work, using sociological theories and institutional theory to describe changes, innovation, and creation.

Market creation for sustainable business models involves a combination of legitimating preferable business models and the de-legitimating of less desirable business models.

In my research I found that **successful sustainable social enterprises as influencers play to the dynamics of that market creation very well.** You could therefore imagine that a startup support program that challenges the startups to map their own market dynamics and identify the key market players, would allow them to engage the right stakeholders at the right phase in their development. Based on a meta-analysis of disruptive market introductions, Leena Aarika Stenroos developed an overview of types of stakeholders important to radical innovation, which could be a good starting point for startups.

Protix is an interesting example of a startup which did a good job on market creation for their disruptive insect business. Based on a Nexus Uni search on the Protix market introduction, we found that their go-to-market involved numerous productive interactions with key players in their innovation system: knowledge institutions, regulators, governments, and financiers. (Avans student project).

Circular business models require legitimacy of circular practices across the chain. At Avans, we engaged in the Circular Cotton Cascade project, which is an example of a collaboration of NGO, the startup Raddis Cotton, Farmer cooperatives and a few bigger players. By taking an 'orchestrating' role to create this chain, Raddis and Avans aim to legitimize circular practices for all cotton chain partners.

Market creation is not a one-man show. All activities of all startups and other actors within the circular economy will eventually contribute to the change of direction of the system. But that also makes it very difficult to assess the value of the contribution of one single startup. And that makes you wonder how long sustainable business models will survive if most of the market does not change.

CIRCULAR ORCHESTRATION

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"If all parties in the Netherlands involved in making the Dutch Economy circular had a musical instrument, what kind of music would we make together?"

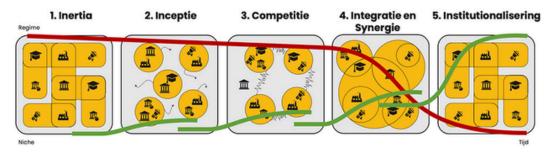


Lucas Simons

There is a systematic pattern behind sustainable transitions. That's what I realized earlier in my career, when I got tasked to develop responsible supply chains for products like coffee, cocoa, and soya in the name of UTZ. Based on that field experience (described in my book *Changing the Food Game*), Andre Nijhoff (Nijenrode) and I developed the so-called sustainable market transformation theory, which describes a pragmatic and unambiguous process that practitioners can follow if they want to make a supply chain more sustainable.

The TransMission model, which I launched in June 2023, combines the Transition model of Drift, the Mission-driven Innovation systems from the Copernicus Institute, and our Market Transformation model. This model could provide a good framework to take the lead in making certain sectors more sustainable. The model forces the user to answer some fundamental questions and helps to develop the Transmission Strategy and identify the Transmission Stakeholder Matrix for the appropriate transition phase. That **allows you to frame transition as an organizational challenge which you can orchestrate and manage.**

In our model, it is not the sector or the problem which goes through the transition phases, but the solution, e.g. hybrid meat in the example of the protein transition.



We need a party who takes 'the lead' to orchestrate the transition. That should be a party with mandate, authority and knowledge, but cannot be the government.

We need a vision and an orchestrating party. The challenge is that for many sectors we lack a vision on a sustainable future, and we don't know yet which solutions are available, and in which phase they are. Who is the right party to take the lead and how should we organize the key players around them?

And on top of that, **we try to solve too many problems at the same time** – there are too many crises, which the government cannot solve on their own.

I think that that's why transitions fail. It is not because we cannot do it.

SCALING CIRCULAR

"Systems were not created all at once, therefore cannot be easily dismantled."

Hans Vermaak

The success and value of circular ventures cannot be separated from the broader context of a sustainable economy. The development of that sustainable economy is a complex issue and requires a multitude of networked initiatives. Underlying causes run deep. You need to disrupt current practices and replace them by something fundamentally different. To reach the required depth, such initiatives need to be limited in size. Quoting the psychologist Karl E. Weick, change cannot be deep, quick, and broad all at once.

A networked problem requires a networked answer. It is tempting to come up with an 'integrated' approach that covers all aspects and involves many stakeholders. But that takes the complexity out of the approach and weakens its fit for situated contexts. It is better to match the power and complexity of the persistent problems themselves.

A networked answer may emerge from concrete initiatives from different actors who develop 'the new' in a clumsy, searching, co-creating way. This can be within policy circles, logistical chains, neighborhoods, etcetera: each of them going 'deeply' enough to make a difference. Interactions between initiatives beyond their immediate neighbors weave the connections of the emerging network. This kind of thinking is at odds with values like control, transparency, and stability.

In this way of thinking a network is not something you 'build'. **Layered networks** emerge because many local practices (like ventures) weave connections with the context around them. Networks are outcomes, not causes of change.

To enable different types of connections, it helps to differentiate different types:

Spreading as social entrepreneurs: connections related to sharing professional know how (e.g., between start-ups).

Switching as institutional entrepreneurs: connections related to bridging different systems like organizations, value chains or ecosystems (e.g. the connection of technology developers with financial experts or policy makers).

Destabilizing as cultural entrepreneurs: connections related to shifting underlying structures of meaning and power. An example would be the 'Urgenda' lawsuit against the Dutch State.

Clear visions, smart goals and reassuring words will not make a difference. It assumes the apex has all the answers and the change is predictable and linear. Such approaches sooth unrest, but also slow us down as soon as you take them too seriously. It makes more sense to say, "how can I help others to show agency within their own realm and make connections beyond that?"

BROKERING CIRCULAR

"If you can't make money there is nothing, nothing at all"

Hans Stegeman

Schumpeter does not suffice. The circular transition is not simply a market transition driven by creative destruction of entrepreneurs. That is because there is no money to be made in the early circular economy. Instead, the **circular transition**, like every sustainability transition, **is primarily driven by policymakers**.

The circular transition doesn't halt because financiers do not understand circular business models, that is not the issue. The only relevant question is: is there a profitable business case? That is a very simple principle that you cannot ignore.

If you intentionally decrease the number of transactions by extending the lifetime of products or by sharing and repairing consumer goods, the macro-economic consequence will be that there will be less economic growth.

Circular risks and returns are not favorable. To get the circular transition afloat, we need to take the current reality of financial and economic systems into account. The reality of (most) circular business models is that they deliver a lower yield than linear practices at a higher risk.

A 'maximal profit incentive' stimulates so-called extractive businesses, but a **circular economy requires the opposite: regenerative and circular businesses**. Consequently, investors will need to accept lower returns. That does not fit in the current economic conventions, but it is the only solution. To deal with that, circular ventures may choose for a Social Enterprise structure, like Fairphone has done.

Circular Risks: Next to innovation and transition risks, the **circular transition comes with specific risks which have to do with the interdependencies and feedback loops that are intrinsic to circular chains.** These virtual risks are persistent risks (not related to a transition or innovation), which dramatically reduce the financial viability of the real circular economy.

As the 'old economy' can still drive higher returns from existing linear practices.

It will take a long time before the main market moves to lower yield sustainable investments. **That does not mean that the circular transition can wait.** Obviously, we need to address the structural errors in the current economic system. But at the same time, we can also be creative and **build new structures within the old**.

You cannot shape a transition only talking about what the future should look like. That would be too easy.

THE ACADEMIC ROUNDTABLE: A KALEIDOSCOPE OF PERSPECTIVES

What are the emerging fundamentals of circular venture building? The insights from the previous interviews illustrate the multifocality of perspectives required to build a circular economy – both at small, operational scale of individual ventures, and at the level of macro-economic principles. As a first step towards developing such a multi-disciplinary effort, we gathered seven interviewees (Taracki, Jonker, Achterberg, Verlegh, Sprong, Simons, and Vermaak) for an academic roundtable. During this inspired discussion we combined and contrasted the different perspectives, and formulated six building blocks for Circular Ventures.

1. A tangible image for the Circular Economy

What do we imagine a Circular Economy to look like? At micro-level, consumers and entrepreneurs are developing examples of circular practices, by designing circular products, re-using consumer goods, initiating repair shops, or launching successful businesses based on circular practices (like MudJeans, Vinted, and Buurman).

Tangible examples of circular economy help build a shared image of what a circular economy entails for our society. However, once such expressions no longer represent the evolving status of that economy, they may turn into 'vanity projects'.

A common image of circular economy should convey the concept of the circular transformation, it is not a replicable blueprint for circular businesses.

2. Circular Economy Principles as guidance

Circular Venture Building requires a situated approach, but it may be possible to identify, develop and define guiding principles for circular economy ventures. Inspired by biomimicry and the universal patterns of living systems, John Fullerton has published 8 Principles for Regenerative Economics. In a similar fashion, Herenboeren, a Dutch organization of cooperative farms, has defined seven principles to develop nature-driven farming.

Would it be possible and desirable to develop something similar for circular ventures or circular systems?

3. Reciprocity as Primary Principle

Successful leaders of circular ventures don't work in isolation. That means that

circular entrepreneurs will need to learn to collaborate, co-create and coinnovate with partners to develop a viable business model together. The keyword here is reciprocal value creation. Value is not expressed in money only, partnerships may also address security of supply, waste streams or operational efficiency.

Words that are being used for these circular chains are communities, sharing, and steward ownership. We agree that for reciprocity to work, it will need to be applicable to all partners. This model will obviously never work if one party aims for extractive profits, and withdraws all funds.

4. Create arenas: Minimum viable ecosystems

The circular economy will emerge from decentralized, transformative initiatives in which groups of people jointly develop a fundamentally new way of working for a specific situation, in a specific sector or material flow. In this frame, the Multi Level Perspective (Geels, 2001) gains a new meaning. All fundamental changes, either at micro, meso or macro level, are put in place by a (small) group of essential actors: a transformational arena. Examples would include decisions about macroeconomic fundamentals, financial models or 'end-ofwaste' regulations.

To enable recycling or reuse loops for materials, startup teams will have to orchestrate an 'arena' of partners from different traditional sectors like textile, building materials and utilities for clothes recycling. The orchestration of such a minimal viable ecosystem will require co-innovation and rightsizing. Dare to start at the right scale that fits with your network and ambitions. In time, a minimal viable ecosystem will attract new partners and mature in an organic way.

The right size of a transformative arena is determined by the expertise, experience and level-of-influence of the participants. A common observation is that discussions about complex topics end up in 'talking head sessions'. A good question to ask is "Are we still transformative enough?" And if the answer is no – it is time to scale down.

5. Spreading is the new Scaling

In Venture Capital terms, a scalable business model allows companies to become more profitable at scale as costs-per-item go down through production efficiencies and/or platform effects. The nature of a circular venture's offering will often be localized, situated in a city, near a production site or sewage station. This model is difficult to scale in the traditional way, and the venture may need to find a different way to spread its practice. They may license their technology or methodology or develop a franchise model to develop revenues from different locations.

We also see successful circular entrepreneurs develop a new way of scaling: it is spreading instead of scaling. They create a movement around their initiative, which invites new partners to join the innovation ecosystem. Each new partner is taking over the main principles but starting his or her own formal entity. Together they improve the offering, scale the impact, and grow the value of their circular innovation.

Using the metaphor of a garden, circular scaling is closer to traditional English gardens, which use informal layouts and winding paths to allow the natural ecosystem to build the garden on its own. To compare, a French garden is characterized by formal, symmetrical designs and straight paths. The English Garden has no central guidance nor a "winner takes all" principle, rather a design where each part adheres to the same common principles.

6. Pace the Ambition. Create an Ecosystem Readiness Level (ERL)

There is no doubt about the 'urgency' of circular practices. Our expert group also shares the ambition and feels responsibility to contribute to the circular development goals where possible. At the same time, words like 'ownership' and 'centralized approach' can get in the way of effective action.

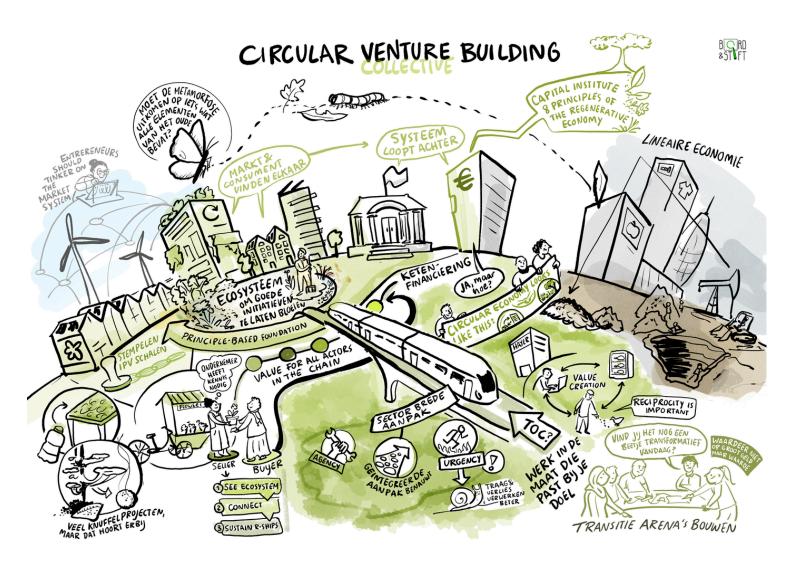
The development of the circular economy is only at the start of a multi-actor, multi-factor transition process. It will take time and many experiments with various players to develop circular practices at all levels in various contexts, e.g., the construction sector, the financial world, or in a neighborhood. There is a risk that 'urgency-inspired' central measures actually counteract the transition, as they ignore the actual time and mindset required for these deep, systemic, transformations.

Rightsizing circular initiatives to remain viable and transformative requires courage: investors, accelerators and policy makers will likely ask for scale and speed. But circular ventures that scale before their ecosystem is ready, may end up with empty factories for outdated propositions and eventually fail. It would be interesting to try and define 'Ecosystem Readiness Level' to gauge how well a venture is prepared to scale.

Our Initiative

This project started with the ambition to develop a blueprint for circular venture building. The interviews and subsequent discussion show that we don't have a clear cut answer yet. At the same time, this publication contains a valuable set of insights and frameworks which can serve as fundamentals for successful circular ventures and improved circular accelerator programs. We consider our roundtable to be one of the many transformative initiatives that will shape the Circular Economy. And we take this further, apply the insights and continue the learning process. What would it look like if we would jointly build a development program for circular ventures or a circular chain? How can we organize ourselves and apply the fundamentals that we formulated in this publication to a specific sector or arena?

We know that we will have to develop these initiatives in collaboration, cocreation and co-innovation with partners. Please reach out to if you would like to join this circular venture building movement, or would like to discuss how to apply the insights from this report.



During the discussion the following companies were mentioned as examples for inspiring practice: MudJeans, Repair Café, De Kleine Aarde and the microentreprise innovation approach from Haier.

THE TEAM



Anieke Wierenga Director

"Shaping thriving circular ventures requires an interdiscipinary approach."



Carla van Heck Production Manager

"We cannot build a new economy with past methods."



Guy de Sevaux Producer

"This could be the start of a new field."



Antoine Heideveld Screenwriter

"What would an MBA for Circular Entrepreneurs look like?"



Arjan Rensma Composer

"The development of circular theory and practice will go hand in hand."



Lucas Lemmens Assistant Director

"We need a new story about our economy."



Valeria Mecozzi Editor & Producer

"All that is learned can be unlearned; it's up to us to lead the way."

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