







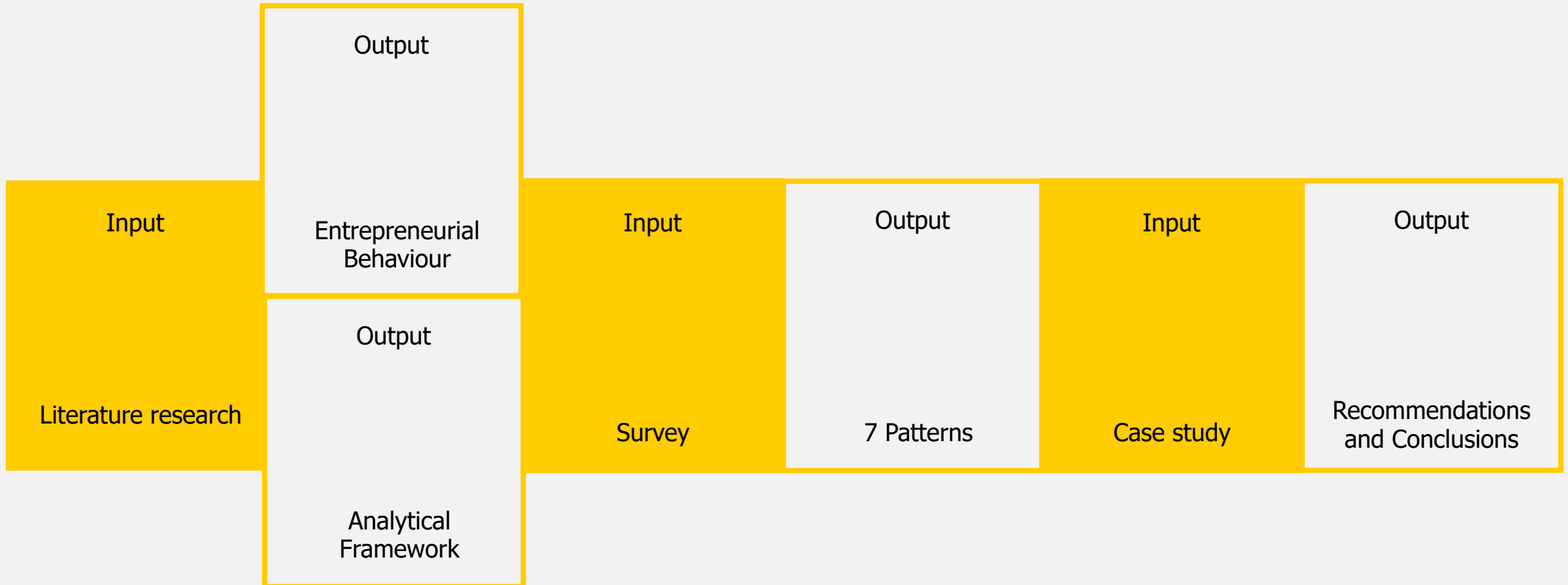
# The 7 Patterns of Entrepreneurial behaviour



“How does entrepreneurial behaviour in the value-chain actors of the built-environment contribute to its transition to a circular economy?”

# The process..

Theory      Practice



# Three Cases

**BLUE CITY**  
Surfing the  
new economy



  
**EDGE**  
TECHNOLOGIES



**THE GREEN HOUSE**  
eat · meet · relax · enjoy





**BLUE CITY**  
Surfing the new economy



EDGE  
TECHNOLOGIES

THE GREEN HOUSE  
eat·meet·relax·enjoy

THE GREEN HOUSE  
eat·meet·relax·enjoy



# Ten Organisations



Rijksvastgoedbedrijf  
*Ministerie van Binnenlandse Zaken en  
Koninkrijksrelaties*



# Many learnings

	What is it?	Why is it needed?	How can it be done?	Output
 <p>Circular Ambition</p>	Developing an ambition to improve the environmental, social and economic impact of building processes	<ul style="list-style-type: none"> <li>To guide decision-making on all levels</li> <li>To establish an identity in circular development</li> <li>Attract partners with similar ambition</li> <li>Build coalitions</li> </ul>	<ul style="list-style-type: none"> <li>Defining the ambition</li> <li>Communicating the ambition across the whole organization + external parties</li> <li>Deciding between long term ambition and short term gains</li> </ul>	Securing ideals of circularity and sustainability within the organisation and its environment
 <p>Experiment &amp; Learn</p>	Utilising the Build-measure-learn loop to build a sustainable business as an outcome of smaller controlled experiments	<ul style="list-style-type: none"> <li>To develop new knowledge</li> <li>To deliver proof of concepts</li> <li>To reduce risks</li> </ul>	<ul style="list-style-type: none"> <li>Taking up smaller projects</li> <li>Living labs for research and development</li> <li>Invest in pilots</li> </ul>	Creation of specific-knowledge and leverage
 <p>Take Risks</p>	The propensity to bear the additional risk and tolerate ambiguity posed by uncertainties in the CE	<ul style="list-style-type: none"> <li>Circular construction process includes more uncertainties than planned construction</li> <li>To deliver proof of concepts</li> </ul>	<ul style="list-style-type: none"> <li>Partnering with risk-taking actors</li> <li>Shared risk business models</li> </ul>	Internalising externalities (Kraaijenhagen et al., 2018)
 <p>Org. Innovation</p>	Changes that are brought about within the organisational environment due to the nature of circular construction projects	<ul style="list-style-type: none"> <li>To internalise the process shift from traditional building to circular building</li> <li>To improve problem-solving capacity</li> <li>To facilitate innovative ideas</li> </ul>	<ul style="list-style-type: none"> <li>Creating a team with diverse skill sets/expertise</li> <li>Managing project based involvement</li> <li>Developing strategic partnerships</li> </ul>	Boosting market readiness
 <p>Take the lead</p>	Playing a central role in pushing circular ambition across the value chain	<ul style="list-style-type: none"> <li>To develop awareness, interest and urgency in coalition actors</li> </ul>	<ul style="list-style-type: none"> <li>Involving partners as early as possible</li> <li>Aligning the interests of the varying actors</li> <li>Developing relationships based on transparency and collaboration</li> </ul>	Project governance
 <p>Role Shift</p>	To look beyond the traditional role of the developer and integrate other supply chain functions into the role	<ul style="list-style-type: none"> <li>Increase accountability across the project lifecycle</li> <li>Align incentives across the long lifecycle</li> </ul>	<ul style="list-style-type: none"> <li>Diversification in key activities</li> <li>Develop long lasting relationships</li> <li>Extend responsibility into operation and end of life phases</li> </ul>	Increasing skin in the game
 <p>Innovation in Business Models</p>	Innovating the product/service delivery leading creation of new and undiscovered value	<ul style="list-style-type: none"> <li>To view circularity as a business opportunity</li> <li>To stimulate the market mechanisms</li> <li>To deliver a feasible business case</li> </ul>	<ul style="list-style-type: none"> <li>Widening the core competencies</li> <li>Collaboration based business models</li> <li>Diversification into new products and services</li> </ul>	Business models that add economic, environmental and social value

*“you want to know, right from the start, what your ambition is because, in the end, you get a better project”*

*– Constantijn Berning (EDGE), 2021*

Area 2/17	Area 2/18	Area 2/19	Area 2/20
<b>Developing an ambition to transform the conventional, linear and resource-intensive model of existing products</b>	The ability to identify and exploit the potential of disruptive models, designs, and processes with a view to creating new products.	Defining the technology and business model of a disruptive product, and identifying the key resources and capabilities needed to develop it.	Developing a business model for a disruptive product, and identifying the key resources and capabilities needed to develop it.
<b>Identifying and exploiting the potential of disruptive models, designs, and processes with a view to creating new products</b>	The ability to identify and exploit the potential of disruptive models, designs, and processes with a view to creating new products.	Defining the technology and business model of a disruptive product, and identifying the key resources and capabilities needed to develop it.	Developing a business model for a disruptive product, and identifying the key resources and capabilities needed to develop it.
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# Developing a Circular Ambition

What is it?	Why is it needed?	How can it be done?	Impact
<b>1. Vision</b> A clear, compelling picture of the future that inspires and motivates the organisation.	<b>The guide decision-making in all areas.</b> The organisation can identify critical strategic areas. Aligns partners with similar ambition and capabilities.	Define the strategy. Communicate the vision and strategy to all employees. Align resources with the vision and strategy.	Provides a clear direction and purpose for the organisation. Inspires and motivates employees.
<b>2. Mission</b> A statement of the organisation's purpose and values that guides its actions.	Provides a clear purpose and values for the organisation. Aligns the organisation's actions with its purpose and values.	Define the mission statement. Communicate the mission statement to all employees. Align resources with the mission statement.	Provides a clear purpose and values for the organisation. Inspires and motivates employees.
<b>3. Strategy</b> A plan of action that defines the organisation's competitive advantage and how it will achieve its goals.	Provides a clear plan of action for the organisation. Aligns the organisation's actions with its strategy.	Define the strategy. Communicate the strategy to all employees. Align resources with the strategy.	Provides a clear plan of action for the organisation. Inspires and motivates employees.
<b>4. Structure</b> The way the organisation is organized, including its departments, teams, and reporting relationships.	Provides a clear structure for the organisation. Aligns the organisation's actions with its structure.	Define the structure. Communicate the structure to all employees. Align resources with the structure.	Provides a clear structure for the organisation. Inspires and motivates employees.
<b>5. Culture</b> The shared values, beliefs, and behaviors that define the organisation's identity.	Provides a clear culture for the organisation. Aligns the organisation's actions with its culture.	Define the culture. Communicate the culture to all employees. Align resources with the culture.	Provides a clear culture for the organisation. Inspires and motivates employees.
<b>6. Innovation</b> The process of developing new products, services, or processes that create value for the organisation.	Provides a clear innovation process for the organisation. Aligns the organisation's actions with its innovation process.	Define the innovation process. Communicate the innovation process to all employees. Align resources with the innovation process.	Provides a clear innovation process for the organisation. Inspires and motivates employees.
<b>7. Leadership</b> The ability to influence and inspire others to achieve the organisation's goals.	Provides a clear leadership style for the organisation. Aligns the organisation's actions with its leadership style.	Define the leadership style. Communicate the leadership style to all employees. Align resources with the leadership style.	Provides a clear leadership style for the organisation. Inspires and motivates employees.

Why?

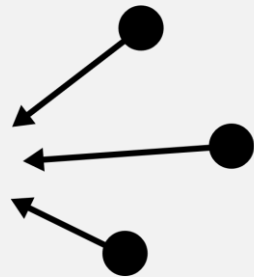


Guides decision making across the organisation

Why?	Why is it needed?	How can it be done?	Impact
1. Vision	The guide to developing a vision for a business is to start with a clear understanding of the business's purpose and mission. This involves identifying the business's core values and the impact it wants to have on the world.	Develop a clear vision statement that outlines the business's purpose and mission. This statement should be concise, inspiring, and easy to remember.	Having a clear vision helps to attract investors, partners, and customers who share the same values and mission.
2. Strategy	The guide to developing a strategy for a business is to start with a clear understanding of the business's competitive advantage. This involves identifying the business's unique strengths and weaknesses, and how it can leverage these to gain a competitive edge.	Develop a clear strategy statement that outlines the business's competitive advantage. This statement should be concise, actionable, and easy to remember.	Having a clear strategy helps to attract investors, partners, and customers who are looking for a business with a competitive advantage.
3. Business Model	The guide to developing a business model for a business is to start with a clear understanding of the business's revenue streams. This involves identifying the business's primary sources of income and how it can diversify its revenue streams to reduce risk.	Develop a clear business model statement that outlines the business's revenue streams. This statement should be concise, actionable, and easy to remember.	Having a clear business model helps to attract investors, partners, and customers who are looking for a business with a clear revenue stream.
4. Marketing	The guide to developing a marketing plan for a business is to start with a clear understanding of the business's target market. This involves identifying the business's primary customers and how it can reach them effectively.	Develop a clear marketing plan that outlines the business's target market and how it can reach them. This plan should be concise, actionable, and easy to remember.	Having a clear marketing plan helps to attract investors, partners, and customers who are looking for a business with a clear marketing strategy.
5. Operations	The guide to developing an operations plan for a business is to start with a clear understanding of the business's core processes. This involves identifying the business's primary activities and how it can optimize them for efficiency and cost-effectiveness.	Develop a clear operations plan that outlines the business's core processes and how it can optimize them. This plan should be concise, actionable, and easy to remember.	Having a clear operations plan helps to attract investors, partners, and customers who are looking for a business with a clear operational strategy.
6. Finance	The guide to developing a financial plan for a business is to start with a clear understanding of the business's financial needs. This involves identifying the business's primary sources of capital and how it can manage its finances effectively.	Develop a clear financial plan that outlines the business's financial needs and how it can manage them. This plan should be concise, actionable, and easy to remember.	Having a clear financial plan helps to attract investors, partners, and customers who are looking for a business with a clear financial strategy.
7. Legal	The guide to developing a legal plan for a business is to start with a clear understanding of the business's legal requirements. This involves identifying the business's primary legal obligations and how it can manage them effectively.	Develop a clear legal plan that outlines the business's legal requirements and how it can manage them. This plan should be concise, actionable, and easy to remember.	Having a clear legal plan helps to attract investors, partners, and customers who are looking for a business with a clear legal strategy.

To establish an identity in circular development

Why?



Possibility Space

Attract partners with similar ambitions to build coalitions

What is it?	Why is it useful?	How can it be done?	Impact
<b>1. Visionary</b> A clear, compelling vision of the future that serves as a guiding light for the organization.	Provides a sense of purpose and direction, inspiring employees and attracting investors.	Develop a clear, concise vision statement that is easy to communicate and understand.	Increases employee engagement and productivity, leading to long-term success.
<b>2. Opportunistic</b> The ability to identify and capitalize on new opportunities as they arise.	Allows the entrepreneur to stay ahead of the competition and adapt to changing market conditions.	Stay informed about industry trends and be ready to act quickly when a promising opportunity arises.	Increases the likelihood of finding profitable opportunities and growing the business.
<b>3. Risk-taker</b> The willingness to take calculated risks in order to achieve a desired outcome.	Enables the entrepreneur to pursue innovative ideas and overcome obstacles.	Conduct thorough research and analysis before making a decision, and be prepared to accept the consequences.	Increases the potential for high returns and long-term growth.
<b>4. Networker</b> The ability to build and maintain a strong network of relationships with other entrepreneurs, investors, and industry experts.	Provides access to valuable resources, information, and support.	Attend industry events, conferences, and networking opportunities. Reach out to potential contacts and build relationships.	Increases the likelihood of finding investors, partners, and other resources needed for success.
<b>5. Resilient</b> The ability to bounce back from setbacks and maintain a positive attitude in the face of adversity.	Helps the entrepreneur stay motivated and focused on their goals, even when things don't go as planned.	Accept that setbacks are a normal part of the entrepreneurial journey and focus on learning from them.	Increases the likelihood of long-term success and resilience in the face of challenges.
<b>6. Visionary</b> A clear, compelling vision of the future that serves as a guiding light for the organization.	Provides a sense of purpose and direction, inspiring employees and attracting investors.	Develop a clear, concise vision statement that is easy to communicate and understand.	Increases employee engagement and productivity, leading to long-term success.
<b>7. Opportunistic</b> The ability to identify and capitalize on new opportunities as they arise.	Allows the entrepreneur to stay ahead of the competition and adapt to changing market conditions.	Stay informed about industry trends and be ready to act quickly when a promising opportunity arises.	Increases the likelihood of finding profitable opportunities and growing the business.

Experienc  
e

How?



Expres  
s

Define

Co-  
sense

*“the whole building itself is a testing ground and experimentation zone”*

*– Jan Jongert (Superuse), 2021*

What is it?	Why is it useful?	How can it be used?	Impact
<b>Experimentation &amp; learning</b>	<ul style="list-style-type: none"> <li>Enables the entrepreneur to test their ideas and assumptions in a controlled environment.</li> <li>Helps to identify potential risks and opportunities early on.</li> <li>Allows for rapid iteration and improvement of the business model.</li> </ul>	<ul style="list-style-type: none"> <li>Useful for testing new products, services, or business models.</li> <li>Can be used to validate assumptions and gather feedback from customers.</li> <li>Helps to build a minimum viable product (MVP) and refine it based on customer input.</li> </ul>	<ul style="list-style-type: none"> <li>Reduces the risk of failure by testing ideas before investing significant resources.</li> <li>Increases the likelihood of success by allowing for rapid iteration and improvement.</li> <li>Helps to build a strong customer base and establish a competitive advantage.</li> </ul>
<b>Networking</b>	<ul style="list-style-type: none"> <li>Provides access to valuable resources, information, and support.</li> <li>Helps to build relationships with potential customers, partners, and investors.</li> <li>Can lead to new business opportunities and collaborations.</li> </ul>	<ul style="list-style-type: none"> <li>Useful for finding mentors, advisors, and potential investors.</li> <li>Can be used to build a strong customer base and establish a competitive advantage.</li> <li>Helps to identify potential risks and opportunities early on.</li> </ul>	<ul style="list-style-type: none"> <li>Increases the likelihood of success by providing access to valuable resources and support.</li> <li>Helps to build a strong customer base and establish a competitive advantage.</li> <li>Can lead to new business opportunities and collaborations.</li> </ul>
<b>Marketing</b>	<ul style="list-style-type: none"> <li>Helps to build a strong customer base and establish a competitive advantage.</li> <li>Can lead to new business opportunities and collaborations.</li> <li>Helps to identify potential risks and opportunities early on.</li> </ul>	<ul style="list-style-type: none"> <li>Useful for building a strong customer base and establishing a competitive advantage.</li> <li>Can be used to identify potential risks and opportunities early on.</li> <li>Helps to build a strong customer base and establish a competitive advantage.</li> </ul>	<ul style="list-style-type: none"> <li>Increases the likelihood of success by building a strong customer base and establishing a competitive advantage.</li> <li>Can lead to new business opportunities and collaborations.</li> <li>Helps to identify potential risks and opportunities early on.</li> </ul>
<b>Financial management</b>	<ul style="list-style-type: none"> <li>Helps to manage cash flow and ensure the business is financially sound.</li> <li>Can lead to new business opportunities and collaborations.</li> <li>Helps to identify potential risks and opportunities early on.</li> </ul>	<ul style="list-style-type: none"> <li>Useful for managing cash flow and ensuring the business is financially sound.</li> <li>Can be used to identify potential risks and opportunities early on.</li> <li>Helps to build a strong customer base and establish a competitive advantage.</li> </ul>	<ul style="list-style-type: none"> <li>Increases the likelihood of success by managing cash flow and ensuring the business is financially sound.</li> <li>Can lead to new business opportunities and collaborations.</li> <li>Helps to identify potential risks and opportunities early on.</li> </ul>
<b>Customer focus</b>	<ul style="list-style-type: none"> <li>Helps to build a strong customer base and establish a competitive advantage.</li> <li>Can lead to new business opportunities and collaborations.</li> <li>Helps to identify potential risks and opportunities early on.</li> </ul>	<ul style="list-style-type: none"> <li>Useful for building a strong customer base and establishing a competitive advantage.</li> <li>Can be used to identify potential risks and opportunities early on.</li> <li>Helps to build a strong customer base and establish a competitive advantage.</li> </ul>	<ul style="list-style-type: none"> <li>Increases the likelihood of success by building a strong customer base and establishing a competitive advantage.</li> <li>Can lead to new business opportunities and collaborations.</li> <li>Helps to identify potential risks and opportunities early on.</li> </ul>



# Learning through experimentation

Phase	Why it is needed?	How can it be done?	Impact
1. Vision	Establishing a clear vision and mission statement is essential for defining the purpose and direction of the business.	Conduct market research, identify target audience, and define core values.	Provides a clear direction and purpose for the business.
2. Planning	Developing a detailed business plan is crucial for understanding the financial requirements and market dynamics.	Conduct thorough market research, analyze competitors, and create a financial model.	Provides a roadmap for the business and helps secure funding.
3. Execution	Implementing the business plan and launching the product or service is the core of the entrepreneurial journey.	Build a strong team, establish processes, and execute marketing strategies.	Brings the business to life and allows for market testing.
4. Adaptation	Being able to pivot and adapt to changing market conditions is a key skill for entrepreneurs.	Monitor market trends, gather customer feedback, and be willing to change direction.	Increases the chances of long-term success and sustainability.
5. Growth	Expanding the business and reaching new markets is a natural progression for many entrepreneurs.	Invest in marketing, explore new markets, and seek strategic partnerships.	Increases revenue and market share.
6. Exit	Deciding when and how to exit the business is a critical decision for entrepreneurs.	Explore options like IPO, acquisition, or sale, and ensure all legal and financial matters are in order.	Provides a clear end point and allows for the realization of the entrepreneur's goals.
7. Reflection	Reflecting on the entrepreneurial journey and learning from experiences is essential for personal and professional growth.	Keep a journal, seek mentorship, and engage in networking opportunities.	Provides valuable insights and helps inform future decisions.

To develop new knowledge



To deliver proof of concepts

Why?



How?



Learn

Measure

7 Patterns of Entrepreneurial behaviour

What is it?	Why is it useful?	How can it be used?	Impact
<b>1. Visionary</b> A clear, compelling vision of the future that inspires and motivates others to follow.	Provides a clear direction and purpose for the organization, and helps to attract and retain talent.	Communicate the vision to all stakeholders, and use it to guide decision-making and strategy.	Increases employee engagement and productivity, and helps to build a strong organizational culture.
<b>2. Opportunistic</b> The ability to identify and seize opportunities for growth and innovation.	Allows the entrepreneur to stay ahead of the competition and to explore new markets and products.	Conduct market research, identify trends, and experiment with new ideas.	Increases revenue and market share, and helps to build a sustainable business.
<b>3. Risk-taker</b> The willingness to take calculated risks in order to achieve a goal.	Enables the entrepreneur to overcome obstacles and to pursue high-potential opportunities.	Identify potential risks, assess their impact, and develop a plan to mitigate them.	Increases the likelihood of success, and helps to build a reputation for innovation.
<b>4. Networker</b> The ability to build and maintain a strong network of relationships.	Provides access to resources, information, and support, and helps to build a strong support system.	Attend industry events, join professional associations, and reach out to potential contacts.	Increases the entrepreneur's visibility and credibility, and helps to build a strong support system.
<b>5. Collaborator</b> The ability to work effectively with others to achieve a common goal.	Enables the entrepreneur to leverage the strengths of others and to build a strong team.	Identify potential collaborators, establish clear roles and responsibilities, and communicate effectively.	Increases the efficiency and effectiveness of the organization, and helps to build a strong team.
<b>6. Resilient</b> The ability to bounce back from setbacks and to persevere in the face of adversity.	Enables the entrepreneur to overcome challenges and to stay motivated in the face of uncertainty.	Develop a growth mindset, embrace failure as a learning opportunity, and maintain a positive attitude.	Increases the entrepreneur's ability to overcome challenges, and helps to build a strong reputation.
<b>7. Multi-passion</b> The ability to be passionate about multiple aspects of the business, from product development to marketing.	Enables the entrepreneur to stay motivated and to explore new opportunities for growth.	Identify areas of passion, set clear goals, and allocate resources accordingly.	Increases the entrepreneur's engagement and productivity, and helps to build a strong business.

*“Sometimes feel we were a bit naive by jumping in and trying to get our head above and swim. But I don't regret it. Because if we wouldn't have done it, it would not have happened”*

*- Yvette Govaart, 2021*

Behaviour	Why it is common?	How can it be used?	Impact
<b>Opportunity spotting</b>	Identifying an opportunity involves a combination of skills and experience. Opportunity spotting is a learned skill that can be developed over time.	The ability to identify an opportunity is a key skill for entrepreneurs. It involves looking for gaps in the market, identifying trends, and recognizing potential. This skill can be used to develop new products, services, or businesses.	Identifying an opportunity is the first step in the entrepreneurial process. It is essential for developing a business plan and for securing funding.
<b>Networking</b>	Networking is a key skill for entrepreneurs. It involves building relationships with other people in the industry, which can lead to new opportunities and resources.	Networking can be used to build a strong support network, which is essential for success. It can also be used to identify potential partners, investors, and customers.	Networking is essential for success in entrepreneurship. It can help entrepreneurs to build a strong support network, which is essential for success.
<b>Resourcefulness</b>	Resourcefulness is the ability to find and use resources in a creative and effective way. It is a key skill for entrepreneurs, as they often have limited resources.	Resourcefulness can be used to find and use resources in a creative and effective way. It can help entrepreneurs to overcome challenges and to develop new products and services.	Resourcefulness is a key skill for entrepreneurs. It is essential for developing a business plan and for securing funding.
<b>Resilience</b>	Resilience is the ability to bounce back from setbacks and to persevere in the face of adversity. It is a key skill for entrepreneurs, as they often face many challenges.	Resilience can be used to bounce back from setbacks and to persevere in the face of adversity. It can help entrepreneurs to overcome challenges and to develop new products and services.	Resilience is a key skill for entrepreneurs. It is essential for developing a business plan and for securing funding.
<b>Adaptability</b>	Adaptability is the ability to change and to adjust to new circumstances. It is a key skill for entrepreneurs, as they often face many changes.	Adaptability can be used to change and to adjust to new circumstances. It can help entrepreneurs to overcome challenges and to develop new products and services.	Adaptability is a key skill for entrepreneurs. It is essential for developing a business plan and for securing funding.
<b>Leadership</b>	Leadership is the ability to inspire and to motivate others. It is a key skill for entrepreneurs, as they often have to lead a team.	Leadership can be used to inspire and to motivate others. It can help entrepreneurs to overcome challenges and to develop new products and services.	Leadership is a key skill for entrepreneurs. It is essential for developing a business plan and for securing funding.
<b>Communication</b>	Communication is the ability to convey information and to persuade others. It is a key skill for entrepreneurs, as they often have to communicate with others.	Communication can be used to convey information and to persuade others. It can help entrepreneurs to overcome challenges and to develop new products and services.	Communication is a key skill for entrepreneurs. It is essential for developing a business plan and for securing funding.



# Taking Risks

Why?	Why is it needed?	How can it be done?	Impact
<b>1. Innovation</b> Developing a new product or service that meets a market need.	The ability to identify and exploit opportunities for innovation is essential for long-term success. It involves a deep understanding of customer needs and market trends.	Define a clear vision and mission statement. Conduct thorough market research. Develop a prototype and test it with potential customers. Iterate based on feedback.	Creates a competitive advantage and opens up new revenue streams. Attracts investment and talent.
<b>2. Risk-taking</b> Taking on financial, personal, or social risks to pursue a business opportunity.	Entrepreneurial success often requires taking calculated risks. This includes investing in unproven ideas, entering new markets, and making strategic decisions with uncertain outcomes.	Conduct a thorough risk assessment. Develop a contingency plan. Start small and scale up gradually. Seek advice from mentors and advisors.	Enables the pursuit of high-potential opportunities. Builds resilience and adaptability.
<b>3. Creativity</b> Generating novel and valuable ideas for products, services, or business models.	Creativity is the foundation of innovation. It involves thinking outside the box and finding unique solutions to complex problems.	Encourage a culture of open communication and idea-sharing. Brainstorming sessions. Cross-functional collaboration. Experimentation and prototyping.	Leads to the development of disruptive technologies and business models. Enhances customer engagement.
<b>4. Networking</b> Building a strong network of relationships with industry professionals, investors, and potential customers.	Networks provide access to resources, information, and support. They are crucial for finding investors, securing partnerships, and reaching target markets.	Attend industry conferences and trade shows. Join professional associations. Reach out to potential mentors and advisors. Offer value to others in your network.	Facilitates access to capital and expertise. Increases visibility and credibility.
<b>5. Persistence</b> Maintaining focus and determination in the face of challenges and setbacks.	Entrepreneurship is a long and often difficult journey. Persistence is key to overcoming obstacles and staying committed to your vision.	Set realistic goals and deadlines. Break tasks into smaller, manageable steps. Stay positive and motivated. Seek support from your network.	Increases the likelihood of long-term success. Builds a reputation for reliability and resilience.
<b>6. Adaptability</b> Being able to pivot and adjust business strategies in response to changing market conditions.	Markets are constantly evolving. Successful entrepreneurs are able to identify trends, anticipate challenges, and adapt their strategies accordingly.	Monitor market trends and customer feedback. Be open to new ideas and technologies. Regularly review and refine your business plan.	Ensures long-term relevance and growth. Reduces the risk of failure.
<b>7. Vision</b> Having a clear and compelling vision of the future of the business.	A clear vision provides a sense of purpose and direction. It serves as a guiding light for all business decisions and actions.	Define your core values and mission. Communicate your vision effectively to your team and stakeholders. Stay focused on your long-term goals.	Inspires and motivates employees. Attracts investors and partners who share your vision.

Time

Why?



Cost

Quality

Circular construction process includes more uncertainties than planned construction

Area 1 (1)	Area 2 (2)	Area 3 (3)	Area 4 (4)
<p><b>1. Vision</b></p> <p>Having a clear vision of the future and the ability to communicate this vision to others.</p>	<p><b>2. Opportunity</b></p> <p>Identifying and exploiting opportunities for growth and innovation.</p>	<p><b>3. Innovation</b></p> <p>Developing new products, services, or processes.</p>	<p><b>4. Risk</b></p> <p>Taking calculated risks to achieve the organization's goals.</p>
<p><b>5. Leadership</b></p> <p>Inspiring and motivating others to achieve the organization's goals.</p>	<p><b>6. Networking</b></p> <p>Building relationships with other individuals and organizations.</p>	<p><b>7. Persistence</b></p> <p>Continuing to work towards the organization's goals despite setbacks.</p>	<p><b>8. Resilience</b></p> <p>Recovering from setbacks and continuing to work towards the organization's goals.</p>
<p><b>9. Creativity</b></p> <p>Generating new ideas and solutions.</p>	<p><b>10. Collaboration</b></p> <p>Working with others to achieve the organization's goals.</p>	<p><b>11. Adaptability</b></p> <p>Being able to change and adapt to new circumstances.</p>	<p><b>12. Risk-taking after a period of inactivity</b></p> <p>Taking risks after a period of inactivity or a period of low activity.</p>
<p><b>13. Strategic thinking</b></p> <p>Thinking about the organization's future and how to achieve it.</p>	<p><b>14. Financial acumen</b></p> <p>Understanding the organization's financial situation and how to manage it.</p>	<p><b>15. Customer focus</b></p> <p>Understanding the needs of customers and how to meet them.</p>	<p><b>16. Team building</b></p> <p>Building a team of individuals who can work together to achieve the organization's goals.</p>
<p><b>17. Problem solving</b></p> <p>Identifying and solving problems that arise in the organization.</p>	<p><b>18. Decision making</b></p> <p>Making decisions that are in the best interests of the organization.</p>	<p><b>19. Communication</b></p> <p>Communicating effectively with others.</p>	<p><b>20. Negotiation</b></p> <p>Reaching agreements with others.</p>
<p><b>21. Time management</b></p> <p>Managing time effectively.</p>	<p><b>22. Organization</b></p> <p>Organizing the organization's resources effectively.</p>	<p><b>23. Planning</b></p> <p>Planning the organization's future.</p>	<p><b>24. Evaluation</b></p> <p>Evaluating the organization's performance.</p>

● Risks

How?



Individual spheres



Collaborative sphere



*“you need different skills in the different phases of the circular development process”*

*– Yvette Govaart (COUP), 2021*

What is it?	Why is it useful?	How can it be used?	When?	Where?
<b>1. Visionary</b> A person who has a clear vision of the future and is able to communicate this vision to others.	Helps to create a shared vision and direction for the organisation.	Useful for setting the strategic direction and inspiring others to follow.	At the start of a new venture or during a major strategic shift.	Throughout the organisation.
<b>2. Opportunistic</b> A person who is able to identify and exploit opportunities for growth and innovation.	Helps to identify and exploit new market opportunities and drive innovation.	Useful for identifying and exploiting new market opportunities and driving innovation.	When new market opportunities arise or when the current market is saturated.	Throughout the organisation.
<b>3. Risk-taker</b> A person who is willing to take risks and is not afraid of failure.	Helps to overcome obstacles and achieve goals.	Useful for overcoming obstacles and achieving goals.	When facing difficult challenges or when the stakes are high.	Throughout the organisation.
<b>4. Change agent</b> A person who is able to bring about change in the organisation and is not afraid of conflict.	Helps to bring about change in the organisation and is not afraid of conflict.	Useful for bringing about change in the organisation and is not afraid of conflict.	When the organisation is facing a major challenge or when the current way of doing things is no longer working.	Throughout the organisation.
<b>5. Team player</b> A person who is able to work well with others and is a team player.	Helps to build a strong team and achieve goals.	Useful for building a strong team and achieving goals.	Throughout the organisation.	Throughout the organisation.
<b>6. Networker</b> A person who is able to build a strong network of contacts and is able to leverage this network for the organisation.	Helps to build a strong network of contacts and is able to leverage this network for the organisation.	Useful for building a strong network of contacts and is able to leverage this network for the organisation.	Throughout the organisation.	Throughout the organisation.
<b>7. Innovator</b> A person who is able to create new products and services and is not afraid of failure.	Helps to create new products and services and is not afraid of failure.	Useful for creating new products and services and is not afraid of failure.	When the organisation is looking for new products and services to offer.	Throughout the organisation.



# Organisational Change

Pattern	What it is	Why it works	How to use it	Impact
1. Visionary	Having a clear vision of the future and the ability to communicate this vision to others.	It provides a clear direction and purpose for the organization, which helps to attract and retain talent and resources.	Develop a clear vision and communicate it effectively to all stakeholders.	Increased motivation and commitment, leading to higher performance and growth.
2. Opportunity	Identifying and exploiting new opportunities for growth and innovation.	It allows the organization to stay ahead of the competition and adapt to changing market conditions.	Conduct regular market research and be open to new ideas and technologies.	Increased market share and revenue, leading to long-term success.
3. Innovation	Developing new products, services, or processes that improve efficiency and effectiveness.	It creates a competitive advantage and drives growth by meeting customer needs in new ways.	Invest in research and development, and encourage a culture of innovation.	Higher productivity and profitability, leading to sustained growth.
4. Risk-taking	Willingness to take calculated risks in order to achieve long-term goals.	It enables the organization to explore new markets and technologies, which can lead to significant growth.	Assess risks carefully and be prepared to act quickly when opportunities arise.	Increased market reach and revenue, leading to higher growth rates.
5. Resilience	The ability to bounce back from setbacks and adapt to changing circumstances.	It ensures the organization can survive and thrive in a highly competitive and uncertain environment.	Develop a strong foundation and maintain a positive attitude in the face of challenges.	Long-term sustainability and success, even in the face of adversity.
6. Networking	Building relationships with other entrepreneurs, investors, and industry experts.	It provides access to valuable resources, information, and support, which can accelerate growth.	Attend industry events, conferences, and networking opportunities.	Increased visibility and credibility, leading to new opportunities and partnerships.
7. Persistence	Staying committed to long-term goals and overcoming obstacles.	It is essential for achieving success in a highly competitive and uncertain environment.	Set clear goals and stay focused on the long-term vision, even when faced with setbacks.	Higher likelihood of achieving long-term success and growth.

To improve problem-solving capacity

Why?

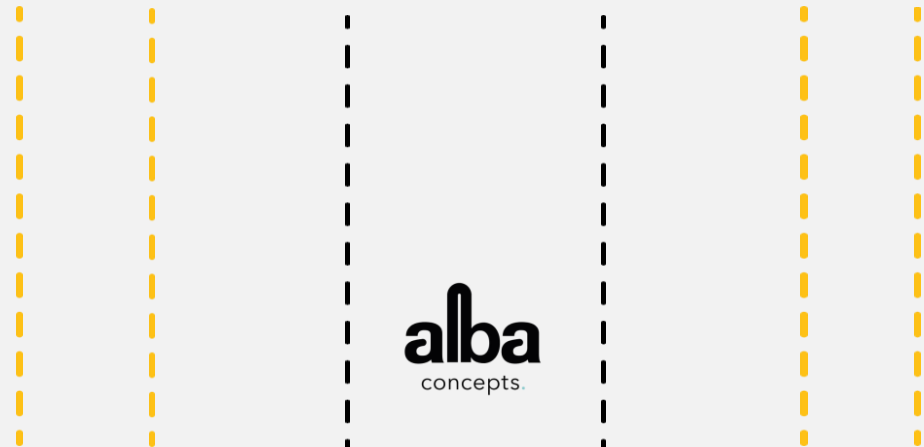


To facilitate innovative ideas

How to do it	Why it works	How not to do it	Impact
<b>1. Create a vision</b> Develop a clear, compelling vision of the future that is shared by all team members.	Provides a sense of purpose and direction, and motivates team members to work towards a common goal.	Creating a vision that is unrealistic or unattainable, or that is not shared by all team members.	Increases team cohesion and commitment, and improves performance.
<b>2. Build a strong team</b> Recruit team members with diverse skills and expertise, and build a strong team culture.	Diverse teams are more creative and innovative, and team culture influences performance.	Building a team that is not diverse, or that has a weak team culture.	Increases team performance and innovation.
<b>3. Set clear goals</b> Set clear, measurable goals for the team, and track progress regularly.	Clear goals provide a sense of direction and focus, and tracking progress helps to stay motivated.	Setting goals that are not measurable or not challenging enough.	Increases team performance and accountability.
<b>4. Communicate effectively</b> Communicate clearly and frequently, and listen to team members.	Effective communication is essential for team success, and listening helps to build trust.	Poor communication, or not listening to team members.	Increases team performance and collaboration.
<b>5. Delegate tasks</b> Delegate tasks to team members based on their strengths and weaknesses.	Delegation allows team members to use their strengths, and it helps to build trust.	Delegating tasks to team members who are not capable of handling them.	Increases team performance and team member confidence.
<b>6. Encourage innovation</b> Encourage team members to think creatively and come up with new ideas.	Innovation is essential for team success, and encouraging it helps to build a strong team culture.	Not encouraging innovation, or punishing team members for coming up with new ideas.	Increases team performance and innovation.
<b>7. Celebrate success</b> Celebrate team successes, and recognize team members for their contributions.	Celebrating success helps to build team morale and motivation.	Not celebrating success, or not recognizing team members.	Increases team performance and team member satisfaction.

## Developing strategic partnerships

How?



Creating a project team with diverse skill sets/expertise

*“Companies have to see circularity as a business opportunity,  
and that requires action leadership ”*

*– Petran van Heel (ABN AMRO)*

Icon	What is it?	Why is it useful?	How can it be used?	Impact
	Identifying and evaluating the market opportunities and the potential of the business idea.	The ability to identify and evaluate market opportunities and the potential of the business idea.	Identifying market opportunities and evaluating the potential of the business idea.	Identifying market opportunities and evaluating the potential of the business idea.
	Identifying the key resources needed to start the business and the potential of the business idea.	The ability to identify the key resources needed to start the business and the potential of the business idea.	Identifying the key resources needed to start the business and the potential of the business idea.	Identifying the key resources needed to start the business and the potential of the business idea.
	Identifying the key customers and the potential of the business idea.	The ability to identify the key customers and the potential of the business idea.	Identifying the key customers and the potential of the business idea.	Identifying the key customers and the potential of the business idea.
	Identifying the key partners and the potential of the business idea.	The ability to identify the key partners and the potential of the business idea.	Identifying the key partners and the potential of the business idea.	Identifying the key partners and the potential of the business idea.
	<b>Taking the lead</b> Identifying the key competitors and the potential of the business idea.	The ability to identify the key competitors and the potential of the business idea.	Identifying the key competitors and the potential of the business idea.	Identifying the key competitors and the potential of the business idea.
	Identifying the key stakeholders and the potential of the business idea.	The ability to identify the key stakeholders and the potential of the business idea.	Identifying the key stakeholders and the potential of the business idea.	Identifying the key stakeholders and the potential of the business idea.
	Identifying the key networks and the potential of the business idea.	The ability to identify the key networks and the potential of the business idea.	Identifying the key networks and the potential of the business idea.	Identifying the key networks and the potential of the business idea.

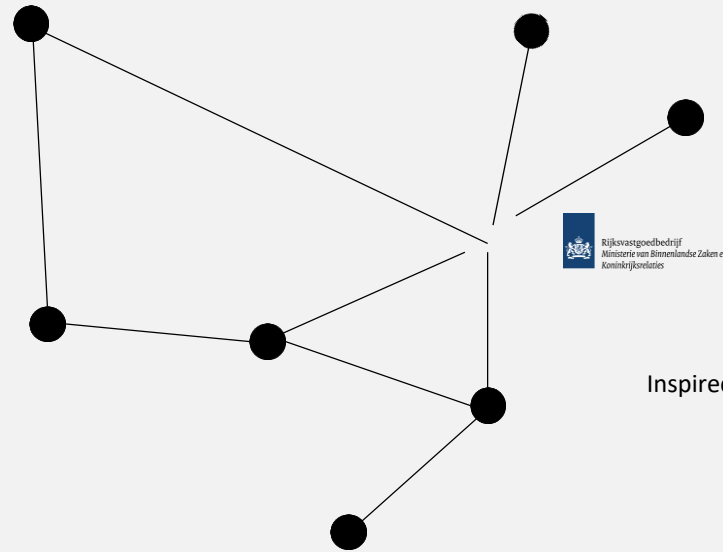


# Taking the lead

Why?	Who?	How?	When?
Why? (1)	Who? (1)	How? (1)	When? (1)
Why? (2)	Who? (2)	How? (2)	When? (2)
Why? (3)	Who? (3)	How? (3)	When? (3)
Why? (4)	Who? (4)	How? (4)	When? (4)
Why? (5)	Who? (5)	How? (5)	When? (5)
Why? (6)	Who? (6)	How? (6)	When? (6)
Why? (7)	Who? (7)	How? (7)	When? (7)
Why? (8)	Who? (8)	How? (8)	When? (8)
Why? (9)	Who? (9)	How? (9)	When? (9)
Why? (10)	Who? (10)	How? (10)	When? (10)

To develop awareness, interest and urgency in coalition actors

Why?



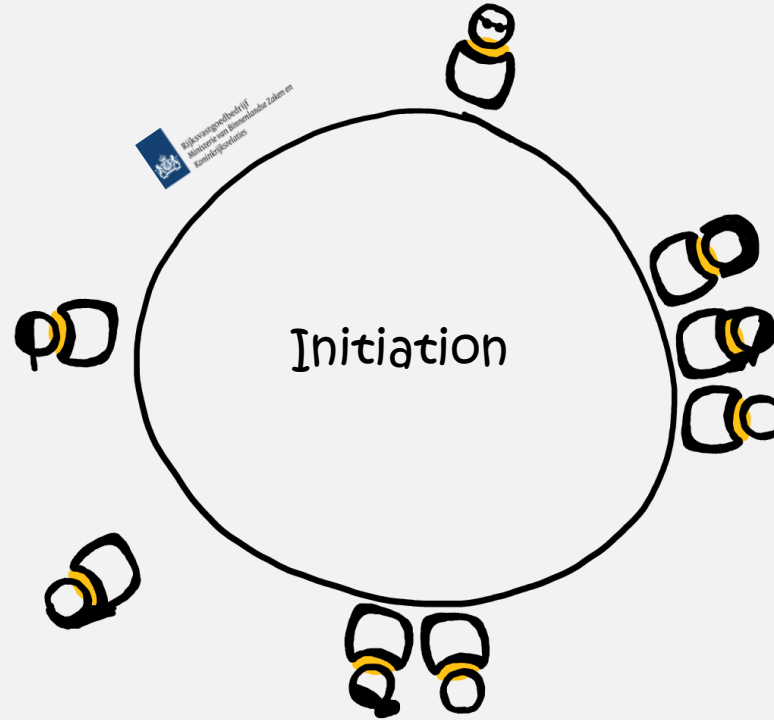
Inspired from Gerding, 2019

To lead the development process

Phase	What to do	What not to do	What you can do	Impact
1. Identify the opportunity	Identify a market need or gap in the market. Conduct market research to validate the opportunity.	Ignore market needs or gaps. Rely on intuition or personal experience.	Use data and research to validate the opportunity. Identify the target market and the value proposition.	Increased likelihood of success. Reduced risk of failure.
2. Develop a business plan	Develop a clear and concise business plan that outlines the business model, financial projections, and marketing strategy.	Develop a vague or incomplete business plan. Rely on gut feelings.	Use a structured approach to develop the business plan. Seek feedback from mentors and advisors.	Increased clarity and focus. Improved decision-making.
3. Secure funding	Secure funding from investors, banks, or crowdfunding platforms.	Rely on personal savings or family/friends for funding.	Develop a strong pitch and financial projections. Network with potential investors.	Increased financial resources. Reduced personal financial risk.
4. Build a team	Build a team of skilled and motivated individuals who can help you execute the business plan.	Build a team of inexperienced or unmotivated individuals.	Recruit based on skills and experience. Offer competitive compensation and benefits.	Increased productivity and efficiency. Improved customer service.
5. Launch the business	Launch the business and start selling products or services.	Delay the launch or launch with a limited offering.	Develop a strong marketing and sales strategy. Monitor customer feedback and adjust accordingly.	Increased revenue and growth. Improved customer loyalty.
6. Scale the business	Scale the business by expanding into new markets or adding new products/services.	Focus only on the current market or product line.	Identify new market opportunities. Invest in research and development.	Increased market reach and revenue. Improved competitive advantage.
7. Exit the business	Exit the business through a sale, IPO, or other means.	Exit the business prematurely or through a liquidation.	Develop a clear exit strategy. Network with potential buyers or investors.	Maximized return on investment. Reduced risk of financial loss.

Involving partners as early as possible

How?



Developing relationships based on transparency and collaboration

Role	Why is it needed?	How can it be done?	Impact
Business Development	Identifying and creating new opportunities for growth and revenue.	Market research, networking, and strategic partnerships.	Increased sales and market share.
Product Development	Creating innovative products that meet market needs.	R&D, prototyping, and testing.	Competitive advantage and customer loyalty.
Marketing	Building brand awareness and attracting customers.	Advertising, social media, and public relations.	Increased visibility and sales.
Finance	Managing the company's financial resources effectively.	Budgeting, fundraising, and financial reporting.	Financial stability and growth.
Operations	Efficiently managing the day-to-day activities of the business.	Process optimization, supply chain management, and quality control.	Cost reduction and improved efficiency.
Human Resources	Attracting, developing, and retaining top talent.	Recruiting, training, and performance management.	Increased productivity and innovation.
Customer Support	Providing excellent service to customers and resolving issues.	Customer service training, feedback loops, and problem-solving.	Customer satisfaction and loyalty.
Legal and Compliance	Ensuring the business operates within legal and regulatory frameworks.	Legal consultation, contract management, and compliance monitoring.	Reduced risk and legal liabilities.
Technology	Leveraging technology to improve business operations and customer experience.	Investing in software, automation, and digital marketing.	Operational efficiency and data-driven insights.

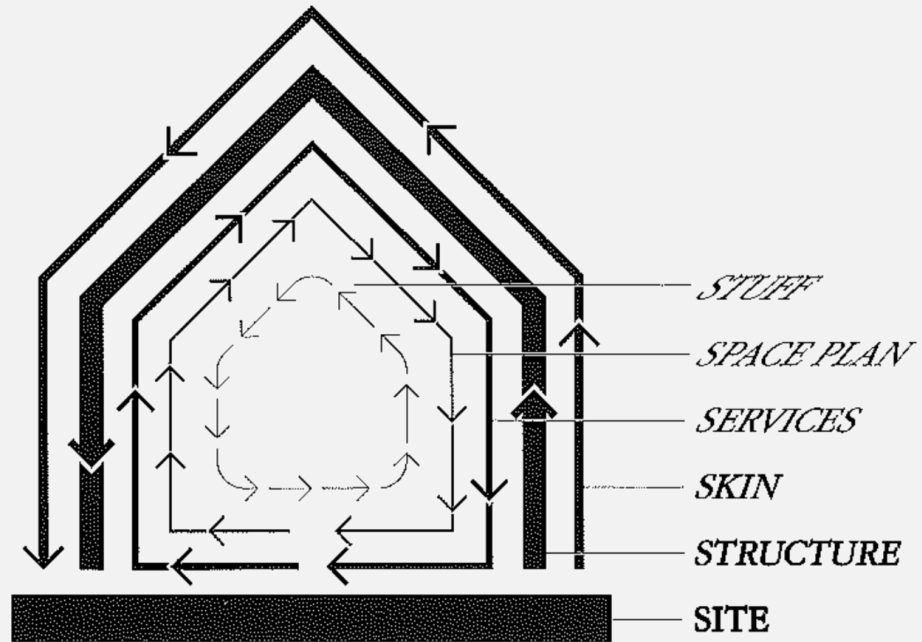


# Re-thinking Roles

Phase	Phase 1 (Concept)	Phase 2 (Design)	Phase 3 (Construction)	Phase 4 (Occupancy)
1. Vision	Establishing a clear vision and mission statement for the project.	Developing a detailed design and plan for the project.	Obtaining necessary permits and approvals for the project.	Establishing a clear communication and reporting structure for the project.
2. Planning	Identifying key stakeholders and their interests in the project.	Developing a detailed budget and financial plan for the project.	Identifying and selecting the right team and resources for the project.	Establishing a clear communication and reporting structure for the project.
3. Execution	Implementing the project plan and managing the project's progress.	Monitoring and controlling the project's budget and financial performance.	Managing the project's risks and addressing any issues that arise.	Establishing a clear communication and reporting structure for the project.
4. Evaluation	Evaluating the project's performance against the original vision and mission statement.	Identifying lessons learned and areas for improvement for future projects.	Obtaining feedback from stakeholders and the project team.	Establishing a clear communication and reporting structure for the project.
5. Closure	Finalizing all project activities and ensuring all deliverables are completed.	Obtaining final approvals and sign-off from stakeholders.	Handing over the project to the client or end-user.	Establishing a clear communication and reporting structure for the project.

# Accountability across the project lifecycle

Why?



Phase	Phase 1 (Construction)	Phase 2 (Operation)	Phase 3 (End of life)	Impact
Phase 1	... (text)	... (text)	... (text)	... (text)
Phase 2	... (text)	... (text)	... (text)	... (text)
Phase 3	... (text)	... (text)	... (text)	... (text)
Phase 4	... (text)	... (text)	... (text)	... (text)
Phase 5	... (text)	... (text)	... (text)	... (text)
Phase 6	... (text)	... (text)	... (text)	... (text)
Phase 7	... (text)	... (text)	... (text)	... (text)

## Diversification in key activities

How?



Material data

Construction



Operations

Usage data

Extend responsibility into operation and end of life phases

*“New business models are definitely needed that might benefit from blockchain like developments where you keep an interest in the future”*

*- Jan Jongert (Superuse Studios), 2021*

Area of focus	What is it?	How can it be used?	Impact
Opportunity identification	Identifying and evaluating potential business opportunities based on market needs, trends, and resources.	Use market research, networking, and industry expertise to spot gaps and trends.	Helps in identifying profitable and sustainable business opportunities.
Resource mobilization	Identifying and securing the necessary resources (financial, human, and technical) to launch and sustain a business.	Use personal savings, loans, and partnerships to gather resources.	Ensures the business has the necessary resources to get started and grow.
Business model development	Developing a clear and innovative business model that defines how the business will generate revenue and manage costs.	Use market research and customer feedback to refine the business model.	Helps in creating a competitive and profitable business model.
Market entry strategy	Formulating a strategy for entering the market, including target audience, pricing, and distribution channels.	Use market research and competitive analysis to inform the entry strategy.	Helps in reaching the target market effectively.
Operational efficiency	Implementing processes and systems to optimize business operations and reduce costs.	Use technology and automation to streamline operations.	Improves productivity and reduces operational costs.
Customer relationship management	Building and maintaining strong relationships with customers to enhance loyalty and repeat business.	Use personalized marketing and excellent customer service.	Increases customer loyalty and lifetime value.
Financial management	Managing the business's finances effectively, including budgeting, accounting, and fundraising.	Use financial planning and analysis to make informed decisions.	Ensures the business remains financially healthy and sustainable.
Scalability and growth	Identifying and implementing strategies to scale the business and reach new markets.	Use market expansion and strategic partnerships for growth.	Enables the business to expand its reach and increase revenue.



# Business model Innovation

Area 1	Area 2	Area 3	Area 4
<p><b>1. Opportunity identification</b></p> <p>Identifying and evaluating potential business opportunities in the market.</p>	<p><b>2. Business model development</b></p> <p>Developing a business model that defines the value proposition, channels, and revenue streams.</p>	<p><b>3. Resource mobilization</b></p> <p>Identifying and securing the resources (financial, human, and physical) needed to launch the business.</p>	<p><b>4. Market entry and growth</b></p> <p>Entering the market and implementing strategies for growth and expansion.</p>
<p><b>5. Innovation and differentiation</b></p> <p>Developing innovative products or services that differentiate the business from competitors.</p>	<p><b>6. Network building</b></p> <p>Establishing relationships with stakeholders, including customers, suppliers, and industry partners.</p>	<p><b>7. Financial management</b></p> <p>Managing the business's financial resources effectively to ensure long-term sustainability.</p>	<p><b>8. Exit strategy</b></p> <p>Developing a plan for the future of the business, including options for exit or succession.</p>
<p><b>9. Risk management</b></p> <p>Identifying and mitigating potential risks to the business's success.</p>	<p><b>10. Customer relationship management</b></p> <p>Building strong relationships with customers to enhance loyalty and repeat business.</p>	<p><b>11. Operational efficiency</b></p> <p>Optimizing internal processes to improve productivity and reduce costs.</p>	<p><b>12. Social responsibility</b></p> <p>Engaging in socially responsible practices that benefit the community and the environment.</p>
<p><b>13. Market research</b></p> <p>Conducting thorough market research to understand customer needs and market trends.</p>	<p><b>14. Strategic planning</b></p> <p>Developing a clear strategic plan that outlines the business's long-term goals and objectives.</p>	<p><b>15. Talent acquisition</b></p> <p>Attracting and retaining top talent to drive business growth and innovation.</p>	<p><b>16. Brand building</b></p> <p>Establishing a strong brand identity that resonates with the target market.</p>
<p><b>17. Innovation ecosystem</b></p> <p>Participating in innovation ecosystems that foster collaboration and knowledge sharing.</p>	<p><b>18. Digital transformation</b></p> <p>Embracing digital technologies to streamline operations and enhance customer experiences.</p>	<p><b>19. Sustainability</b></p> <p>Implementing sustainable practices that reduce environmental impact and promote social well-being.</p>	<p><b>20. Global expansion</b></p> <p>Exploring international markets for growth and diversification.</p>

To stimulate the market mechanisms

## Innovation

Why?



Value proposition

Value creation

Value capture

To prove feasible business models

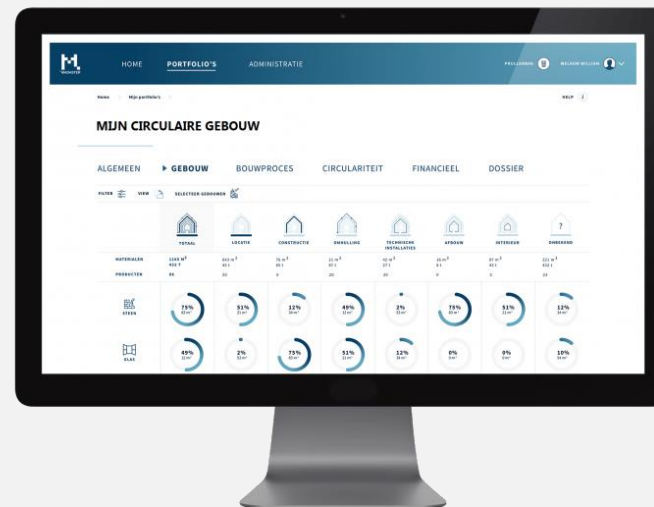
# Providing new products or services

## Online store

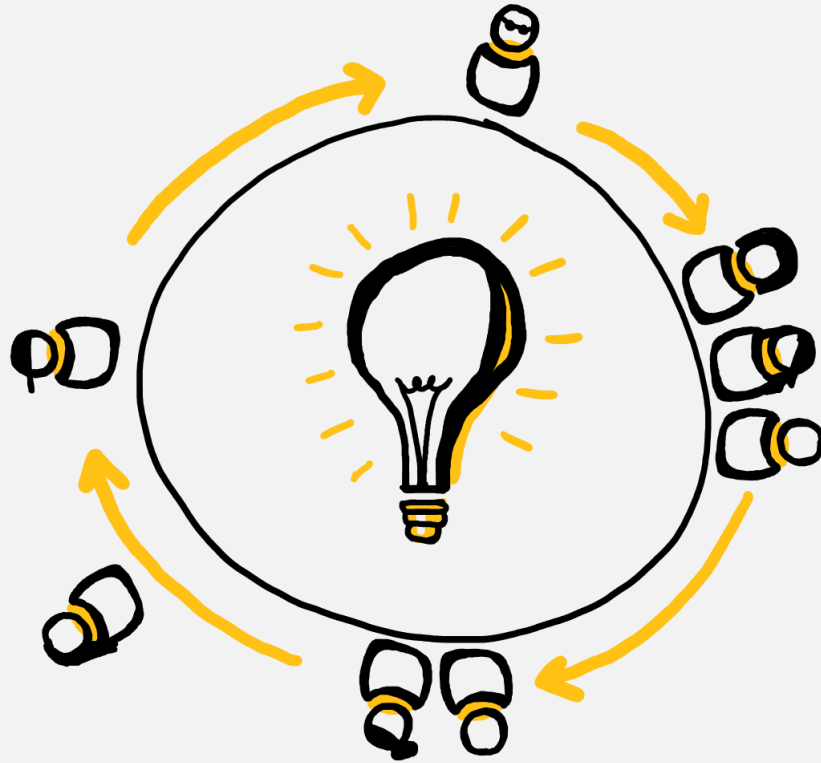
NEXT stands for building blocks for a green future. All products are divided into categories. Make your choice.



How?

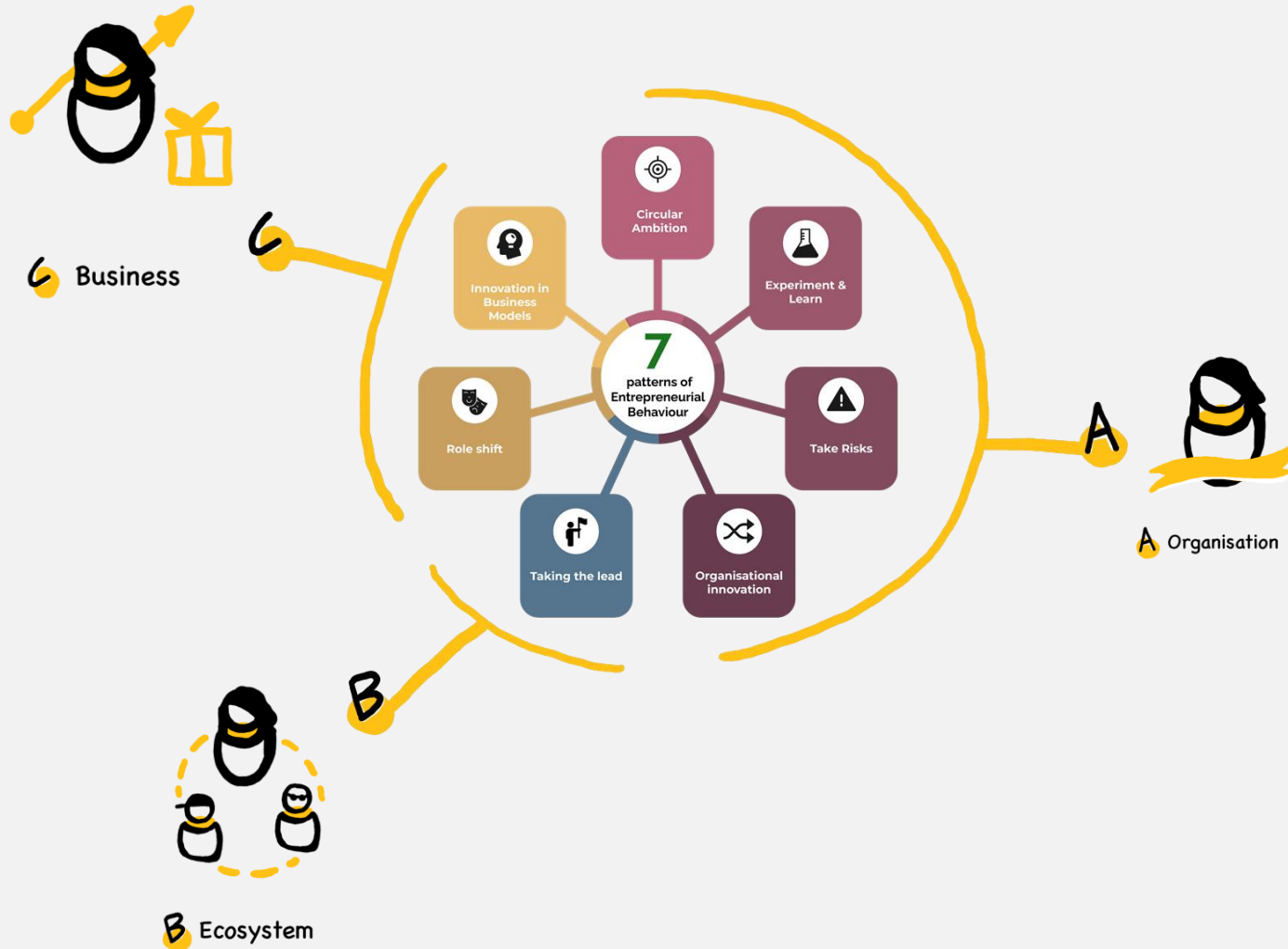


# Conclusions..



Entrepreneurial behaviour should be adopted by all actors in their own capacity due to their interdependence

# Conclusions..



Since patterns of EB are highly interdependent (A,B,C) they should be viewed as a whole

# Practical implications



What is it?	Why is it needed?	How can it be done?	Output
<b>1. Circular ambition</b> Establish an ambition to meet the environmental, social and economic impact of the business purpose	<ul style="list-style-type: none"> <li>To guide decision-making on efficiency</li> <li>To ensure activities do not create negative externalities</li> <li>To ensure activities do not create negative externalities</li> </ul>	<ul style="list-style-type: none"> <li>Defining the ambition</li> <li>Communicating the ambition across the organisation</li> <li>Aligning the business strategy with the ambition</li> </ul>	Having a clear ambition that is aligned with the organisation and its mission statement
<b>2. Innovation in Business Models</b> Lifting the B2B innovation focus to B2C innovation through an integration of business and social impact	<ul style="list-style-type: none"> <li>To identify new knowledge</li> <li>To explore and test concepts</li> <li>To reduce risks</li> </ul>	<ul style="list-style-type: none"> <li>Testing as a main priority</li> <li>Using data to measure and improve the business model</li> </ul>	Creation of specific knowledge and insights
<b>3. Role shift</b> The necessity to have the additional role of business and social impact in the business model	<ul style="list-style-type: none"> <li>To ensure social and environmental impact is integrated into the business model</li> <li>To ensure social and environmental impact is integrated into the business model</li> </ul>	<ul style="list-style-type: none"> <li>Partnering with role-shifting actors</li> <li>Developing business models</li> </ul>	Knowledge generation (Boschinger et al., 2016)
<b>4. Taking the lead</b> Changes that are brought about within the organisation and its mission statement	<ul style="list-style-type: none"> <li>To understand the process shift from traditional business model building</li> <li>To ensure social and environmental impact is integrated into the business model</li> <li>To ensure social and environmental impact is integrated into the business model</li> </ul>	<ul style="list-style-type: none"> <li>Creating a team with diverse skill sets and expertise</li> <li>Aligning the business strategy with the mission statement</li> <li>Developing business models</li> </ul>	Knowledge transfer (Boschinger et al., 2016)
<b>5. Organisational Innovation</b> Taking operational risks in coping circular business and social impact	<ul style="list-style-type: none"> <li>To identify weaknesses, internal and external</li> <li>To ensure social and environmental impact is integrated into the business model</li> </ul>	<ul style="list-style-type: none"> <li>Invoking partners in early co-creation</li> <li>Aligning the business strategy with the mission statement</li> <li>Developing business models</li> </ul>	Project governance
<b>6. Experiment &amp; Learn</b> To test and learn from the real-world use of the business and social impact of the business model	<ul style="list-style-type: none"> <li>To ensure social and environmental impact is integrated into the business model</li> <li>To ensure social and environmental impact is integrated into the business model</li> </ul>	<ul style="list-style-type: none"> <li>Developing business models</li> <li>Aligning the business strategy with the mission statement</li> <li>Developing business models</li> </ul>	Knowledge transfer (Boschinger et al., 2016)
<b>7. Take Risks</b> Ensuring the production process allows for the integration of new and innovative ideas	<ul style="list-style-type: none"> <li>To ensure social and environmental impact is integrated into the business model</li> <li>To ensure social and environmental impact is integrated into the business model</li> </ul>	<ul style="list-style-type: none"> <li>Aligning the business strategy with the mission statement</li> <li>Developing business models</li> <li>Aligning the business strategy with the mission statement</li> </ul>	Business models that address social, environmental and economic value

An evaluation tool

A blank canvas to answer critical business questions

Problem identification in project environments

# Future scope..

Technical aspects of circularity

Contrasting case studies

Implementation on a project

# Future scope..

## Modifications to the matrix

### What?

What is it?	
 Circular Ambition	Developing an ambition to improve the environmental, social and economic impact of building processes
 Experiment & Learn	Utilising the Build-measure-learn loop to build a sustainable business as an outcome of smaller controlled experiments
 Take Risks	The propensity to bear the additional risk and tolerate ambiguity posed by uncertainties in the CE
 Org. Innovation	Changes that are brought about within the organisational environment due to the nature of circular construction projects
 Take the lead	Playing a central role in pushing circular ambition across the value chain
 Role Shift	To look beyond the traditional role of the developer and integrate other supply chain functions into the role
 Innovation in Business Models	Innovating the product/service delivery leading creation of new and undiscovered value

### Why?

Why is it needed?
<ul style="list-style-type: none"> <li>To guide decision-making on all levels</li> <li>To establish an identity in circular development</li> <li>Attract partners with similar ambition</li> <li>Build coalitions</li> </ul>
<ul style="list-style-type: none"> <li>To develop new knowledge</li> <li>To deliver proof of concepts</li> <li>To reduce risks</li> </ul>
<ul style="list-style-type: none"> <li>Circular construction process includes more uncertainties than planned construction</li> <li>To deliver proof of concepts</li> </ul>
<ul style="list-style-type: none"> <li>To internalise the process shift from traditional building to circular building</li> <li>To improve problem-solving capacity</li> <li>To facilitate innovative ideas</li> </ul>
<ul style="list-style-type: none"> <li>To develop awareness, interest and urgency in coalition actors</li> </ul>
<ul style="list-style-type: none"> <li>Increase accountability across the project lifecycle</li> <li>Align incentives across the long lifecycle</li> </ul>
<ul style="list-style-type: none"> <li>To view circularity as a business opportunity</li> <li>To stimulate the market mechanisms</li> <li>To deliver a feasible business case</li> </ul>

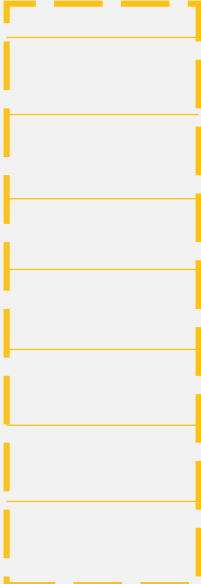
### How?

How can it be done?
<ul style="list-style-type: none"> <li>Defining the ambition</li> <li>Communicating the ambition across the whole organization + external parties</li> <li>Deciding between long term ambition and short term gains</li> </ul>
<ul style="list-style-type: none"> <li>Taking up smaller projects</li> <li>Living labs for research and development</li> <li>Invest in pilots</li> </ul>
<ul style="list-style-type: none"> <li>Partnering with risk-taking actors</li> <li>Shared risk business models</li> </ul>
<ul style="list-style-type: none"> <li>Creating a team with diverse skill sets/expertise</li> <li>Managing project based involvement</li> <li>Developing strategic partnerships</li> </ul>
<ul style="list-style-type: none"> <li>Involving partners as early as possible</li> <li>Aligning the interests of the varying actors</li> <li>Developing relationships based on transparency and collaboration</li> </ul>
<ul style="list-style-type: none"> <li>Diversification in key activities</li> <li>Develop long lasting relationships</li> <li>Extend responsibility into operation and end of life phases</li> </ul>
<ul style="list-style-type: none"> <li>Widening the core competencies</li> <li>Collaboration based business models</li> <li>Diversification into new products and services</li> </ul>

### Output

Output
Securing ideals of circularity and sustainability within the organisation and its environment
Creation of specific knowledge and leverage
Internalising externalities (Kraaijenhagen et al., 2018)
Boosting market readiness
Project governance
Increasing skin in the game
Business models that add economic, environmental and social value

### Process



# Thank you

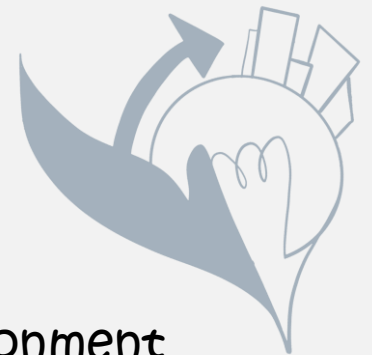


## **Becoming Entrepreneurial:** *A Strategy for a Circular Built Environment*

Prof.dr.ir. Hans Wamelink

Dr. ir. arch. Catherine De Wolf

Ir. Yvette Govaart



Patterns of EB	Pattern Groups	Authors of identified research
Ambition	<b>Ambition</b>	Davids (1963), Dunkelberg & Cooper (1982) , Sexton & Bowman-Upton (1990), Sutton (1954), Hisrich & Obrien (1982)
Goal orientation		
Achievement orientation		
Recognition		
Growth orientation		
Independence orientation		
Autonomy	<b>Leadership</b>	Durand (1975), Gasse (1977), Hisrich & Obrien (1982)
Leadership		
Self-reliance		
Proactiveness		
Taking initiative		
Risk taking		
Risk management		
Risk bearing		
Making decisions based on trust and competence of people		
Tolerance for ambiguity		
Tolerance of uncertainty		

Creation of new combinations of resources (opportunities)	<b>Learning through experimentation</b>	Ries (2011), Alvarez et al. (2010)
Learning through experimentation		
Learning as you go		
Evaluating direct feedback		
Access to social capital	<b>Access to social capital</b>	Buttner (1993)
Innovative incentive models within the existing firm structure	<b>Organisational changes</b>	Shane & Eckhardt (2010), Gartner, Carter & Reynolds (2010), Kuratko (2010)
Rewards and reinforcements		
Strategic Renewal of firm		
Renewing routines over time		
Formation of new organizations	<b>Business model innovation</b>	Gibbs (1987), Kuratko (2010), Murdoch (2005), Kraaijenhagen et al (2018)
Innovation activities in products or processes		
Business model reconstruction		
Creation of a business plan		

	Code	Challenge	Cases
Cultural	C1	Lack of interest, skills/knowledge and engagement	A / B / C
	C2	Lack of collaboration between business functions	A / B / C
	C3	Risk aversion	B
	C4	Attitude towards material value and ownership	B / C
Regulatory	R1	Lack of a consistent regulatory framework	A / B / C
	R2	Obstructing laws and regulations	A / B / C
	R3	Lack of incentives for CE	A / B / C
Financial	F1	CAPEX prioritised over OPEX	-
	F2	Greater investment costs	A / C
	F3	Low prices for virgin materials	C
	F4	Limited funding	-
	F5	Unclear business case	B
Sectoral	S1	Lack of coherent vision	B
	S2	Lack of standardization	A / C
	S3	Split incentives	C
	S4	Long product lifecycles (buildings and materials)	A / B / C
	S5	Technical challenges	A / B / C
	S6	Insufficient use or development of CE-focused design and collaboration tools, information, and metrics	A / B / C
	S7	Lack of market mechanisms	A / B / C
	S8	Difficulty in scaling	A / C
	S9	Lack of continuity across project life cycle	A / B / C

Table 16: Enabling patterns

Enabling EB Pattern	Challenges to implementation of CE
Circular Ambition	C1, C2
Learning from experimentation	S5, S8, S2
Taking risks	C3, C4, S3
Innovation in organisation	C2, S1, S6
Re-thinking roles	S4, S9
Business model innovation	S7
Taking the lead	C1

Case	Project role	Position in organisation	Part of the project team
A	Client - Developer - User	Director	Yes
A	Architect	Partner	Yes
A	Contractor	Project leader	Yes
A	Dismantling contractor	Commercial director	No
B	Circularity expert	Consultant	No
B	Client	Sustainability advisor	Yes
C	Developer - User	Director	Yes
C	Architect - User	Partner	Yes
C	Contractor	Sustainability manager	Yes

What is it?	Why is it needed?	How can it be done?	Output	
 <p>Circular Ambition</p>	<p>Developing an ambition to improve the environmental, social and economic impact of building processes</p>	<ul style="list-style-type: none"> <li>To guide decision-making on all levels</li> <li>To establish an identity in circular development</li> <li>Attract partners with similar ambition</li> <li>Build coalitions</li> </ul>	<ul style="list-style-type: none"> <li>Defining the ambition</li> <li>Communicating the ambition across the whole organization + external parties</li> <li>Deciding between long term ambition and short term gains</li> </ul>	<p>Securing ideals of circularity and sustainability within the organisation and its environment</p>
 <p>Experiment &amp; Learn</p>	<p>Utilising the Build-measure-learn loop to build a sustainable business as an outcome of smaller controlled experiments</p>	<ul style="list-style-type: none"> <li>To develop new knowledge</li> <li>To deliver proof of concepts</li> <li>To reduce risks</li> </ul>	<ul style="list-style-type: none"> <li>Taking up smaller projects</li> <li>Living labs for research and development</li> <li>Invest in pilots</li> </ul>	<p>Creation of specific-knowledge and leverage</p>
 <p>Take Risks</p>	<p>The propensity to bear the additional risk and tolerate ambiguity posed by uncertainties in the CE</p>	<ul style="list-style-type: none"> <li>Circular construction process includes more uncertainties than planned construction</li> <li>To deliver proof of concepts</li> </ul>	<ul style="list-style-type: none"> <li>Partnering with risk-taking actors</li> <li>Shared risk business models</li> </ul>	<p>Internalising externalities (Kraaijenhagen et al., 2018)</p>
 <p>Org. Innovation</p>	<p>Changes that are brought about within the organisational environment due to the nature of circular construction projects</p>	<ul style="list-style-type: none"> <li>To internalise the process shift from traditional building to circular building</li> <li>To improve problem-solving capacity</li> <li>To facilitate innovative ideas</li> </ul>	<ul style="list-style-type: none"> <li>Creating a team with diverse skill sets/expertise</li> <li>Managing project based involvement</li> <li>Developing strategic partnerships</li> </ul>	<p>Boosting market readiness</p>
 <p>Take the lead</p>	<p>Playing a central role in pushing circular ambition across the value chain</p>	<ul style="list-style-type: none"> <li>To develop awareness, interest and urgency in coalition actors</li> </ul>	<ul style="list-style-type: none"> <li>Involving partners as early as possible</li> <li>Aligning the interests of the varying actors</li> <li>Developing relationships based on transparency and collaboration</li> </ul>	<p>Project governance</p>
 <p>Role Shift</p>	<p>To look beyond the traditional role of the developer and integrate other supply chain functions into the role</p>	<ul style="list-style-type: none"> <li>Increase accountability across the project lifecycle</li> <li>Align incentives across the long lifecycle</li> </ul>	<ul style="list-style-type: none"> <li>Diversification in key activities</li> <li>Develop long lasting relationships</li> <li>Extend responsibility into operation and end of life phases</li> </ul>	<p>Increasing skin in the game</p>
 <p>Innovation in Business Models</p>	<p>Innovating the product/service delivery leading creation of new and undiscovered value</p>	<ul style="list-style-type: none"> <li>To view circularity as a business opportunity</li> <li>To stimulate the market mechanisms</li> <li>To deliver a feasible business case</li> </ul>	<ul style="list-style-type: none"> <li>Widening the core competencies</li> <li>Collaboration based business models</li> <li>Diversification into new products and services</li> </ul>	<p>Business models that add economic, environmental and social value</p>