



PROJECT H2020
“Living Lab research concept in rural Areas – LIVERUR”

DELIVERABLE 3.4.: Benchmarking of traditional value vs platform based living lab concept

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EXECUTIVE SUMMARY

Purpose

The living lab movement is emerging globally as an approach by its methodologies and tools for economic and social development at the local and regional scale, giving great opportunities for rural, urban and regional development, to all actors in **the Quadruple Helix innovation**. Governmental organisations, Higher Education Institutions, civil organisations, large companies and SMEs joining and demonstrating a new role in promoting and facilitating innovation in case of LIVERUR project and leveraging its sustainable competitiveness.

In T3.4. the **objective is:** Benchmarking of traditional value – chain approaches with the newly created living lab concept in rural areas (Lead Role: TRA)

Input: Every partner will contribute according to their expertise

Activity: T3.4 benchmark all the actors involved in living labs innovation, including researchers, users, developers and other stakeholders enter a social relationship. What is the main difference between the innovative but traditional value-chain (linear approach) and the circular economy based approaches (as a platform of the actors) in the rural circular living labs. **The differences and similarities will be demonstrated by the Lean and Circular Business Model Canvas** based common activities (benchmarks and workshops) in T3.4.

In WP3.4., LIVERUR consortium partners follows **a specific Guideline and workflow in order to attend** in the “**Interactive LEAN vs Circular Business Model workshop**” during 3rd Consortium meeting in Terceira island at Azores on 26/28 June 2019.

Design/methodology/approach – Before the Workshop:

Actions:

- ✓ D3.4. Report (V1.0) ready , evaluated by a peer-reviewer and submitted before the deadline: 30 April.2019.
- ✓ First contact letter sent to the consortium with D3.4, the basic templates & Guideline (5th of May.2019).
- ✓ One skype conferences call with consortium partners (20th of May 2019).
- ✓ LEAN Canvas : how to fill up before the workshop (20th of May 2019).1
- ✓ World Cafe at the 3rd Consortium meeting with All Partners at the Terceira/Azores- Developing a LIVERUR »supply chain« schema (26-28 June 2019.)
- ✓ Filling up & Collecting the templates (LEAN and Circular Business Model Canvas) (26-28 June 2019).
- ✓ Assessment and updated version of D3.4 V2.0. (by 15th of July 2019)

Findings – After submitting the D3.4. Version 1.0. **by 30th of April. 2019**, one-one completely filled and assessed LIVERUR LEAN Canvas and LIVERUR Circular Business Model Canvas as the result of the **Interactive LEAN vs Circular Business Model workshop**” during 3rd Consortium meeting in Terceira island at Azores on 26/28 June 2019. The updated **D3.4. Version 2.0 will be submitted by 15th of July 2019.**

Originality/value – *In terms of rural open innovation no similar work has done by today.*

Keywords *Open innovation, Business models, Quadruple Helix model of stakeholders, Rural Living Labs*



TABLE OF CONTENTS

EXECUTIVE SUMMARY	2
TABLE OF CONTENTS	3
Figures	4
Tables	4
1. What is a “ Business Model”?	5
1.1 Definition of a Business Model	5
2. What is LEAN Canvas ?	6
3. BUSINESS MODEL CANVAS VS. LEAN CANVAS	7
4. LEAN Canvas: Have the whole rural innovation by its main actors at a glance	8
4.1. How to fill out the template LEAN CANVAS?	8
4.2. Get Better Business Outcomes	10
4.3. The Power of the LEAN CANVAS Lies In It`s Simplicity	10
4.4. LIVERUR LEAN Canvas – an exercise to fill it up during the LIVERUR workshop (at Terceira Island, on 26-28 June.2019)	11
5. Circular Business Model Canvas	12
5.1. How the Circular Business Model Canvas supports the LIVERUR sustainability and innovation?...	12
5.2. What is the novelty of the Circular Business Model Canvas comparing to previous BMCs, like LEAN BMC?	13
Annex 1. Guideline to the building blocks of LEAN Canvas (by Steve Mullen)	16
Annex 2. The LEAN Canvas template	18
Annex 3. Filled LEAN CANVAS template	19
Annex 4. A sample of filled Circular Business Model Canvas	20
References	21



Figures

Fig 1. The Cambridge Business Model Innovation Process is a framework developed to guide organisations' business model innovation efforts and map the necessary activities and potential challenges

Fig 2. The building blocks of LEAN Canvas

Fig 3. Instructions/clarifications how to translate the LEAN Canvas building blocks

Fig 4. Flow to Innovation

Fig 5. LEAN CANVAS usage better fits to R+I projects as LIVERUR

Fig 6. Empty LEAN Canvas template

Fig 7. Circular Business Model Canvas template

Fig 8. The design-implementation gap of sustainable business model innovation

Fig 9. Empty LEAN Canvas with questions & instructions

Fig 10. Filled LEAN BMC

Fig 11 Sample of Circular Business Model Canvas

Tables

Table 1. Business Model Canvas vs LEAN CANVAS



1. What is a “ Business Model”?

1.1 Definition of a Business Model

A business model describes the rationale of how an organization creates, delivers, and captures value, in economic, social, cultural or other contexts. The process of business model construction and modification is also called business model innovation and forms a part of business strategy.¹

Why the Cambridge Business model, designed by Martin Geissdoerfer- Paulo Savaget – Steve Evans in 2017, is the best approach to describe the **Business model innovation process as an iterative and potentially circular process in rural context** ² which reflects well the Living Lab methodology and LIVERUR project goals?

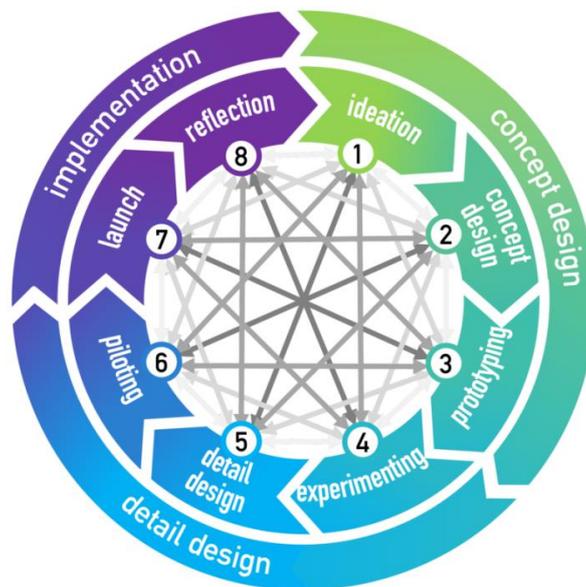


Fig 1. The Cambridge Business Model Innovation Process is a framework developed to guide organisations’ business model innovation efforts and map the necessary activities and potential challenges

A Business model design includes the modelling and description of an organisation's:

- value propositions
- target customer segments
- distribution channels
- customer relationships
- value configurations
- core capabilities
- commercial network
- partner network
- cost structure
- revenue model

A business model design template can facilitate the process of designing and describing all LIVERUR Circular Rural Living Labs's business models.

¹ https://en.wikipedia.org/wiki/Business_model

² Martin Geissdoerfer- Paulo Savaget – Steve Evans: The Cambridge Business Model Innovation Process, 2017. <https://www.sciencedirect.com/science/article/pii/S2351978917300392>



2. What is LEAN Canvas ?

The first generation of **Business Model Canvas** was proposed by **Alexander Osterwalder** based on his earlier book: **Business Model Ontology**.

The Lean Canvas has been developed by **Ash Maurya** which fits better to the research and innovation projects (combined by entrepreneurship) as a next stage of the **Business Model Generation**. It outlines a *more problem focused approach and it majorly targets entrepreneurs and startup businesses*.

In as much as both models give analytical approaches which are vital in the success of a business, they have faced their own share of criticisms. For instance, the Business Model Canvas does not take into account the performance measurement and the business model management which are vital for the continued success of the business while the Lean Canvas does not give the expected approach when the solution given to the initial problem becomes unrealistic or difficult to attain on the ground .

The Common Exploitation Booster service program (2015-2018), lead by META-Group, harmonised with the EC **proposed the usage of LEAN Canvas**, which outlines several prescriptions which form the building blocks for the activities. It enables **both new and existing businesses to focus on operational as well as strategic management and marketing plans**.

Lean Canvas uses the **same 9 blocks concept** except they've been modified slightly **to suit the needs/ purposes/requirements of a Lean Startup**.

Steve Mullen present the LEAN Canvas as “**the perfect one-page format for brainstorming possible business models, the blocks guide you through logical steps starting with your customer problems right through to your unfair advantage (often the hardest block to answer)**”.³

³https://medium.com/@steve_mullen/an-introduction-to-lean-canvas-5c17c469d3e0



3. BUSINESS MODEL CANVAS VS. LEAN CANVAS

Element	Business Model Canvas	Lean Canvas
<i>Target</i>	New and existing businesses	Startup businesses purely
<i>Focus</i>	Customers, Investors, Entrepreneurs, Consultants, Advisors	Entrepreneurs purely
<i>Customers</i>	Lays emphasis on customer segments, channels and customer relationships for all businesses	Does not lay much emphasis on customer segments because startups have no known or tested products to sell
<i>Approach</i>	It lays down the infrastructure, lists the nature and sources of financing and the anticipated revenue streams of the business	It begins with the problem, a proposed solution, the channels to achieving the solution, costs involved and the anticipated revenue streams
<i>Competition</i>	It focuses on value proposition in quantitative and qualitative terms as way to stay smart in the market	It assesses whether the business has an unfair advantage over the rest and how to capitalize on it for better grounding
<i>Application</i>	It fosters candid understanding, creativity, discussion and constructive analysis	It is a simple problem-solution oriented approach which enables the entrepreneur to develop step-by-step

Table 1. Business Model Canvas vs LEAN CANVAS

A comparison among Business Model Canvas vs LEAN Canvas includes **Target, Focus, Customers, Approach, Competition and Application.**

4. LEAN Canvas: Have the whole rural innovation by its main actors at a glance

Lean business model canvas, is closer to R&D & Innovation projects, created by Ash Maurya⁴ based on Problems (3 top problems) and Customers.

Lean Canvas is adapted from [The Business Model Canvas](#) and is licensed under the Creative Commons Attribution-Share Alike 3.0 Un-ported License.⁵

4 good questions to understand the customer:

- ✓ **Who is “he”?**
- ✓ **What is “his” problem?**
- ✓ **How does “he” solve the problem now?**
- ✓ **Is our product more efficient in solving this issue?**

4.1. How to fill out the template LEAN CANVAS?

Follow the steps as described below. It is very important to follow the same sequence.

- 1) **PROBLEM** - find 3 main problems you are addressing
- CUSTOMER SEGMENT** - identify who has the problem, define target customers and users
- EARLY ADOPTERS** - find a small nice that is having the biggest problem, the ones that suffer the most (early adopters)

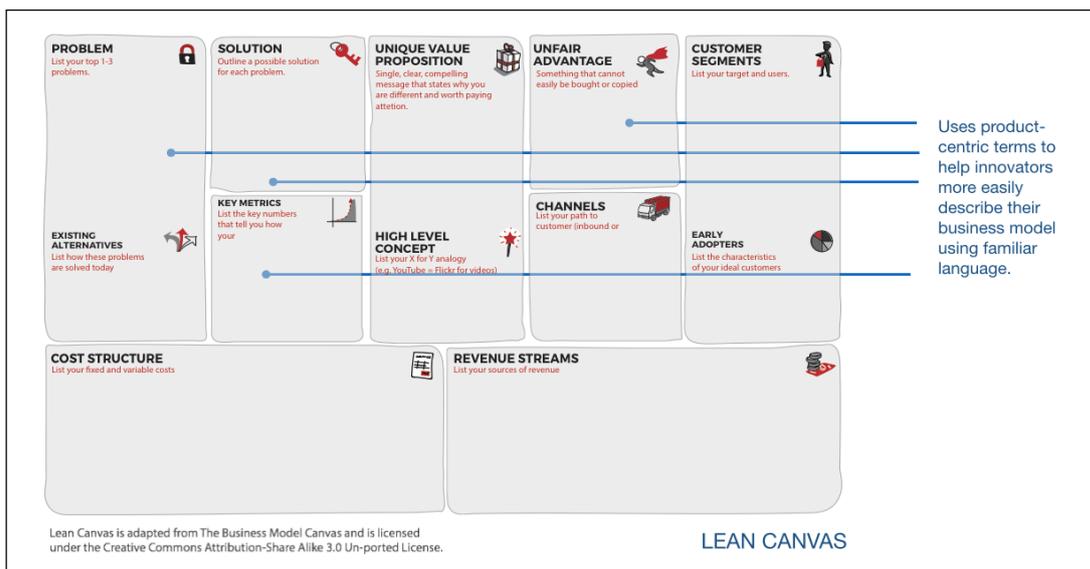


Fig 2. The building blocks of LEAN Canvas

⁴ Author of Running Lean, Scaling Lean, and Creator of Lean Canvas - Helping Entrepreneurs Find Their Business Model [@LEANSTACK](#).

⁵ <https://blog.leanstack.com/why-lean-canvas-vs-business-model-canvas-af62c0f250f0>

- EXISTING ALTERNATIVES** - Find out how they are solving the problem now (today's alternatives)
- 2) **UNIQUE VALUE PROPOSITION** - Define your UVP based on the today's alternative, what makes your product more efficient, a single and compelling sentence that makes everybody understand why you are far better (your features need to be compelling to the customers' needs, other ways are irrelevant to clients).
 - 3) **SOLUTION** – outline the main features of your solution. When your features are similar of the ones of the competitors, this is an equality. What matters are the points of difference! What you do, that the others do not do and is what matters to the clients.
 - 4) **CHANNELS** – How will you reach your customers?
 - 5) **COST STRUCTURE** – which will be the main costs when the solution is ready for the market (e.g. customer acquisition costs, distribution costs, hosting, people etc).
REVENUE STREAMS - which will be the main revenue streams when the solution is ready for the market (e.g. direct sales, licensing, pay per use, etc)
 - 6) **KEY METRICS** – key activities you will measure to track the success (e.g. units sold, users registered, retaining users, paying customers, number of complaints ...)
 - 7) **UNFAIR ADVANTAGE** – what is it that gives you an advantage in front of the competition? Something that can't be easily copied or bought.

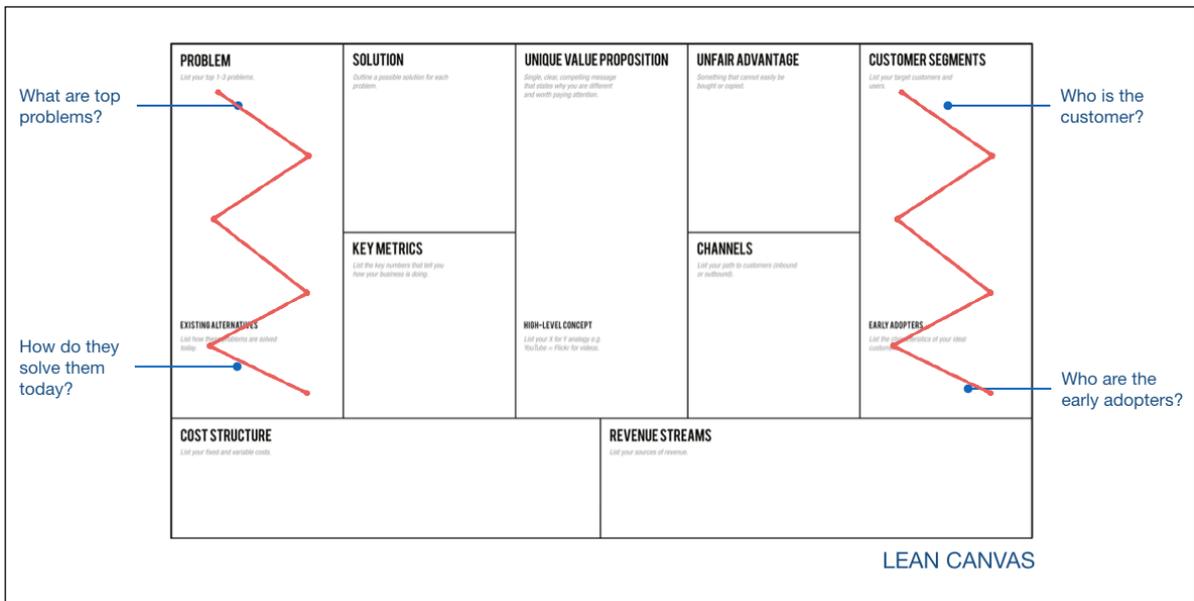


Fig 3. Instructions/clarifications how to translate the LEAN Canvas building blocks

Annex 1 gives a **Guideline to the definition of the building blocks of LEAN Canvas (by Steve Mullen).**

4.2. Get Better Business Outcomes

Creating a better business modelling tool or a better business model canvas was never the point.

Lean Canvas is part of a bigger **Continuous Innovation framework** that helps systematically uncover what customers want and build products they cannot refuse.

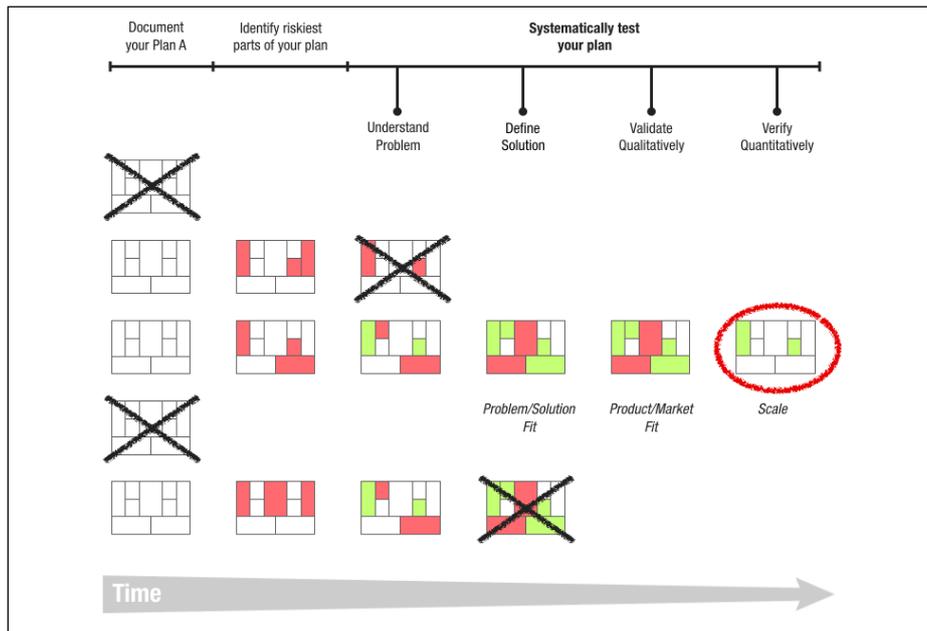


Fig 4. Flow to Innovation

4.3. The Power of the LEAN CANVAS Lies In It`s Simplicity

The Business Model Canvas attempts to overcome it's lack of customer-centricity by pairing it with the Value Proposition Canvas. But then you have 2 canvases. Why create 2 canvases, when one will do? **That`s the answer why to use the LEAN CANVAS only!**

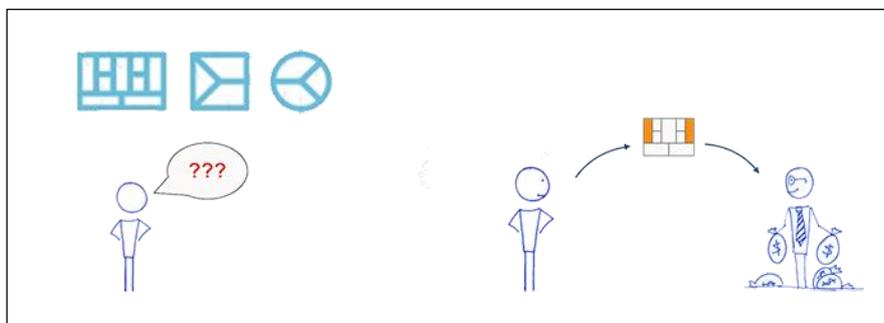


Fig 5. LEAN CANVAS usage better fits to R+I projects as LIVERUR

4.4. LIVERUR LEAN Canvas – an exercise to fill it up during the LIVERUR workshop (at Terceira Island, on 26-28 June.2019)

A LEAN Canvas of Ash Maurya template will be used which is licensed under *the Creative Commons Attribution-Share Alike 3.0 Un-ported Licence*.

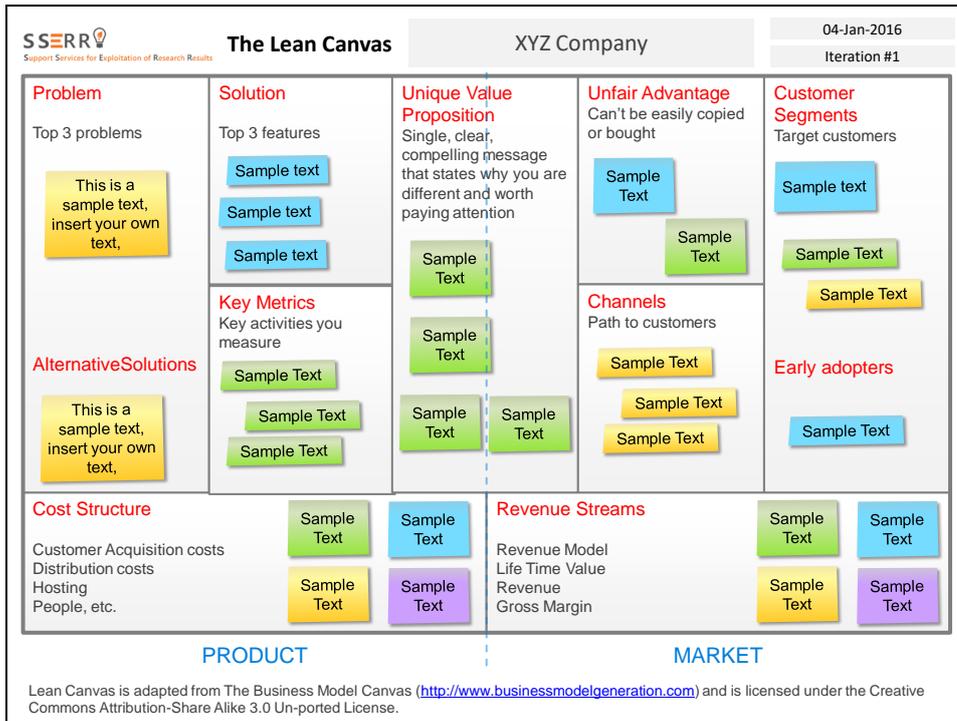


Fig 6. Empty LEAN Canvas template

Common Instructions for the LIVERURE partners are:

“After you finish the exercise, try to test your hypothesis on the market, with at least 2 to 3 real potential customers. Validate your assumptions. Are the problems you assume really the ones? Is your solution solving their problem? Are the features your solution is offering the ones the market needs and looks for? Write down the feedbacks and update, revise, iterate the CANVAS accordingly. “

The first exercises will be done during the next project meeting in 26-28th of June 2019, in Terceira/Azores-islands, in Portugal.



5. Circular Business Model Canvas

5.1. How the Circular Business Model Canvas supports the LIVERUR sustainability and innovation?

12

Sustainability and innovation are the key words for any competitive rural economies where new products, services and business models determinates the territorial economic growth.

Sustainability innovations in all selected LIVERUR domain aiming to improve the environmental, social, and economic performance of the innovative solutions in the rural context. During the project lifecycle of LIVERUR, all partners (academic and non-academic) evaluating the market potentials in the different countries and devotes particular attention to the ways and the levels value-added is created.

LIVERUR will consider that all the benchmarked indicators in WP2, the selected business cases from rural living labs in WP3 and the proposed piloting actions , systems and related chains create value may be captured in different ways in WP4 and WP5.

The dimensions that will be investigated in the feasibility phase of the achieved innovations at the economic level **giving a value which is settled in the competitive environment of the end market (consumer market), and an added value can be derived from any aspect consumers are willing to pay for.**

The circularity in rural areas are well described in AGRIFOLVALOR project which developed exciting Circular Business Cases using a new form of Circular Business Model Canvas..⁶ AGRIFORVALOR is a Horizon 2020 project that works on closing the research and innovation divide by connecting enterprises with research and academia in multi-actor innovation partnership networks **in order to exploit biomass from agriculture and forestry.**

Their methodology is based on the all aspects of the traditional Business Canvas building blocks but not only. They gave trainings and business services on:

- ✓ Strategy and Organisation;
- ✓ Social Enterprise Development;
- ✓ Business Planning and Models;
- ✓ Commercialisation and Intellectual Property Rights;
- ✓ Finance and Marketing
- ✓ Networking and Negotiation

The offered knowledge along the following aspects: e.g. legal issues (IPR), innovation management, financing opportunities and bioeconomy principles) and training on entrepreneurship skills and how to set up new start up companies gave them an overview to be able to fill it up the Circular Business Model Canvas

LIVERUR project platform , RAIN will offer similar kind of support services as an outcome of WP6.

The Circular Business Model Canvas is proposed to use which perfectly can describe the various business models of the new 13 circular rural living labs in LIVERUR and can include information about the special value proposition one by one RLLs .

⁶ www.agriforvalor.eu, www.facebook.com/agriforvalor



The value proposition communicates the number one reason why a product or service is best suited for a customer segment. It lists the natural, technological and energy resources used; provides the list of partners and the planned key activities of RLLs.

Being a circular model, it elaborates the up-cycling opportunities (that is the creative reuse, or the process of transforming by-products, waste materials, useless, or unwanted products into new materials or products of better quality or for better environmental value) **at the end of the life of the product – how they can be reused, repaired or recycled?**

13

It challenges the RLLs and their stakeholders to think about their customer relationships, revenue streams and cost structure.

5.2. What is the novelty of the Circular Business Model Canvas comparing to previous BMCs, like LEAN BMC?

Using the Circular Business Model Canvas template of the french CircuLab , the following elements can reflect the circularity of RLLs and the Circular Economy main principles: **Multiactor involvement, Sustainable differential advantage, Range of applications, Commercial Viability, Serving customer needs, Scalability, Transferability to other regions and/or sectors with similar preconditions, TRL level improvement.** Extra information on cost structure and revenue streams within the canvas could also gain additional data/information.



Fig 7. Circular Business Model Canvas template



Conclusion

The main outcome of D3.4. is the adaptation of a new *sustainable business model*, which derives from the qualification of “business models” with concepts usually raised by theories on corporate sustainability. This particularly includes theories **on stakeholder management and sustainable value creation**. Consequently, the sustainable business model is a business model that incorporates **pro-active multi-stakeholder management, the creation of monetary and non-monetary value for a broad range of stakeholders, and a long-term perspective**.

The expected outcome of **sustainable value creation** is **improved performance in economic, environmental and social aspects**. This comprises a diverse range of outputs for the benefits of the Circular Rural Living Labs and their stakeholders; including, for example, **resource efficiency, resilience to external shocks, better relationship with employees and communities, and higher profitability**.

Several tools and processes have been developed to facilitate the design of business models and assist innovative endeavours. Tool development such as Business Model Canvas for sustainability is a relatively recent phenomenon, which was primarily focused on products or took a broad view on eco-innovation. Even more recent is the development of tools that aim at using business model innovation as a leverage to help organisations & companies to meet their sustainability ambitions. These approaches are focusing on single phases of SBM innovation, with the exception of the sustainable business model process in the Circular economy, which combines different tools into a more comprehensive process. These tools have helped with the design of a wide range of promising business model concepts, but offer only little guidance through most of the remaining business model innovation process.

To summarise the reasons for this under the term design-implementation gap, which is represented in Fig.X .

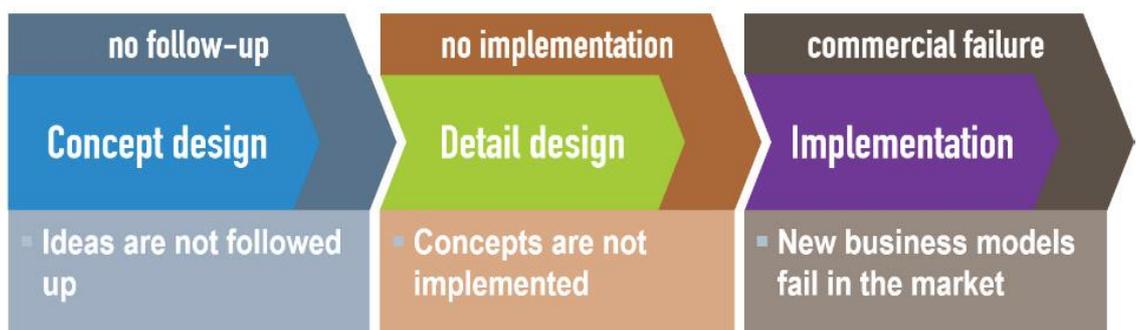


Fig 8. The design-implementation gap of sustainable business model innovation

The term covers all challenges arising in the business model innovation process of organisations that prevent the successful and sustainable implementation of business models.



Annex 1. Guideline to the building blocks of LEAN Canvas (by Steve Mullen)

Steve Mullen: Here is a quick explainer of each Lean Canvas block (and in the order to go through them)⁷.

The idea here is to spend around 15–20 minutes to get that idea down on to paper. Some people prefer to project the PDF onto a wall and use sticky notes to add their ideas into the boxes. But I've become so used to Lean Canvas that I sketch my business model ideas directly into my notebook.

Now that you have your first Lean Canvas, the key is to test. Ash encourages you to try as many iterations of the first canvas as possible and to test each one after which a winning business model will emerge. Sounds like hard work? Well yes, it is. But going through this process will save you time, energy and money. Think about it: the worst possible outcome for any entrepreneur is to build something that no one wants!!

1. Problem

Each customer segment (CS) you are thinking to work with will have a set of problems that they need solving. In this box try listing the one to three high priority problems that you CS has. Without a problem to solve, you don't have a product/service to offer.

2. Customer Segments

The problem and Customer Segments can be viewed as intrinsically connected—without a CS in mind you can't think of their problems, and visa-versa.

3. Unique Value Proposition

In the middle of the canvas is the UVP. A value proposition is a promise of value to be delivered. It's the primary reason a prospect should buy from you. A way to get your head around this is to think why are you different and why should your CS buy/invest time in you—further reading: [Useful Value Proposition Examples \(and How to Create a Good One\)](#)

4. Solution

Finding a solution to the problem is the golden egg! You're not going to get this right off the first bat—it's OK, as that's what Lean is all about. What you need to do is [Get Out The Building](#)—a phrase coined by the godfather of Lean Startup, Steve Blanks. And what Blank's here is that the solution is not in your office, it's out there in the streets. So go interview your customer segment, ask them questions, and take those learnings. Remember the Lean Startup is validated learning through a continual [Build—Measure—Learn](#) cycle.

⁷ https://medium.com/@steve_mullen/an-introduction-to-lean-canvas-5c17c469d3e0



5. Channels

Channels are ways for you to reach your CS. And remember that in the initial stages it's important not to think about scale but to focus on learning. With that in mind try to think which channels will give you enough access to your CS at the same time give you enough learning. Channels can be email, social, CPC ads, blogs, articles, trade shows, radio & TV, webinars etc. and BTW you don't have to be on all of them, just where your CS are.

17

6. Revenue Streams

How you price your business will depend on the type of model it is, however, it's quite common for startups to lower their cost, even offer it for free to gain traction, however, this can pose a few problems. The key being it actually delays/avoids validation. Getting people to sign up for something for free is a lot different than asking them to pay. There is also the idea of perceived value. Further reading: [Simple pricing strategies for your products or services, the lean way!](#)

7. Cost Structure

Here you should list all the operational costs for taking this business to market. How much will it cost to build / landing page? What is your burn rate—your total monthly running costs? How much will it cost to interview your customer segment? How much do market research papers cost? etc. You can then use these costs and potential revenue streams to calculate a rough break-even point.

8. Key Metrics

Every business, no matter what industry or size, will have some key metrics that are used to monitor performance. The best way to help with this is to visualize a funnel top down that flows from the large open top, through multiple stages to the narrow end. A good model to help with this is Dave McClure's ARRRR (aka Pirate Metrics)—further reading: [Startup Metrics for Pirates](#)

9. Unfair Advantage

This is the most difficult to block to answer. However, do try to think about this as having an unfair advantage can help when it comes seeking partners & investors. Here is a [great definition of unfair advantage](#): *"The only real competitive advantage is that which cannot be copied and cannot be bought."*—Jason Cohen. Unfair advantage can be insider information, a dream team, getting expert endorsements, existing customers etc. So rather than think about adding something like "commitment and passion" as an unfair advantage (because it is not), think about what you have that no one else can buy.



Annex 2. The LEAN Canvas template

<p>Problem 1) Top 3 problems)</p> <p>His main problem Which job has to accomplish</p> <p>Existing alternatives to address the same problems</p>	<p>Solutions 4) Top 3 features</p> <p>Based on the VP (why it is better than others) Use MVP to test assumptions</p>	<p>Value proposition 3)</p> <p>Why you are different and worth buying (How you help customer doing his job, accomplish his mission Improve his position better than others. Provide</p>	<p>Unfair Advantage 7) Can be easily copied or brought? What are the customer retaining costs? Acquisition costs Switching costs</p>	<p>Customer segment 2)</p> <p>Who is he Distinguish between users and customers (customers buy, users “use”) Split in vertical segments Pick the strongest customer segment</p> <p>Early adopters (the customers to be the first ones to buy your solutions)</p>
	<p>Key Metrics 8) Key aspects/activities you need to measure for a feedback</p>		<p>Channels 5) How you contact your customers/early adopters, How you deliver value How you promote value</p>	
<p>Cost structure 9) MVP HR costs, Eng. costs, MFG costs, marketing costs.....</p>		<p>Revenue Streams 6) Why customers pay How he prefers to pay What is the average price? How many paying customers</p>		

Fig 9. Empty LEAN Canvas with questions & instructions



Annex 3. Filled LEAN CANVAS template ⁸

Filled LEAN Canvas by WUUDIS Ltd. during the H2020 SSERR – Support Services for Research Results workshop with the consortium of “Integrated processing and Control Systems for Sustainable Production in Farms and Forests” (*SLOPE*) -, lead by Mrs Tunde Kallai on 16th of December 2016.

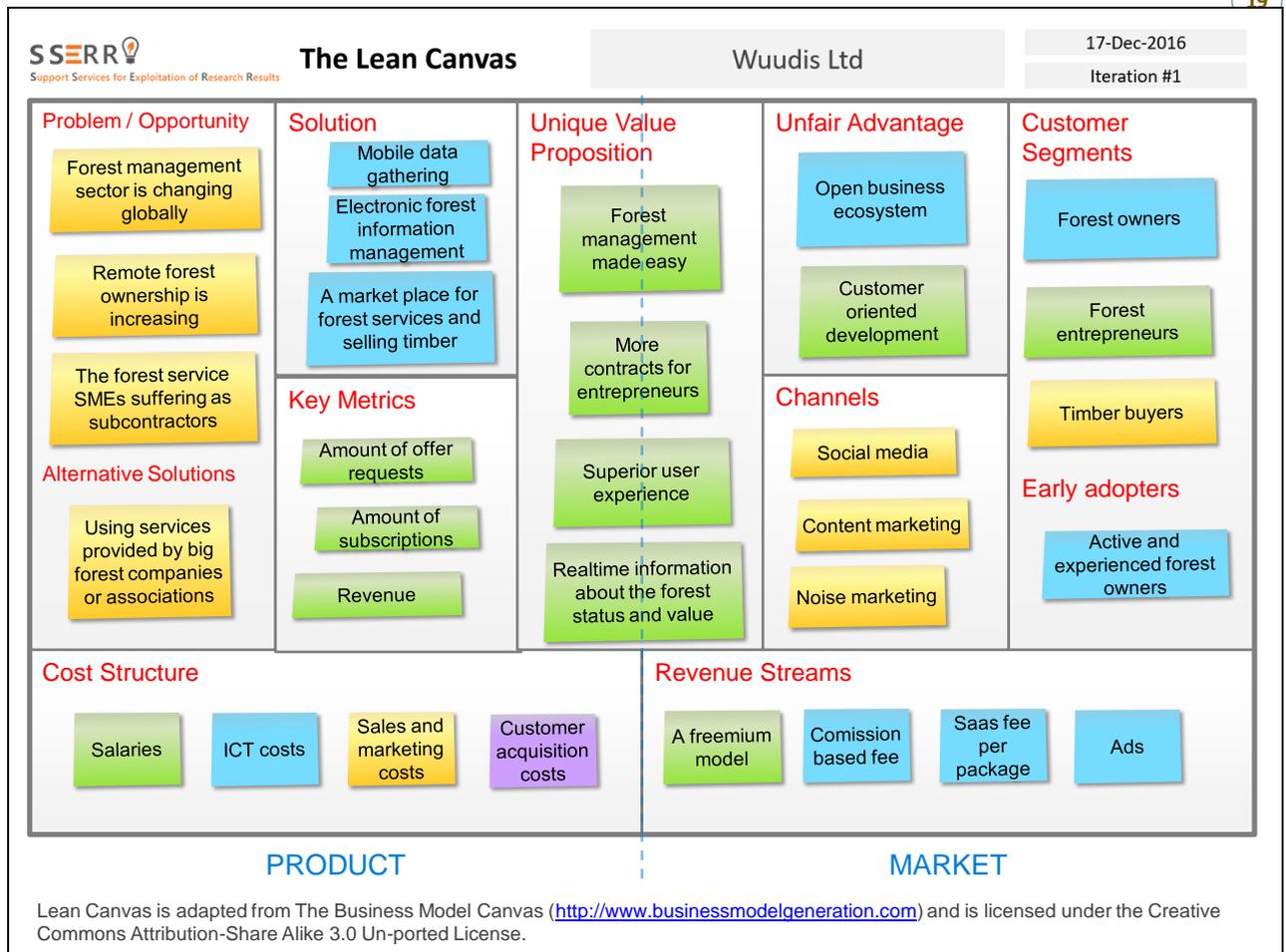


Fig 10. Filled LEAN BMC

⁸ Filled LEAN Canvas by WUUDIS Ltd during the “Integrated processing and Control Systems for Sustainable Production in Farms and Forests” (*SLOPE*) - H2020 SSERR – Support Services for Research Results workshop, lead by Mrs Tunde Kallai on 16th of December 2016.



Annex 4. A sample of filled Circular Business Model Canvas

POSITIVE IMPACTS	R & D investments -> Improvement of knowledge on some fruits and vegetables as well as on the organization of agricultural sectors in developing countries. The project involves many partners from many countries and continents, which means a global impact and the end.	Reduction of the negative impacts on the environment thanks to the partial use of renewable energies. Optimization of cultivated areas as well as water and energy consumption needed to feed the developing countries populations.	Enable farmers to significantly improve their income by up to 60%. Jobs creation in rural areas. Save time for end customers (of the processed food, since they will spend less time in cooking). Availability of finished (processed) food all year long. Extension of marketing and consumption areas of the farmers production. Rural exodus reduction.	The plastics collection and recycling network, more than neutralize the negative impact of the use of plastic in our packaging. In addition, this initiative will create a lucrative business for the poor. Reduction of chemical fertilizers use.	
NEGATIVE IMPACTS	High investment costs in R&D and production.	Pollution due to the partial use of fossil fuels in the e-food trucks (compulsory where current electricity is not available, for the thermal stabilization step of the food processing).	The use of plastic - aluminum packaging for the processed food. The processing process alters certain nutritional properties of fruits and vegetables.	Pollution generated by e-food trucks transportation from the manufacturing plants to the customers worldwide.	
TEAM	KEY ACTIVITIES 1) To design and make e-Food processing Trucks for fruits and vegetables; 2) To create and manage a cloud-based system for the remote supervision and maintenance of e-food processing trucks; 3) The organization of distribution channels for finished products from the e-food processing trucks.	NATURAL RESOURCES 1) e-food trucks manufacturing; mainly Aluminum and Iron. Recycled resources are available; 2) processed food packing; Plastics and aluminum. Recycled plastics could be used since it is not in contact with the food.	VALUE PROPOSITION 1) Elimination of post-harvest losses. 2) Significantly increase market opportunities for small farmers. 3) Provide easy-to-cook food all year long to developing countries populations. 4) Provide jobs to women and young people in rural areas.	LIFECYCLING Creation of an e-food trucks maintenance and repair network to extend the life of the equipments. Use of recyclable (and recycled) materials. Re-use of a maximum of subsets for other purposes. Recovery of all fruits and vegetables waste for integration into a composting system that will use them to produce biogas and organic fertilizer. Commitment to remove from nature at least the amount of plastic introduced via our packaging. We will reach this goal by create and/or supporting a plastics collection and recycling network. The collection will be incentivized by paying small amounts to people for the plastics they bring to collection centers.	
ISSUE	FUNCTION Transformation and conservation of fruits and vegetables near the farmers. Helps to stop post harvest losses in developing countries. Help to feed the populations in the developing countries and worldwide. Helps to provide jobs and business opportunities for rural people in the developing countries. Helps to protect the planet.	PARTNERS CIRAD (a French Research Laboratory); BPI France (French Public investment bank); e-food trucks manufacturing Sub-contractor; individual Farmers or Agricultural Cooperatives; Recycling / composting specialists; e-food trucks Dealers; Distributors / Wholesalers and Retailers. Retail chain aggregators; Financing and development organizations; National training and support organizations for farmers; logistics companies (for e-food trucks and Finished Products).	TECHNICAL RESOURCES Trimming Unit Washing unit Sterilization unit Refrigeration unit Packaging unit	USERS & CONTEXTS Farmers and cooperatives RGOs E-food processing trucks dealers According to the FAO, \$ 300 billion in fruit and vegetable losses per year in developing countries. Of which 40% occurs between harvest and processing. These losses cost water, land, energy, labor and contribute to increased emissions of greenhouse gases and global warming. Creation of new jobs for young people and women in the food value chain.	DISTRIBUTION Distribution through direct sales and dealers network, depending on the country, after sales services through our cloud-based platform, dealers network and our field technicians. Participation in agriculture and agribusiness fairs and forums. Communication on social networks. Field work with prescribers. Users training. Manufacture of e-food trucks in Europe and transport by boats to customers countries.
REVENUE	entire e-food trucks sales e-food trucks accessories sales e-food maintenance	Production in the cost dealing with the waste Production in costs linked to current transportation and food processing / production	State or donor subsidy / or innovation voucher for pilot actions and/or for green production to the users / to the manufacturer (As food), to be confirmed / by countries / national agro-food agencies / innovation programs	Recycled raw material sales (Iron, etc) Government and/or RGO's recycling and pollution reduction incentives	
COST	e-food trucks and accessories production Research & development to improve the trucks and processes, design news processes etc. Partners coordination costs (meetings, reports, etc)	Procurement costs (bags for finished products from e-food trucks)	Partners' coordination costs (meetings, reports, etc) Trainings (e-food trucks users) After sales assistance and supervision of e-food trucks	e-food trucks and accessories transportation to the customers Marketing and distribution costs Recycling costs (incentives to collect plastic bags, buying back over used e-food trucks and accessories, recycling infrastructures)	

Fig 11 Sample of Circular Business Model Canvas



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