

New Business Models in Austria - Forerunners in Sustainable Economics

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Abstract

This country report contains the results gained from an explorative study conducted in Austria. The aim of this study is the investigation of New Business Models. We conducted 14 personal and 2 written interviews in order to show how these New Business Models (NBM) create value. New thereby means that business models for instance can lead towards alternative paradigms or changes of structures and routines. From the sustainability perspective such business models are particularly interesting because they establish a win-win situation not only for the company, but also for the environment or the people who participate in the projects. Our results indicate that this comes true in most of the cases when we look either at the values the NBM are creating (13 of 16 create more than one value) or at the aspect that most of them deliver values for different groups of consumers (e.g. B2B and B2C). Because they perform better in satisfying customers' demands and even more, create added sustainable values, these types of business models will be booming in the future.

The report was written by the Austrian team of researchers within this international research project basically managed by Prof. Jonker. The authors of this country report are: Romana Rauter (post-doctoral scientist), Petra Gsodam, Thuy Duong Nguyen and Petra Stabauer (Master students at the University of Graz), with support from Jan Jonker and Rupert J. Baumgartner. The groundwork for this research was the working paper 'New Business Models' published by Jan Jonker, Nijmegen School of Management, Radboud University Nijmegen. The underlying research and interviews for this paper were conducted in cooperation with the Sustainability Management and the Joint Degree Master Students at the Institute of Systems Sciences, Innovation and Sustainability Management, University of Graz, in winter 2012/13. The interviews were used as the basis for this paper, together with various other sources. The writing and the research were performed with all possible caution; however if you do find any mistakes or would like to add some corrective remarks, please don't hesitate to contact us. The result is entirely the author's responsibility.

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We are deeply indebted to everyone who has helped realizing this report. Many thanks to Prof. Jan Jonker for initiating this international project, without his enthusiasm and encouragement the project would not exist at all. Thus we owe thanks to the students from the Master course 'Sustainable Innovation' at the University of Graz performing the interviews and analysing the results. Especially we want to thank the interviewees for

sharing their time, providing insights in their organisation and motivation, their willingness to pass on their experience and to make an effort in changing the economic system. Without their commitment and efforts it would have been impossible to write this paper.

Kurzfassung

Der vorliegende Forschungsbericht fasst die ersten Ergebnisse zusammen, welche im Rahmen einer explorativen Studie in Österreich im Jahr 2013 erzielt wurden. Zielsetzung dieser Studie war es neue Geschäftsmodelle und deren Charakteristika zu identifizieren und zu analysieren. Neu bei den untersuchten Geschäftsmodellen ist die Tatsache, dass sie einen Beitrag zu einem Paradigmenwechsel in Richtung Nachhaltigkeit liefern können, indem sie Win-Win-Situationen, nicht ausschließlich für das eigene Unternehmen kreieren, sondern auch für die Umwelt und die Menschen, welche in die Projekte eingebunden sind. Unsere Ergebnisse zeigen, dass die untersuchten Geschäftsmodelle neue und verschiedene Möglichkeiten der Wertschöpfung berücksichtigen und demnach mit ihrem Beitrag zur Nachhaltigkeit auch zukünftig relevant sein werden.

Dabei stehen diese Studie und demnach auch der Report nicht per se für sich, sondern sind Teil eines internationalen Projektes zu neuen Geschäftsmodellen, welches von Prof. Jan Jonker von der Radboud Universität Nijmegen in den Niederlanden initiiert wurde und geleitet wird. Der vorliegende Bericht wurde in einer Zusammenarbeit von Romana Rauter (Universitätsassistentin am ISIS), Petra Gsodam, Thuy Duong Nguyen und Petra Stabauer (Masterstudierende am ISIS) mit Unterstützung von Jan Jonker und Rupert J. Baumgartner erstellt. Die Interviews, welche als Basis für diesen Report dienen, wurden von Studierenden am ISIS im Kurs 'Sustainable Innovation' im Wintersemester 2012/13 durchgeführt.

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1. Introduction

The world is constantly changing and might no longer exist the way we think we know it. But due to the fact that we are running out of ideas how the future might look like, we still stick to an old-fashioned world view (Jonker 2012). Although the move from an industrial economy to a functional economy already has been risen in the late 1980s (Stahel 1986, Stahel 1989, Ceschin 2013), we just rarely see (radical) changing initiatives. Whereby in an industrial economy the central value is based on the exchange of products, a functional economy is oriented to satisfy consumer needs through the delivery of functions (e.g. having clean clothes instead of washing machines and powder) (Ceschin 2013). From the sustainability perspective, orientation towards functions instead of products (dematerialisation) under certain circumstances could have positive (ecological) impacts and therefore is basically welcomed. But more than that, new ideas for running businesses and organisations do not only refer to dematerialisation but also to the creation of shared value (Porter and Kramer 2011, Jonker 2012). This shared value can be gained if all different types of stakeholders as well as other organisations and parties are working together (Jonker 2012). Enabling such a cooperative collaboration quite often means changing, reorganising or even (re)inventing an organisations' business model. This change has already partly taken place (Stubbs and Cocklin 2008) and therefore is the centre of attention in the research carried out in Austria as well as internationally. New Business Model (NBM) or business model change in the context of sustainability could be about the *'implementation of alternative paradigms other than the neoclassical economic worldview that shape the culture, structure and routines of organizations and thus change the way of business towards sustainable development.'* (Boons and Lüdeke-Freund 2013: 15).

Referring to those aspects the goal of our study was identifying and analysing NBMs in Austria, which might show characteristics as the aforementioned ones and therefore can be seen as forerunners within a changing economy. Thereby we aim at answering the following research questions:

- What kinds of value does the business model generate?
- Does the business model consider cooperative collaboration as a central element?
- Do the people involved in transactions use different or alternative transaction modes?

In order to receive empirical results, we considered the following research process – which is based on the methodology elaborated by the Netherlands – as the appropriate one: The students in the course worked in groups of two, except one group that consisted of three students. They identified a company representing a new business model and conducted an interview with one of the company members to discover the unique features of the business model. In all cases our interview partners are key persons either being the founder and/or CEO of the company or being the head of the initiative. The interviews have been conducted personally, either face-to-face or via Skype or telephone. In most of the cases the interviewees gave their consent to record the interviews. In case they did not agree to recording, the students took notes and excerpted the important information of the conversation. These 14 interviews took place in December 2012 and January 2013. In April 2013 two additional and interesting business models (SonnenZeit and go-shred) were identified and added to the original sample. Therefore the final sample in Austria consists of 14 plus 2 cases. But contrary to the 14 cases the 2 additional interviews were not conducted personally. After a phone call, the interview guideline was sent to the interview partners via e-mail and they filled in their answers and sent the protocol back to the research group. Due to this, the validation of the results given is not that high as it is in the other cases. After conducting the interview, the students had to transcribe and qualitatively analyse their material. This process of transcribing, coding and analysing was done qualitatively based on the approach of Strauss and Corbin (1998). The transcript of the interviews as well as the coding and the final results are documented in a written report. Each group had to hand in one report and those reports are now the foundation for this paper. For writing this country-based paper, the reports were condensed and reshaped into a consistent framework in order to improve the comparability of the result and to sum up the results of the different groups.

There are various benefits of compiling the cases into such a national report: First of all with this country report we would like to address interested readers, both scientists and practitioners. Therefore our aim is a comprehensive, clearly structured and easily readable national report containing all relevant and interesting results received from the individual interviews. Secondly, we are absolutely convinced of and enthusiastic about the powerful idea of sustainability. This vision leads us to the strong intent of diffusing the idea of sustainability and in this specific situation we can do that by sharing our knowledge about new (sustainable) business models. Thirdly, we publish our results with the strong hope to get feedback and to initiate discussions and further ideas, which might lead to changes anywhere in Europe.

As already pointed out in the abstract, the following document is part of an exploratory research project about emerging New Business Models, as business models that create more than just financial value. Prof. Jan Jonker, Professor of Corporate Sustainability at the Nijmegen School of Management (NSM), Radboud University Nijmegen (Netherlands),

initiated this research in 2011. The initial outcomes gained from research activities in the Netherlands were described in a working paper, which was presented first during the 'Change the Model' symposium that took place in June 2012 at the Radboud University Nijmegen Campus (ISBN: 978-90-8119-793-9). This working paper is a preliminary attempt to define and categorize NBM in their way to create value(s) with three basic patterns, namely, sharing, swapping and creating. Additionally main characteristics of New Business Models should be pointed out by filling in a checklist (see Table 1). To support this attempt of categorization, an interview protocol has been set up in order to confront it to real life cases. For details regarding the main characteristics of NBM please see chapter 2, the checklist as well as the interview protocol will be presented in Appendix 1.

The research was replicated and elaborated in Holland at the Radboud University Nijmegen during the academic year 2012–2013. During 2013, the same research was conducted in 10 countries and 11 institutions including: Portugal (ISMAI – Instituto Superior da Maia), France (ESC Toulouse Business School), Poland (University of Lodz, Faculty of Management), Switzerland (University of Applied Sciences and Arts Northwestern Switzerland, School of Business), Austria (University of Graz – Institute of Systems Sciences, Innovation and Sustainability Research), Germany (University of Kassel – Nachhaltige Unternehmensführung), Germany (FOM University of Applied Sciences, Hochschule für Ökonomie & Management Gemeinnützige GmbH, Competence Centre for Corporate Social Responsibility), Ireland (University of Limerick, Kemmy Business School, Department of Accounting & Finance), Lithuania (Kaunas University of Technology, Faculty of Economics and Management, Department of Business Economics), Croatia (University College of Economics, Entrepreneurship and Management 'Nikola Subic Zrinski' Zagreb) and Turkey (Yasar University, School of Economics and Administrative Sciences).

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2. Cases

In the following chapter the cases selected in Austria are presented. As already described in the introduction the results are based on the students work throughout the winter term 2012/13. In the very beginning Prof. Jonker as the initiator of the project gave a presentation about the research project by explaining the research approach and giving a handful of best practice examples from the Netherlands and France. The following selection process of interview partners was based on the checklist (see Table 1) representing the main characteristics of NBM. If the business models fulfil these basic requirements, they can be categorised as NBM and can be included in the sample. Of course it is not always possible to predict whether the business models actually fulfil the requirements. But to get the best possible information beforehand, an intensive check using publicly available information was done. Thereby the research groups identified a company/an initiative representing a new business model and conducted an interview with at least one representative of the company to discover the unique features of the business model and to get detailed information. All 16 cases are described within chapter 2, the overall rating in chapter 3 however is calculated without those two cases. Due to the fact that we started our research in Graz and selected the cases according to recommendations of experts in this field, most of the cases are located in Graz or nearby Graz (region: Styria), one initiative is located in Vienna, one in Tyrol, one in Upper Austria, one in Salzburg and one in Carinthia.

Originally the checklist used in our research is based on theoretical and empirical research done in the Netherlands. Theoretically means that the identified features of NBM are grounded in the current research discussions in the field of business models and management (e.g. Boons and Lüdeke-Freund, 2012; Porter and Kramer, 2011; Nidumolu et al., 2009). Empirically means that the validation of these features was carried out in the very first exploratory study in this research project conducted in the Netherlands. As a result this non-comprehensive list of seven features organizing NBMs was presented. Before giving an overview in Table 1 the features are described more explicably within the next paragraph (Jonker 2012, p. 30):

1. A form of cooperative collaboration as a central element; doing business will then be the art of new collaboration. Connecting will have more and more social and economic value.
2. Deliberately creating multiple value(s): this is about aiming for a kind of balance among values such as nature, care, attention and money. Part of this is perception or community building regarding a product and/or service.
3. Money is no longer the only means of trade; time, energy or care can also be earned, deployed or exchanged. This can be extended to sharing profits with participants.

4. Economy based on needs and uses (now and later) and, consequently, working with credit books for energy, warmth, vegetables or care, for example.
5. Ownership of property or the means of production is no longer central – access to these things is perhaps more important. This could mean just paying for use, not for ownership, or 'relocating' the ownership (e.g. the producer remains the owner).
6. Parties expressing and securing long-term commitment to each other, which means that, a large amount of trust is needed in the relationship.
7. Working with alternative 'money' (time, points, etc.).

The interviewees were asked to indicate to which extent their NBM represents one or more of those characteristics. They were asked to do that by using the following checklist:

Table 1: NBM Checklist

Please be so kind as to indicate the extent to which your NBM represents one or more of the characteristics below:	
1 = strongly the case – 7 = strongly not the case Please circle what is most appropriate in your NBM	
1) Works on shared value creation (value)	1- -2- -3- -4- -5- -6- -7
2) Cooperative collaboration is a central principle (collaboration)	1- -2- -3- -4- -5- -6- -7
3) Money is not the only transaction medium (money)	1- -2- -3- -4- -5- -6- -7
4) Economy based on use and needs (economy)	1- -2- -3- -4- -5- -6- -7
5) Based on access and use (access and use)	1- -2- -3- -4- -5- -6- -7
6) Founded on long-term commitment (commitment)	1- -2- -3- -4- -5- -6- -7
7) Allows alternative currencies (currencies)	1- -2- -3- -4- -5- -6- -7

Not only focusing on those aspects, the interview partners were also asked 1) how and why the business model was developed, 2) how the business model works and 3) what kinds of value the business model creates. These questions were not only asked to get an idea about the development of the model in general, but to get a deeper understanding about the main patterns, namely sharing, swapping and creating. This categorization is also helpful to discover several streams of business models although the categorization was not so much the purpose: Realizing the denominators and learning about the (common) basis of these NBMs clearly stands in the focus of our research (Jonker 2012).

Finally, what does sharing, swapping and creating mean?

As stated for the features in the checklist, the three categories are results from the first exploratory study on NBM in the Netherlands. Of course there are also a couple of variations on those categories, but within this project we decided to stick to these three categories for now (Jonker 2012, p. 21-23):

- Sharing: The sharing of social capital, time and ability is a recurring element in many NBMs. Models are based on a variety of collaborations such as sharing people, ideas, equipment, property, data and transport. The current way of organizing no longer works, for several reasons, giving a modern turn to the concept of 'conventional' cooperation. Concluding that a business model is primarily based on sharing means that this way of creating value is to the fore.
- Swapping: A second stream of NBMs is swapping (originally named as trading), which concerns transaction with associated benefits. Many NMBs offer transactions with alternate payment methods, such as points, credits, advertisements, tweets, time and saving systems. Deploying these alternative means could be a way to stimulate certain demand and achieve (micro) behavioural change. Again, concluding that a business model is primarily based on swapping means that this way of creating value is to the fore and that an 'alternative' mode of transaction is used.
- Creating: NBMs use different methods to simultaneously create multiple values in win-win situations. For example, a new initiative could save energy and reduce CO₂ emissions while creating economic profits. The transaction model is then aligned with the goals. But obviously there are also other ways to create a win-win situation, such as allowing the customer to determine the value, relocating funds or shifting the concept of ownership. We stated that a business model is based on creating if this mode of multiple value creation is the central aspect within the business model.

Basically the students asked the interviewees to decide which basic pattern is the most important one. If they were not pretty sure or aware about that we concluded from their information and their drawing, which type of value creation is obviously the most important one. The modes of value creation are explicitly described in each business case, for a general overview please see chapter 3.

Corresponding to those main research questions the structure of the following chapters 2.1-2.16 is as follows: Firstly some general information regarding the company are given; secondly the questions 1) how and why was the business model developed, 2) how does the business model work and 3) what kinds of value does the model create, are answered. By answering the question how the business model work a description concerning the field in which the NBM primarily are acting is given.¹ Thirdly, in the paragraph about outcomes and reflections the individual spider diagram of each business model is shown. This spider diagram is the visualised result of the filled in answers in the checklist given by the interviewees. The spider diagram is based on the answers of the interviewees who rated

¹ B2C: Business-to-consumer, B2B: Business-to-business, C2B: Consumer-to-business, C2C: Consumer-to-consumer

their agreement or disagreement with the characteristics presented in the checklist (see Table 1). The ratings of this seven point scale are visually shown in the spider diagram, whereby we would like to point out, that 1-3 means disagreement (not the case), 4 marks neutral and 5-7 means agreement (strongly the case). In the spider diagrams we used abbreviations to name the different features.² Additionally, each chapter contains the hand-drawn picture of the NBM.

The cases are presented in alphabetic sequence; the two additional cases are added at the end.

2.1. BAN

BAN (Beratung Arbeit Neubeginn) located in Graz is a social enterprise which sells second hand goods and employs long term unemployed people. Furniture and other goods discarded or given away are collected, repaired and tuned before selling. One important point is that BAN is not a charity company, but participates in the market charging fair prices.

How and why the business model was developed

BAN was founded in 1983. Graduates from the land social academy established it. They wanted to create a new model for social integration, which is more focused in the self-helping rather than in the traditional donation approaches. Matching with this new framing, at the beginning of the 80's the environmental awareness propitiated the appearance of environment protection laws in Austria. Thus, values as recycling or reusing seemed appropriate to implement the idea of the founders. The core idea of BAN has remained. But, the company also has changed over the past three decades. The company is still owned by a non-profit civic association, but BAN itself is a limited company for ten years now. Despite three decades of run, BAN considers that its business model is in continuous development, and that it would be a huge mistake thinking that it is complete. There are plans for continuous improvements, like collect and recycle more; and also ideas to explore other ways of employment to keep on helping long term unemployed people in their reinsertion.

² For the abbreviations please also see Table 1: 1) Works on shared value creation (value) | 2) Cooperative collaboration is a central principle (collaboration) | 3) Money is not the only transaction medium (money) | 4) Economy based on use and needs (economy) | 5) Based on access and use (access and use) | 6) Founded on long-term commitment (commitment) | 7) Allows alternative currencies (currencies).

How does it work

BAN focuses on B2C and also a little bit on B2B. The business model is B2C because there is a second hand shop where people can buy things and B2B because BAN has a take-back scheme with some companies.

The following drawing shows how BAN works:

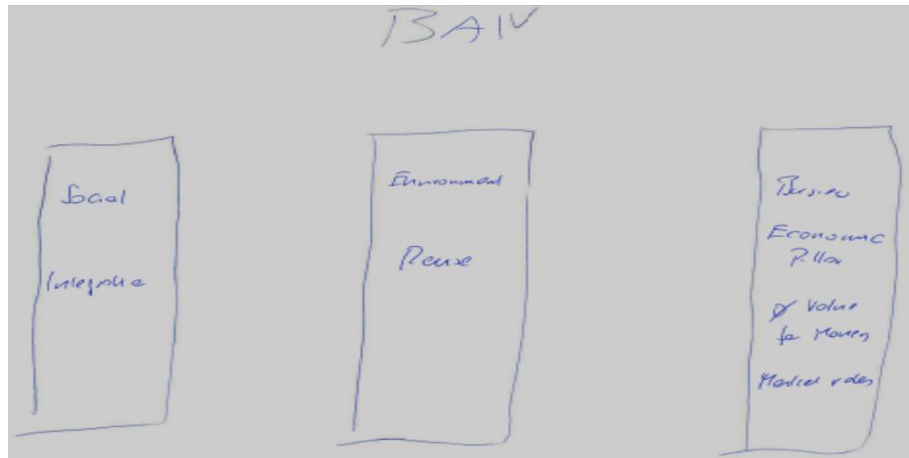


Figure 1: Picture of the NBM of BAN

Here it can be seen that BAN's business model has three pillars, which have all the same importance within the company. The first one is the social pillar. BAN helps long term unemployed people. The company gives them a normal job limited to one year, where the employees get normal wages, have to pay their taxes and their social contributions. If the employees have problems during this year with the integration, for example if they need a special qualification, they get support from the human resource department. Thus, the overall goal of BAN is to place these people to the open labour market after one year. The second pillar is the environmental one, which includes reuse and recycling. The company has a clearing out and a collection service for customers, runs a recycling yard and sorts out. BAN has a large second hand sales department, where employees renovate furniture, repair electric appliances and then they sell them. BAN also cooperates with other companies in term of take-back schemes and there's cooperation with the municipality also in terms of take-back schemes. The third pillar stands for the economic or business side of the company. Although BAN is a social and sustainable firm, earning money is important to survive on the market, to run the business successfully. BAN gets public money for the integration work they do, and earns money with their large second hand sales department.

What kinds of value BAN creates

BAN can be categorised as a creating business model, which means that the model establish a win-win situation. BAN establishes a win-win situation by creating several added values for all parties involved in its business activities. Within this business model, economic,

environmental as well as social values are created. Social values are created because BAN employs long term unemployed people. More than 50% of BAN's employees can enter the work market successfully after one year. As mentioned already in the previous section, earning money is for BAN important to survive on the market. BAN earns money with their second hand sales department and thus creates economic value. Ecological values are created through reuse and recycling. Reusing and recycling goods saves resources. Due to this, less harm is done to the environment.

Outcomes and Reflections

The following graph visualises BAN's rating regarding the typical characteristics of NBM.

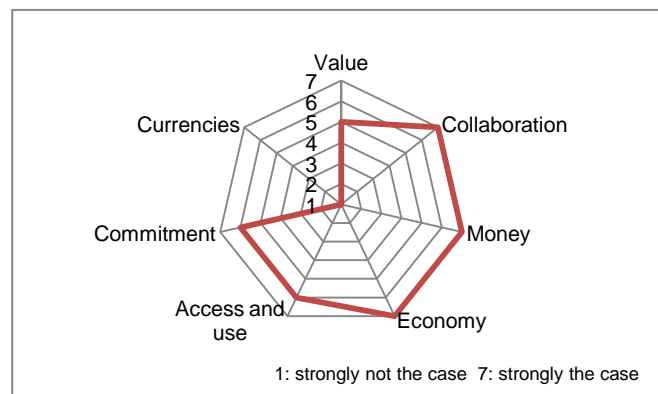


Figure 2: Spider diagram of the NBM of BAN

Due to the reason that the labour market needs employees all the time, we can argue that this business model is funded on long-term commitment and economy based on use and needs. Within this business model, the company has a take back scheme with various other companies. Thus, cooperative collaboration is a central principle. BAN is a very social oriented enterprise, but yet, some of the features characterizing a NBM are not very distinct. Especially the criteria 'Allows alternative currencies' is not fulfilled at all. The company does not allow alternative currencies because they think that alternative currencies limit exchange.

2.2. ContainMe!

One example of a New Business Model is ContainMe!. Two young architects founded the company and they will be the first ones who produce ISO container houses in zero energy standard. Furthermore, they follow the Cradle-to-Cradle approach for building their container modules. As far as possible they try to use regional raw materials, which can be reused and recycled easily.

How and why the business model was developed

Above-mentioned the idea of ContainMe! was developed by two young architects. They started developing this business model in the middle of 2011. Currently they are in the founding phase, which means they have just started developing their business model. At the moment they try to get all the financial things done, which is very difficult for a start-up as long as they do not have something to show – a prototype. Therefore, now they are building their first prototype.

The first reason why they started developing their business model was that they want to build ecological houses, which are cheaper than traditional ones. Second, flexible living is an important aspect for them. In their business model they want to overcome the problem of flexibility in the traditional housing sector. In this context, also the aspect of transportation should be mentioned. All the modules have the same standard and so they easily fit on trucks, planes, ships etc.

How does it work

First, the most visible difference between their business model and traditional business models in the housing sector is, that they would like to combine eco-friendliness with affordable housing on a high standard. The second difference is the flexibility of their modules. It is the first time that a house is really flexible regarding the transport of the modules as well as the adjustment of existing module-houses.

In order to support their customers in the adjustment of existing module-houses, ContainMe! will establish a platform for the selling and buying of used containers. Thus, their customers can offer modules, which they don't need any longer on this platform, sell them and therefore get money back. Furthermore, the business model focuses on B2C, because ContainMe! mostly would like to support private people, who don't have enough money to buy a whole 'traditional' house. The following figure simplifies how ContainMe! works:

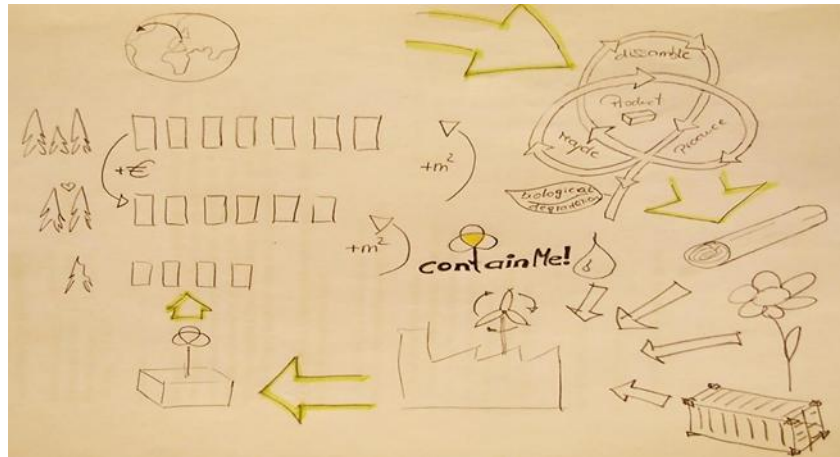


Figure 3: Picture of the NBM of ContainMe!

On the right side of the drawing, the production of the container modules and the raw materials used for building the modules are shown. On the left side they illustrated that the modules can be bought and sold easily as well as the flexibility of the modules regarding their transportation (transport one module e.g. from Europe to North America is possible). Furthermore, also the Cradle-to-Cradle cycle is shown on the drawing. This emphasizes the importance for ContainMe! to follow the Cradle-to-Cradle approach.

What kinds of value ContainMe! creates

This business model belongs to value creation, where new products and markets can be created through collaboration. They create multiple values in a win-win-situation. Within this business model, economic, environmental as well as social values are created.

First of all, ContainMe! would like to create value for the users (customers) of their product. It should be easy for everybody to buy a house, to sell it, to react on their individual situation and to live in the way, which they would like to. Their mission is to create affordable living with a high standard while taking under consideration the environment. The next noteworthy point is that through their product they want to create a community for people who share the same interests – people who take care of the environment and consider the environmental situation when taking decisions. Second, environmental values are created through saving resources, recycling and reusing. They use used containers for their modules, recyclable and reusable materials and additionally – the container-house is a zero-energy building. Third, economic values emerge through the sale of the container modules. The modules are sold at an affordable price, thus their customers save some money. Economic values are also created for ContainMe's partners, who will join the serial production.

In developing their business model they used different networks, for example Eco-World Styria and Holzcluster. In general, those network partners work together with environmental

friendly companies in Styria and connect a company to other business or production partners. Public funds those networks and they are interested in helping the Austrian and especially the Styrian economic.

Outcomes and Reflections

The following graph visualises the rating regarding the typical characteristics of NBM.

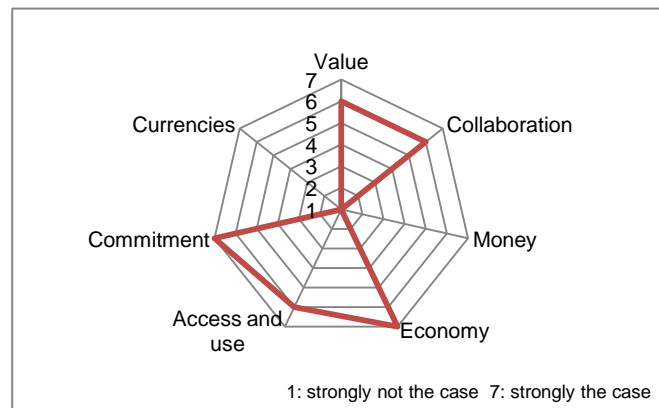


Figure 4: Spider diagram of the NBM of ContainMe!

The criteria 'Money is not the only transaction medium' and 'Allows alternative currencies' are rated with 1, which means 'strongly not the case'. Thus, one can think that ContainMe! is not really a NBM. But, all of the other criteria are rated with 6 or even 7 (= strongly the case), multiple values are created and the business model is sustainable at the core of its business. Thus, this business model is nevertheless a good example for a successful NBM.

When talking about the rating, it is also important to mention that up to now all the companies, which work together with ContainMe! on their prototype, gave them the materials etc. for free (from the photovoltaic construction to the furniture), in order to receive good advertising and to get the chance to join the serial production of the modules. Thus, although there is a bad rating, we can see the aspect of alternative currencies.

2.3. e-Lugitsch

e-Lugitsch is an Austrian company that was founded more than 100 years ago and is well known in the region. The new business model the company has created was to introduce public funding of photovoltaic plants owned by the company. With the NBM, the company is producing green energy and it generates value in and for the region and for the people who live there.

How and why the business model was developed

The whole development process for the new business model started in 2002. After the implementation of a new law, the so-called 'Ökostromgesetz' in Austria in 2002 the whole

topic of photovoltaic became more popular. A large number of people started claiming from their regional energy supplier, in this case e-Lugitsch, information and possibilities to contribute to new and clean energy production. The public interest was high, but the costs for an individual person to purchase this energy were not feasible. Due to this it was a trigger for e-Lugitsch to look into the problem and develop solutions. The company found a solution in the system, which was established by the 'Waldviertler' shoe producer and created a similar business model. With this model, the company was able to involve interested people in a photovoltaic project that created value for them and for the region. This was possible through the distribution of vouchers.

In 2005 the company has built the first small plant (4 kW capacity), since then they have built 3 more small plants and one big plant (17 kW capacity), which was completed in 2010. In 2013, the company aims to build its largest photovoltaic plant. For this plant the company wants to use the new business model, which was designed by the Energy Systems Austria as a sale and lease back model. This business model is ready-for-use and operates within all legal frameworks in Austria and – any energy provider in Austria could use it.

How does it work

e-Lugitsch applied their business model in three different cases: In the first one the company has built a 2 kW photovoltaic plant. Each person could buy a share from a minimum of 200 Euro to a maximum of 1,000 Euros with maximum 5 shares per person. This made customers co-owners of the plant. Through this share sale the plant was financed. After that the customers receive 30 Euros per year over a time period of 10 years, which are paid in vouchers. After 10 years, the customer would have received vouchers worth 300 Euros. These vouchers can be used to purchase energy efficient electronic products at the retail store from the company e-Lugitsch or they can use them to pay their electricity bill. In the second case the company has built a 17 kW photovoltaic plant. Here the purchase price was divided by performance. There is a guaranteed minimum rate of the return on customer's investment. This minimum is the interest rate of the 12-month Euribor. The rest is simple profit accounting. The plant is a separate cost centre in the accounting department. The expenditure and the revenue through the electricity feeding in the electricity grid are collected there. If the yearly revenue is higher than the fixed return on investment, every shareholder receives the additional amount for his shares. The shareholders of the plant are informed at the end of the year of the amount they would receive. In addition, every 5 years the shareholder would receive a quarter of his invested capital. After the contract period has expired the plant would belong to the company. In the third case the company uses a sale-and-leaseback model, designed by the Energy Systems Austria. Here the company builds a plant, sells it to private individuals and leases it back. As compensation, the owner gets a 3,5% return on investment. Unlike the previous two models this model is limited to public participation because of the high risks it bears. If the company goes bankrupt, the investor

will not receive any money. The maximum amount, which could be invested by one person, is 6,500 Euros.

The business model (BM) of e-Lugitsch is categorised as B2C. The company makes the customers participate in the construction and operation of the photovoltaic plant. Through selling shares to the customers, it makes them co-owners of the plant. Customers get a guaranteed return on their investment in the form of vouchers, which they can use for their own needs. Nobody else participates in this model except for the company and the customers who buy shares. This business model refers to sharing. Both the company and the customer share access to energy. Through selling shares the company makes it affordable for the customer to access the photovoltaic plant and the energy it generates. By investing in the plant customers make it possible for the company to construct the plant, which generates the energy.

The first picture, Figure 5, shows the business plan for the 4 kW plants.

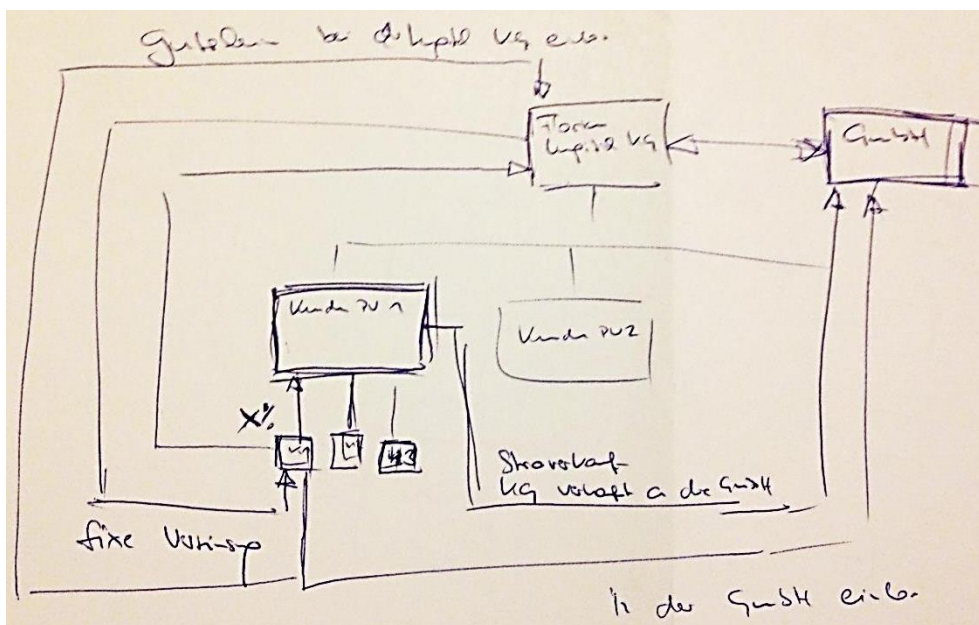


Figure 5: Picture of the NBM of e-Lugitsch (1)

Within the second picture, you can see the BM of the 17 kW plant:

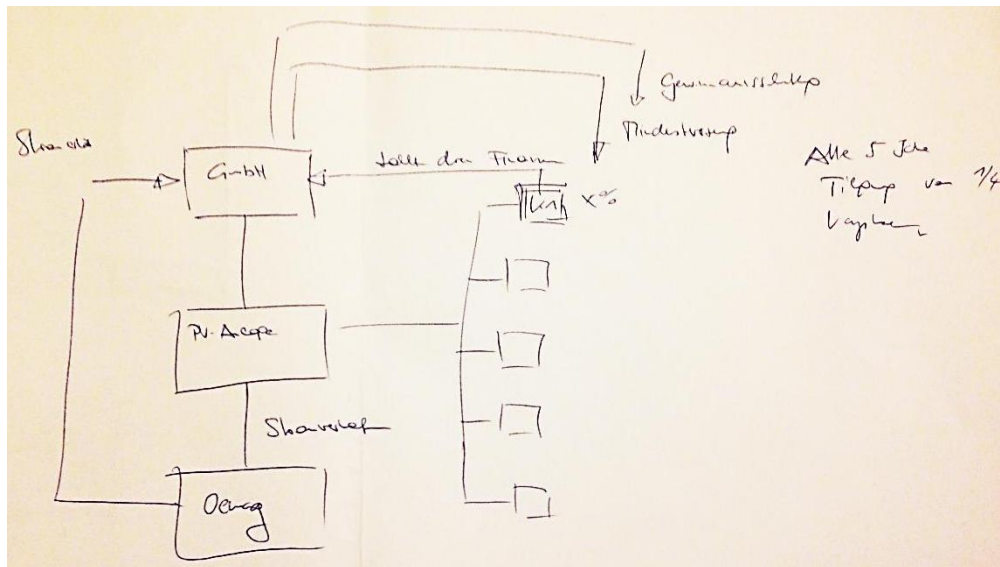


Figure 6: Picture of the NBM of e-Lugitsch (2)

What kinds of value e-Lugitsch creates

Referring to the interview partner the model creates environmental value. It increases the share of renewable energy in Austria and generally raises awareness on renewable energy. It also creates economic value for the region making it more sustainable, because the capital stays in the region. Customers can choose which project they want to invest into, but these projects are always located in the region. The vouchers that the company gives to the customers can be used only in the region.

Outcomes and Reflections

The following graph visualises the rating of e-Lugitsch concerning the typical characteristics of NBM:

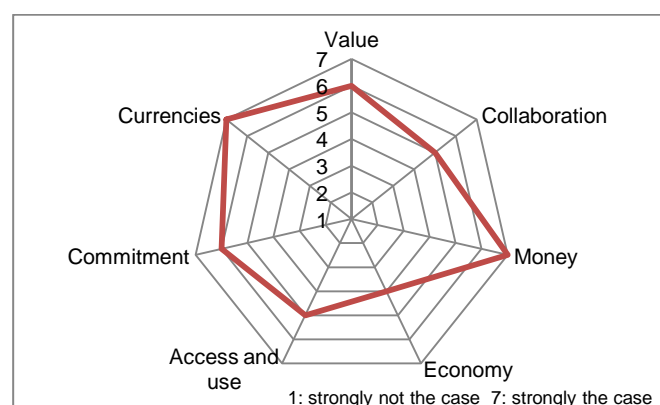


Figure 7: Spider diagram of the NBM of e-Lugitsch

It can be concluded that the model does not bring (additional) economic value for the company, but rather improves its image, creates environmental value and makes the region's economy more sustainable. It also allows the public to participate in this value creation process through direct investment in the photovoltaic plants. Furthermore this concept helps to rebuild the energy system from a fossil fuel based to a renewable energy sources. The case definitely is a new business model in the way that the company does not generate profit for itself and creates additional value. The sale-and-lease-back model is not a new business model. What could be observed, as a new approach however is the crowd integration in the project. Therefore it creates value not only for the company, but for the region and the people that participate in the project as well. In the long run this model brings benefits to all parties involved and could therefore be seen as a successful new business model.

2.4. FGM-AMOR

The FGM-AMOR (Forschungsgesellschaft Mobilität - Austrian Mobility Research) is one of the leading research and educational organisations on sustainable mobility in Europe. The goal of FGM-AMOR is to make public spaces and public transportation barrier-free and accessible to all and to make transportation sustainable. What makes FGM-AMOR innovative is the way it is organized. It is organized in such a way that the employees look at the company from two perspectives: as a company employee and as an owner at the same time.

How and why the business model was developed

It has been established in 1993. Today there work more than 40 employees. FGM-AMOR is mainly working on a European Union project where it gets its funding. It has a wide array of networks throughout Europe and the sharing of knowledge and experience with companies that are working in the same line of expertise kept FGM-AMOR up to date and fine tuned to the current demand and requirement of sustainable mobility. Currently the company is still growing and it is in its consolidation phase.

How does it work

FGM-AMOR focuses on B2B as well as B2C. The primary relationships are B2C since the knowledge produced by FGM-AMOR mainly targeted its customers in the form of the society and different organisations. There are also B2B relationships to some extent because FGM-AMOR exchanges knowledge with its network of organisations throughout Europe. FGM-AMOR follows a different way of organizing the company. In their approach, a high level of motivation among the workers should be created. The secret to this high level of motivation emerges because employees have the feeling that they are owners of the company. Thus, they are working for their own success and not for another person who employs them. The employees of the company are a group of multidisciplinary people who have a good orientation towards sustainability. Another source of motivation is that their daily work

contributes to an improvement in environment and society. The following drawing shows how FGM-AMOR works:

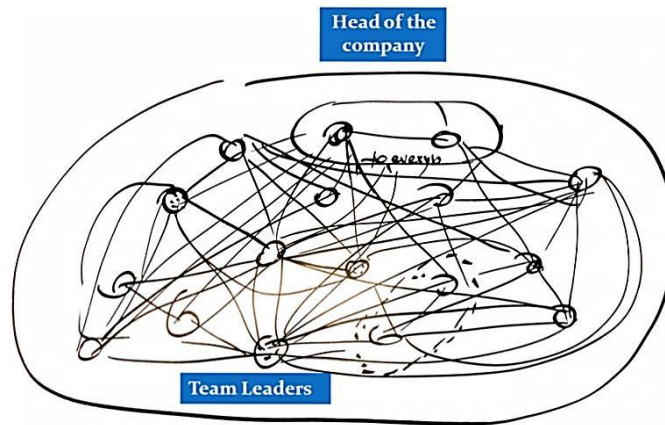


Figure 8: Picture of the NBM of FGM-AMOR

The two circles on top in the above figure show the top management (head of the company). The circles with dots inside represent the different team leaders in the company. The other circles stand for the workers (employees). All the connecting lines represent the unrestricted access of each and every employee as a worker as well as an owner. This shows that the company is organized in a democratic way, where everybody is interconnected in their endeavour to achieve the company's goal.

What kinds of value FGM-AMOR creates

The business model of FGM-AMOR can be categorised as a creating as well as a sharing business model. Due to the fact that it creates multiple values – in addition to economic value – we can argue that it can be primarily categorised as creating. Of course, it is also sharing because it is in constant knowledge exchange with its network of organisations. The knowledge about sustainable transportation is also shared to the society and to the concerned governmental and non-governmental organisations to take the necessary action.

Added environmental and social values are created through the outcome of FGM-AMOR's knowledge, which results in reduced emissions, low urban noise, low traffic congestion, the use of alternative mode of transportation and the health benefit to the citizens. The solidarity and strong sense of responsibility among all its employees is another social value that belongs to the category of 'creating'. The values created by FGM-AMOR in the category sharing emerge due to the reason that the company is sharing the knowledge produced to support the environmental-friendly, social and economic development in the transportation sector. Furthermore, the company shares its knowledge with its network of organisations throughout Europe. Basically, within this business model, economic,

environmental as well as social values are created, but during the interview the interviewees focused on environmental and social values.

Outcomes and Reflections

The following graph shows FGM – AMOR's rating on the seven criteria characterizing a NBM. The company is performing very well in all of the criteria, except the allowance of alternative currencies.

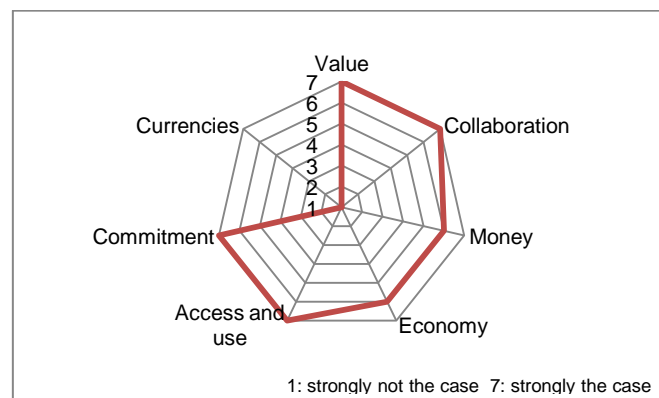


Figure 9: Spider diagram of the NBM of FGM-AMOR

Works on shared value creation is strongly the case for FGM-AMOR's activities because added environmental and social values in addition to economic values are created. Cooperative collaboration is a central due to the strong network of actors throughout Europe and in Austria. Regarding the criteria that money is not the only transaction medium it should be mentioned that FGM-AMOR is working with NGOs that have the same area of interest and they are involved in non-financial transaction. FGM-AMOR provides the NGOs with its large meeting hall and other logistic facilities, such as printing and photocopying facilities. The NGOs in turn will provide FGM-AMOR knowledge in the area of sustainable mobility management. The knowledge produced by FGM-AMOR is highly required by and useful for the society and different stakeholder involved in sustainable mobility management, therefore the business model is based on use and needs. The knowledge produced by FGM-AMOR is accessible by different actors. Equally important is that FGM-AMOR has access to the knowledge and experience beard by its different network of actors. Therefore, based on access and use received the highest possible rating. Founded on long-term commitment is strongly the case for FGM-AMOR since it is founded for working on the sustainable mobility front for a long period of time. Allows alternative currencies is not the case at all for FGM-AMOR, primarily due to the reason that it is working on European projects and demanded to deliver its financial report in terms of money only. There is no room left for manoeuver in this regard for FGM-AMOR as long as it's a project based company.

2.5. Four Elements

Four Elements (4E) is an association developing and promoting Hip Hop and urban culture based in Graz. It has an extensive network of creative professionals, promoters, social and youth workers and artists working together in different teams on different projects. This BM shows how hip hop and urban culture are transformed to build a self-conscious community, a network of social workers, artists, producers, cultural managers, art dealers, public institutions and others based on creating, sharing and collaboration.

How and why the business model was developed

The model was developed step-by-step. In 2006 a couple of friends organized a Hip-Hop festival (45 artists performing in three locations) to promote urban culture and artists of all four elements of hip-hop (graffiti, break-dance, DJ-ing, and rap) and themselves. After the first festival in 2006 the core-members felt an on-going demand for hip hop based cultural practice and experience in different settings. They realised that these services could be workshops for youth centres, for the public, promoting and selling art and art performances to different customers or encouraging the community in different urban districts to revitalize public space through discourse, performance and art, like graffiti paintings and concerts. In 2008 they started as an association. A large share of their monetary base was financed through subsidiaries and sponsoring. The more people got involved the more different professions accumulated. Since people knew each other from diverse Four Elements events they began to collaborate outside the 4E framework, often bringing their contract projects back to Four Elements, when they needed specific expertise to realise and promote them. The more projects were realised in co-operation with Four Elements the more it was associated with an expertise in urban art forms and contemporary youth culture, having the potential to organize and administrate a long-term cultural and social development. A number of creative entrepreneurs in different disciplines work for free sharing their time with Four Elements knowing that this could be a kick-start for their own business projects. Therefore Four Elements is able to get artists involved in youth projects, which are some kind of role models for the younger generation. Governmental Institutions and parties like 'Die Grünen', City of Graz, province of Styria or Caritas (Austria) and others collaborated regularly with them. The financial basis for social projects still derives from subsidiaries, entry fees and sponsoring. Beside that there are a lot of projects where the collaborators get paid for. But there is no money floating back from this (paid) external projects to Four Elements, there is only the time the professionals share for Four Elements projects. Even though there are really a lot of different areas and projects in which Four Elements operates, they are just at the beginning to form a real business relying on a solid business plan. Today loosely 10-15 people are working for Four Elements, depending on the prevailing projects, with many more associated.

How does it work

Four Elements is categorised as C2C or in some cases B2C. The company connects people and every other component in its network to produce its values. Four Elements provide services and cooperation's for governmental institutions, organisations and companies, who are in need of Hip Hop-related products such as graffiti painting, break dancing, and music mixing. Moreover, they organize Hip Hop festivals, events and projects, workshops and performances that attract the youth a great deal. Their motto is 'each one teach one', showing the important role of education for the next generation in their BM. They are closing the generation gap through hip hop and youth culture based exhibitions, combined with traditional lectures, movies and discourse open for every- one in different locations all over the city. They connect different actors through their network to realise projects and ideas from different sources. They revive public space. As the CEO states it in the interview: 'Four Elements is an intercultural network organisation'. The hierarchy of Four Elements is really flat. The core team (CEO, managers and the staff are not totally separated) creates a network of sharing know-how among artists, professionals (from different professions in Hip Hop and urban culture) and young individuals. They also have a number of partner organisations and co- working places.

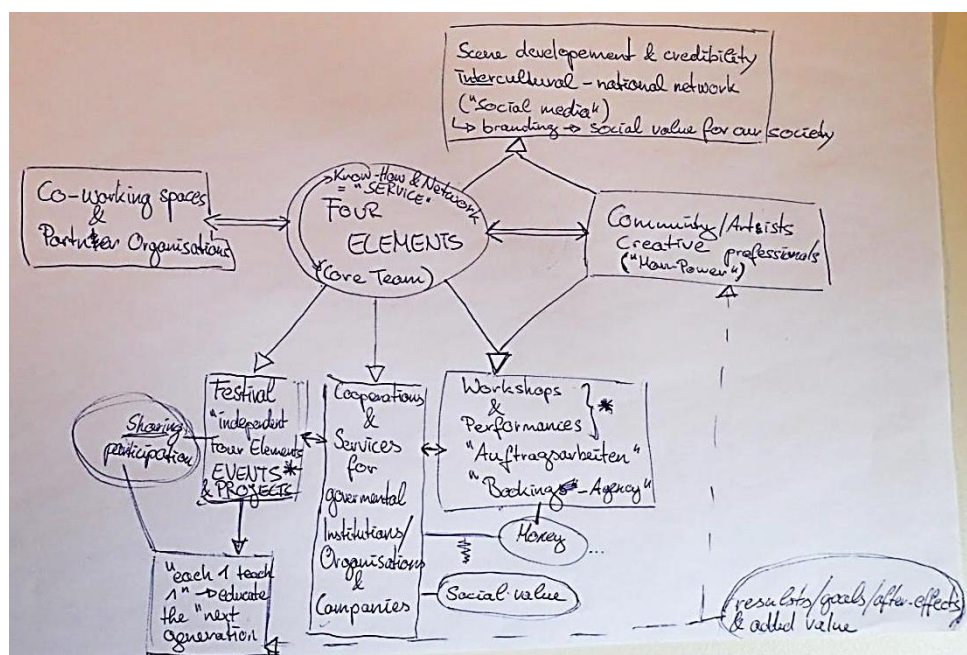


Figure 10: Picture of the NBM of Four Elements

What kinds of value 4E creates

4E creates different kinds of values, based on the different processes. All these values focus on the social aspect of sustainability. Basically, Four Elements link every participant to create a Hip Hop Culture that had not existed before in the area. They make an added value for the society in Graz and contribute to the social aspect. With their activities in the city they claim back abandoned public space (cultural value). Within the network, when people know

something – not only knowledge of Hip Hop but organisation and communication skills, for example – they tell it to others without expecting payment. Four Elements connect and/or promote professionals. They work at the company's events for free, and get promoted in big well-known projects, that are values for them as well (professional value). Four Elements pay a lot of attention to the youth. A great number of young people from 10-25 years old are really interested in these artistic fields. They go to the work- shops and performances where they can learn from the experts, after that they get together to practice, and then they can be involved in the company's activities as the next generation (educational value). The actors in Four Elements collaboration include break-dancers, DJs, rappers and beat-boxers, beat-productions, graffiti creators, writing and street artists, photographers and multimedia producers (collaboration).

There are three criteria in Four Elements business model: sharing knowledge, the media and the devices. A network of creative professionals that collaborate in the company's activities plays the role of running the whole business. Once an individual joins in the network, he/she will have plenty of opportunities to learn from experts in that area. All of them will contribute their talents to the company's events and activities. The whole Media, especially social media aspect is very important. This criterion is clear, because the company needs to highlight their projects and attract communities. The last point is about the devices. Through partnership, they can get professional equipment for really good conditions, while the exchange is not always in monetary terms. Take photography for instance. The devices were provided by a smaller business for free, and 4E promotes them on their events. In summary, the new business model of Four Elements is a mix of sharing and creating.

Outcomes and Reflections

The spider web diagram shows the seven most important characteristics of NBM and how 4E think they meet those criteria:

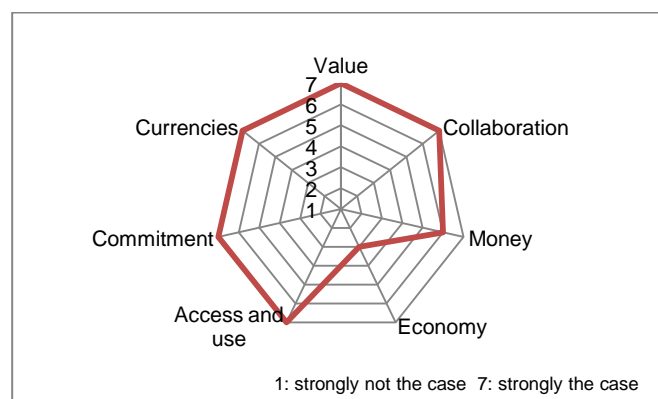


Figure 11: Spider diagram of the NBM of Four Elements

The company has a point of sustainability in social aspect. They created a culture of youth work concept based on hip-hop. As it happened, kids formed their own break-dance crews

and they attended almost every project after joining in Four Elements activities. It seems that Four Elements has a lot to offer, but if it can be a sustainable NBM must be questioned. At the moment it is more like a collective of independent young entrepreneurs from different professions working together but on their own bill. But as the CEO mentioned in the interview working on their business plan is an on-going activity.

2.6. Gemüsewerkstatt

Gemüsewerkstatt is a commercial association that creates a platform and network for bringing organic farmers and customers from Graz and the surroundings of Graz together. With Gemüsewerkstatt, organic farmers have a platform where they can sell their organic products and customers can buy healthy and organic food and at a fair price. The association works together only with organic farmers from Graz and the surroundings of Graz, with a maximum distance of 50 km away from Graz, because they pay attention to short transportation routes. Additional to the organisation of the sale, Gemüsewerkstatt also provides lectures, participate in discussion groups and they arrange cooking workshops. Furthermore, they organize excursions with their customers to their farmers, so that customers can see where the food comes from.

How and why the business model was developed

Gemüsewerkstatt was founded in 2010. The overall idea was to develop a new concept for buying and selling organic food. First, the founder thought about delivering diverse local and seasonal vegetables and fruits to the customer's home every week. But, within this idea the ecological footprint would raise because of the transportation itself and the refrigeration of the transportation truck. Due to this problem, the founder came up with the idea of a pick-up site at which customers can collect the organic food by themselves.

The lead-time for developing this new concept was about 18 month. At the beginning it was very difficult to explain the advantages and the procedure of this new concept to farmers, which do not know the idea before. As Gemüsewerkstatt is an association, financial resources are limited. Therefore, advertising is done at a minimum. Gemüsewerkstatt's employees are working unpaid at the moment but their aim is to earn money with Gemüsewerkstatt in the future. In autumn 2010 Gemüsewerkstatt started with four organic farmers. At the end of 2012 there were about 21 farmers working together with Gemüsewerkstatt.

How does it work

Gemüsewerkstatt's business model focuses on B2C. Customers visit the website www.gemuesewerkstatt.at, where they find an overview of all organic products. In the web shop the customers can choose and order the organic food they want. There is no minimum quantity or minimum order value. The only guideline is that the orders have to be made by Wednesday noon. Every Wednesday, all orders are collected from the employees of Gemüsewerkstatt and then forwarded to the organic farmers in order to guarantee a delivery on Friday. The farmers deliver the ordered food to the Gemüsewerkstatt pick-up site by themselves. Customers can pick-up their order on Friday afternoon at the pick-up site. There is also the possibility to delegate a bike courier against a small delivery fee, in order to deliver the products to their homes. To optimize the transportation, the farmers organize a common transport. Due to the common transportation of the fruits and vegetables and the low distance between the pick-up site and the farms, a small ecological footprint can be achieved.

Customers have the possibility to become potential club members of the association. The club membership is voluntary; customers are not forced to pay a member fee. There are three possible types of club members.

- Support club members: They are supporting the Gemüsewerkstatt with money (donations).
- Regular club members: They are paying an annual fee; therefore they get a discount for every order they make.
- Active club members: They are helping the employees on Fridays to arrange the delivery day.

The following figure simplifies how Gemüsewerkstatt works:

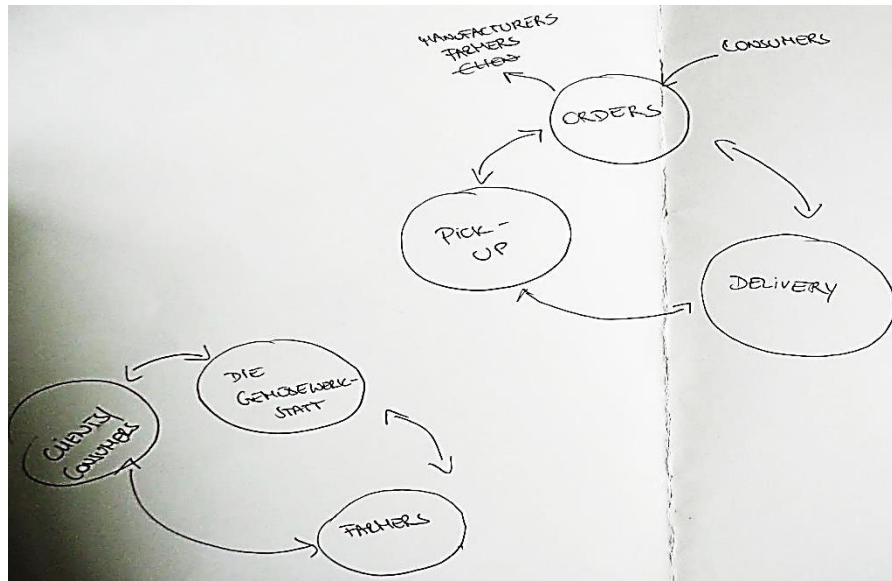


Figure 12: Picture of NBM of Gemüsewerkstatt

On the left side of the picture, the cycle between Gemüsewerkstatt, farmers and consumers is shown whereas on the right side the cycle between orders, delivery and pick-up is illustrated.

What kinds of value Gemüsewerkstatt creates

The business model of Gemüsewerkstatt can be categorised as a creating, swapping as well as a sharing business model. The association trades and swaps a lot, due to budget restrictions. For instance the website was designed by a teacher, who is a good friend of the founder, together with his pupils in a class project. Customers, farmers as well as other people have the possibility to participate in and to give feedback to Gemüsewerkstatt. The association wants to involve customers as potential members of the association, in order to get new ideas, feedback, etc. Furthermore, Gemüsewerkstatt establish a win-win situation by creating several added values for both, farmers and consumers. They create a platform or network for the organic farmers and their products and customers in Graz and the surroundings.

This NBM is also about sharing. The office of Gemüsewerkstatt – which simultaneously is the pick-up site – shares rent together with another organisation using the room also for their work. Additionally, Gemüsewerkstatt provides their office to a permaculture round table which takes place once a month. Further on, Gemüsewerkstatt is supporting other people who are thinking about establishing a similar model in other regions of Austria. They share their knowledge and give those people tips and hints because they want to carry this idea further. Within this business model, economic, environmental as well as social values are created. Economic values emerge due to the reason that there is no pricing pressure for

farmers. The price is fixed by the farmers themselves and it is not negotiated with them. Another reason why economic values are created is that the transportation is organized collective. Thus, the farmers can save transportation costs. Lower transport distances lead to added environmental values. Furthermore, customers are forced to think about packaging material and transportation before they pick-up their products at the pick-up site. In supermarkets organic food is wrapped in plastic. But, within the concept of Gemüsewerkstatt, people have to bring their own boxes, cans, back bags, etc. in order to take the ordered products with them. This may lead to less use of plastic bags and packaging material. Gemüsewerkstatt strongly supports organic farmers in the area of Graz. Thus, the association helps to prevent that small local farmers die out. The association promotes healthy nutrition. Therefore, the company tries to motivate their customers to cook with healthy products and to think about their nutrition. In cooking workshops, Gemüsewerkstatt shares knowledge about nutrition and different people can exchange views. Furthermore, Gemüsewerkstatt wants that people understand that there are various growing possibilities in Austria and that a seasonal nutrition is also a big concern. So the association is also able to strengthen the community and to create multiple social values.

Outcomes and Reflections

The following graph visualises Gemüsewerkstatt's rating regarding the typical characteristics of NBM.

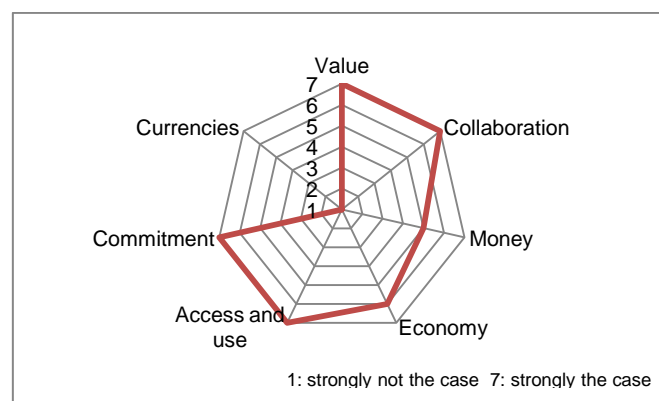


Figure 13: Spider diagram of the NBM of Gemüsewerkstatt

The association does not allow alternative currencies at all. During the interview they mentioned that due to the fact that Gemüsewerkstatt is a commercial association and the law does not allow using alternative currencies, they cannot allow alternative currencies within their business model. As all the employees are working for free at the moment and the farmers and customers are not forced to pay a fee in order to participate, cooperative collaboration is a central principle and the business model is based on access and use. Gemüsewerkstatt creates multiple social, environmental and economic values for their

customers, farmers and all other people involved in this business model. Thus, Gemüsewerkstatt entirely fulfils the aspect of shared value creation.

2.7. Holzwärme Strobl

Holzwärme (HW) Strobl is a heating plant situated in Strobl near Salzburg that provides heat produced to 98% out of renewable resources. HW Strobl consists of 38 collaborators and provides heat to approximately 80 buildings in the region, i.e. households, compartments and public buildings. The company combusts wood in the form of wood chips, for heat production, which is distributed to the village of Strobl via pipes.

How and why the business model was developed

The HW Strobl business model was considered since 1996 and a respective inquiry was made in the village to assess whether it would be a favourable option among the inhabitants. At the time, wood heating prices were not competitive enough to oil prices and thus the business was not deemed viable to start up. After 8 years, i.e. in 2003, finally the opportunity for settling the business was good, as oil prices got higher. In other words, a wood heating plant would have a competitive advantage. Thus an association of 38 partners was formed, which took action. Much effort was needed in terms of collecting all the necessary information and roughly estimating the demand and thus where would be the best operating place. No new inquiry was made, but offers were made to each of the inhabitants and the first contracts were signed in the summer of 2004. In September 2004, in only a few months, they started operating, providing heat. Since then the demand grew and is still relatively stable or growing. So the development was rather quick once the decision to actually attempt this venture was taken.

How does it work

As it is already mentioned in the introduction, HW Strobl is a wood district heating plant that provides heat to approximately 80 buildings, i.e. households, compartments and public buildings in the region. Wood is combusted in the form of wood chips, for heat production, which is distributed to the village of Strobl. What is special about this enterprise is the fact that the farmers who provide wood, can choose not to receive money for their sale, but a credit note according to which they will receive an equivalent, in terms of money, amount of heat instead. The wood that is used for heat production derives from the local region (max distance 20 km) and thus people know how the fuel source used for their heating was produced. An independent from fossil fuels, competitive, renewable fuel source is used in the form of a centralized system, as people won't own a boiler anymore, but will be supplied with heat from the same source.

The BM is depicted in Figure 14 below. The drawing on the left depicts the complete system. The sun creates trees and thus wood, which is then used for heat

production in the heating plant, which distributes the heat to the region through a water cycle through a pipe system. The drawing on the right comprises a part of the left drawing and specifically the heat purchasers. In the circle of this drawing belong the residential and public buildings (the latter represented with a G (Gemeinde)) and also the farmers who use credit notes for the wood they provided. There are some farmers out of the circle as well, which are the ones who are far away and thus are not suitable for district heating. The subsystem is connected via a line to the whole system on the left.

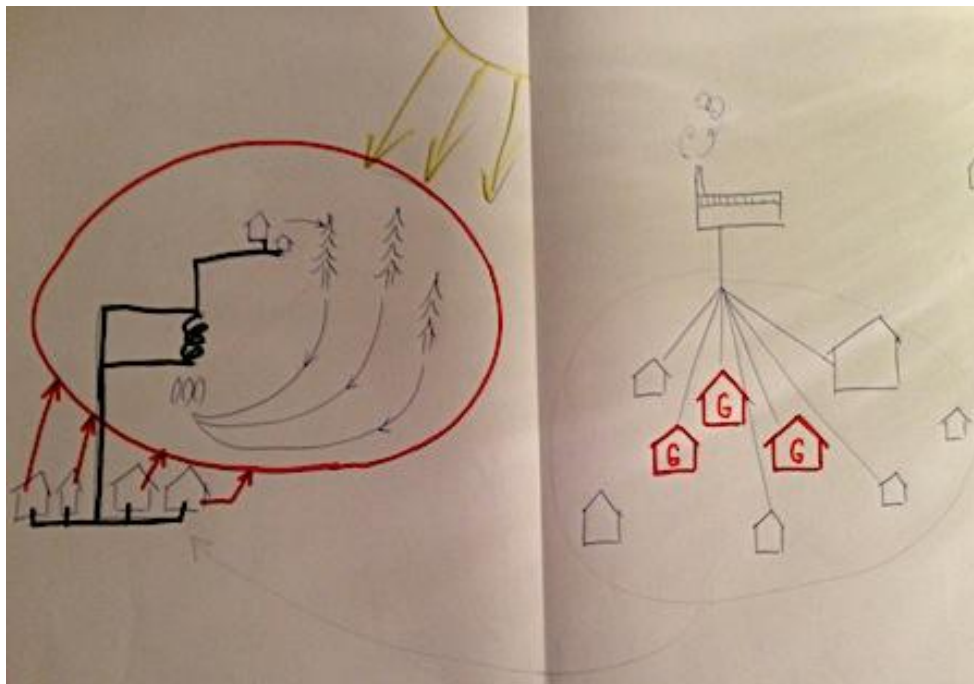


Figure 14: Picture of the NBM of HW Strobl

The involvement of farmers who use credit notes for getting heat equivalent to the wood they provide and of farmers, who receive money, makes the BM difficult to distinguish as B2C, C2B or C2C. Nevertheless, typically the farmers' double role as providers and consumers is separated, mainly because they don't comprise the majority of consumers. Thus the BM is considered to be a B2C model, as the business, i.e. heating plant provides a service to the end consumers, i.e. inhabitants getting receiving heat.

What kinds of value Holzwärme Strobl creates

The HW Strobl business model is about creating, as wood obtained from the farmers is processed into wood chips, then combusted for energy production in the form of heat, and finally distributed to the purchasers. So the BM is merely providing a service rather than a product. The focus of HW Strobl is to create environmental values, but nonetheless economic values are important as well and are part of the BM. There are some social values created by the HW Strobl but those are just positive 'side effects'. Through Holzwärme

Strobl people get heat from regional wood instead of fossil fuels. The wood that is delivered to the Holzwärme Strobl is 100% regional (max. 20 kilometres distance). The value that is created thereof is that small farmers and forest owners are able to sell their wood to a local company and they get fair prices for their product. People who buy heat from the Holzwärme Strobl know where the wood is coming from and that it is produced in an 'environmental-friendly' way. That means it is better for the environment than usual ways of producing heat, like oil-fired heating systems (environmental value). As HW is a regional enterprise, the local economy is enhanced and customers pay less for their heat compared to other heating systems (Institut für Wärme und Öltechnik 2013).

- Current price (2013) for district heating: € 0,0921 / kWh (including price for performance and measurement).
- Current price (Austrian average price incl. taxes 28.01.2013) for domestic fuel oil: € 0,9730 / Litre.
- Current price (2013) for electricity: € 0,1610 / kWh.
- Current price (2013) for wood pellets: € 0,248 / kg.
- Current price (2013) for hard Coal-coke: € 0,551 / kg.

People who get the heat from the Holzwärme Strobl don't have further installation and maintenance costs, as they don't have to own a furnace. Also, there is oil independency and they don't have to buy directly any heating fuels or any additional products; they just get the heat delivered (economic value). Finally, the HW collaboration has created some working places and thus a few people were employed, although as pointed out from the interviewee this was mainly a side effect and not a goal (social value).

Outcomes and Reflections

This spider web diagram represents the rating regarding the typical characteristics of NBM.

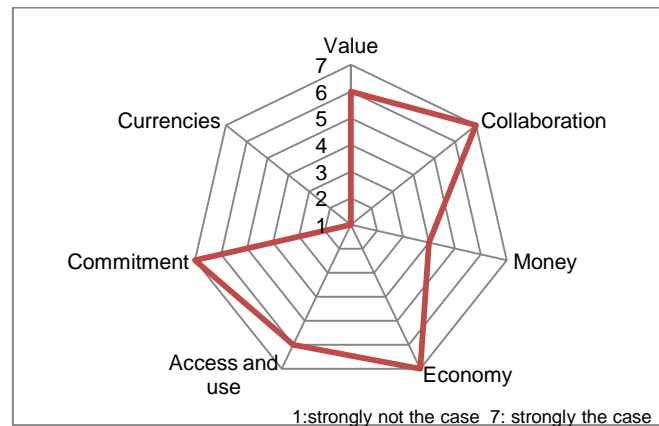


Figure 15: Spider diagram of the NBM of HW Strobl

The main purpose of the Holzwärme is to produce sustainable heat in a sustainable way at a regional level. Of course the economic success is essential, because otherwise the company couldn't survive. But the Holzwärme was founded to provide sustainable energy. The values created out of this business model are that people get regional heat out of renewable resources instead out of fossil fuels. Alternative currencies are legally not possible within this business model, because they sell something and so they have to pay taxes. But still, there are transactions without any cash flows. Probably the business model will have long-term success. They already exist for 10 years and there is growing demand. They are thinking about building a new heating system. As long there is enough wood that can be delivered to Holzwärme, and as wood heating has a competitive advantage over fossil fuels, e.g. lower and stable prices, there won't be any problem. What makes Holzwärme a New Business Model is beside their focus on the environment and the provision of a sustainable service, the fact that it comprises an association of many collaborators and that there is relatively flexibility in the transactions and the business plan itself.

2.8. INTERVAC Austria

INTERVAC is an international home exchange & holiday service company. INTERVAC Austria is an organisation, or more precisely, a civil-law partnership, which is in charge of running the online database for home exchange/swapping in Austria, providing with the home offers and contact information for members. Meanwhile, INTERVAC offers guidance and advice for swappers to help them to get the most out of the home exchange experience.

How and why the business model was developed

INTERVAC was the inventor of the idea of home swapping and has been discovered and pioneered home swapping practices ever since. The origin of the idea of home swapping can be dated back to 1953, stemming from collaboration between teachers to offer low-cost vacation accommodations among their colleagues around the globe. The development of the home swapping model is mainly driven by demand from the market. After the initial trials, participated teachers found that it is an enjoyable way of travelling and realised that living in each other's homes was great for cultivating international friendships. INTERVAC's home swapping concepts and services has been growing ever since – not confined to teacher group anymore, but open to all the people that are interested in home swapping. In the beginning, swapping offers were only available in printed version. Offers were printed and tacked into a catalogue and sent to all members. Thanks to the internet, INTERVAC could use online platforms to spread information to all partners, with a much higher information density and with the possibility of immediate updating. Nowadays, INVERVAC has innovated again by offering free application for iPhone and iPad, and by showing all available homes on Google maps. Thus, it makes partner-searching process easier, clearer and more enjoyable. All in all, these above mentioned innovations in communication channels fostered a better diffusion of the home swapping services in and out of Europe.

How does it work

The principle of home swapping is that the 'homes' the partners exchange do not need to be of the same value, as long as the partners' offers fit together. As it is shown in the figure, not only houses, but also apartments, cars, caravans and boats can be exchanged.

INTERVAC Austria counts a membership fee of 89 € annually, including unlimited swapping. Generally, members follow a free-in/free-out participating process. Houses, that the partners are swapping, do not have to be of the same value, they only have to fit together. The offers differ a lot from each other and it is all about finding the best fitting offer, choosing the right exchange partner and to contact them. The next step is to organize the duties. Duties are connected to the houses (the object for swapping), for example to cut the lawn or to take care about the different plants. The whole home swapping concept is depending on faith, thus a good way to maintain faith is greatly needed. Faith is sustained in form of evaluations. Evaluations are voluntary and should guarantee a better reliability. INTERVAC Austria is keeping record of all troublemakers, which are excluded from the swapping system if they do not fit to the rules. INTERVAC Austria emphasized the importance to hold promises and to be faithful. If faith is not obtained any more it would be the end of the organisation.

INTERVAC is categorised as C2B and B2C, because it is possible to describe the connection as follows: The members offer their property on the online platform (to the organisation) and the organisation provides the home to other members. However, it also fits into the C2C

model, because customers, if they have already got in touch with each other, they have to organize the swap directly by themselves.

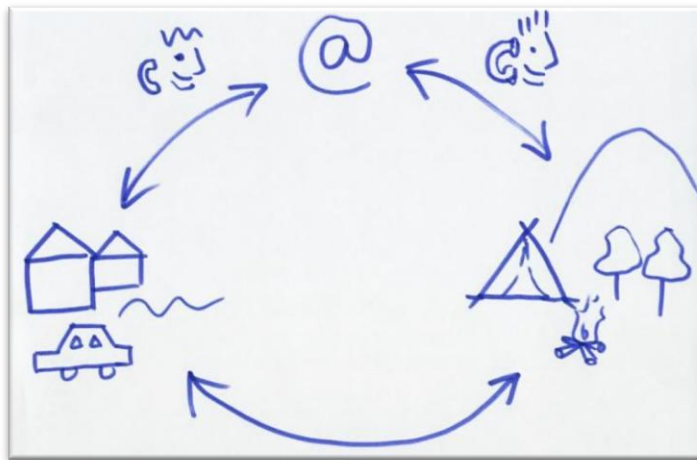


Figure 16: Picture of the NBM of INTERVAC Austria

What kinds of value INTERVAC creates

The sustainability value of this new business model mainly lies in the social domain: trust, sharing, responsibility, cultural exchange, security, cultivating international friendship, etc. The first impression of home swapping is that it is low-cost nature. Besides offering an economical travelling option, INTERVAC (or house exchange in general) creates a whole bunch of shared social values itself and among the swappers. The business model of INTERVAC is swapping (swapping of properties). People actually swap lifestyle together with swapping houses, and gaining cross-culture experience and developing international friendship. When exchanging houses with another family, one trades much more than just a place to stay. The members trade views, neighbours, environments, and climates; for a little while one can experience someone else's life-style. As it is mentioned before, the whole business model is based on faith. Swappers need to be trustful on the one hand, and also trust their swapping partner on the other hand. Also, swappers need to be generous enough to share their own houses and lifestyle with others swappers. Meanwhile, during their stay in other's house they need to be responsible for the exchanged house. These shared values are closely related to social sustainability. A long-term partnership between the exchanging partners and INTERVAC is not necessary. The partnership can be quit whenever the participants want to. According to INTERVAC Austria, some members who swapped on INTERVAC continue changing their houses in a private way. The organisation does not care about that because it is the aim of the organisation to bring international people together.

Outcomes and Reflections

This spider web diagram represents the rating regarding the typical characteristics of NBM.

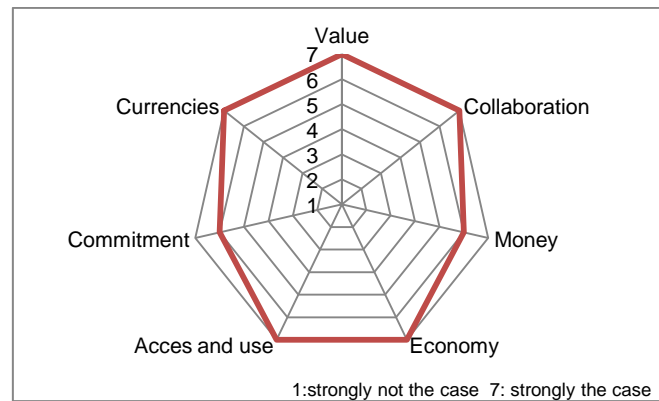


Figure 17: Spider diagram of the NBM of INTERVAC Austria

Concerning the aspect that cooperative collaboration is a central principle the CEO said, that the whole business model is based on the active participation of swappers from around the globe. Concerning the aspect, that money isn't the only transaction medium, the CEO said, that within this BM, properties such as houses, apartments, cars etc. are the transaction medium. INTERVAC categorized swapping as transaction process. The reason why it is not fully scored is that swappers need to pay an annual membership fee to be able to join the swapping. Due to the fact, that home swapping maximizes the utility of the houses, the criteria economy based on use and needs is scored the highest, same like based on access and use. Within the interview the CEO mentioned, that the ownership of the houses is not the central issue during the swapping. INTERVAC is founded on long-term commitment. According to INTERVAC Austria, some members who swapped on INTERVAC continue changing their houses in a private way. The organisation does not care about that because it is the aim of the organisation to bring international people together. The BM of INTERVAC is not dependent on money, the currency INTERVAC is using is swapping. The house swapping business model is based on exchange principle encouraging to create shared value to the pair of swappers. Participants benefit from cheap and convenient holidays, a home-like experience, cultural exchange and more integration in the new neighbourhood. The sustainability value of this new business model mainly refers to the social domain: trust, responsibility, generosity, cultural exchange, security and cultivating international friendship. Especially, the whole swapping business model is based on trust. House swapping is good for environment as well, because a decreased demand on hotel will reduce the environmental impact related to hotel operation and services. If home swapping would become a mainstream choice of holiday, it could save land, energy, materials and money for building up hotels.

2.9. KAESCH – Network for neighbourly help

Nowadays money is the most important means of exchange. Exchanging goods for money or providing a service and receiving money is very common in today's society. Due to this fact some people had the idea to form a kind of system, where people receive something for something else, such as KAESCH, which is located in Vienna. It is an exchange system, where people can swap all kinds of material things and services. Participating in the system is only possible between members of KAESCH. It is based on a membership basis and not designed for winning, exploiting or speculating. KAESCH has the ultimate goal to bring people with different native languages together and it is really appreciated that people care about each other, because social abilities connect people with different backgrounds.

How and why the business model was developed

One of the founders of KAESCH, already founded an exchange system in Vienna in 1996. The intention was to change the structure of doing business and to support the abilities of people. However, she has never done something like this before and therefore she and her exchange system faced some problems. The CEO decided to establish the system within one housing complex, called 'Schöpfwerk'. In the beginning people really liked and accepted it. However, after a while the exchange network started to stagnate. This was due to a too little creativity of the residents within this housing estate and a lack of further demand. In consequence it failed. A few years later there was a change in the housing structure, especially within the 'Schöpfwerk' housing estate. At this time more than 5000 people lived there. Two thirds of them were immigrants from 26 different countries. Additionally, there were lots of children with bad knowledge in the German language and as the CEO was not able to change the school structure, she saw again the need for neighbourly help. This was the main driver for her to found the exchange system KAESCH. As she had a higher experience at that time, she decided to establish the system within three housing areas in order to increase the creativity and to include people out of many different societal classes. KAESCH encompasses the three housing areas 'Kabelwerk', 'Alt-Erlaa' and 'Schöpfwerk'. Finally, the opening event took place in November 2010. Now KAESCH offers a good opportunity to exchange goods or services between people. There are about 200 to 300 members (nearly 50% Austrians and 50% immigrants) who operate together.

How does it work

KAESCH is a private association based on membership. The exchange system is managed in a hierarchical way. On the top there is the board, which instructs the regional groups. Below the regional groups there are additionally some project groups, who are responsible for the events. Due to the fact that the members only consist of private persons, this business model focuses on C2C, but other constellations would also be possible.

The following drawing shows how KAESCH works:

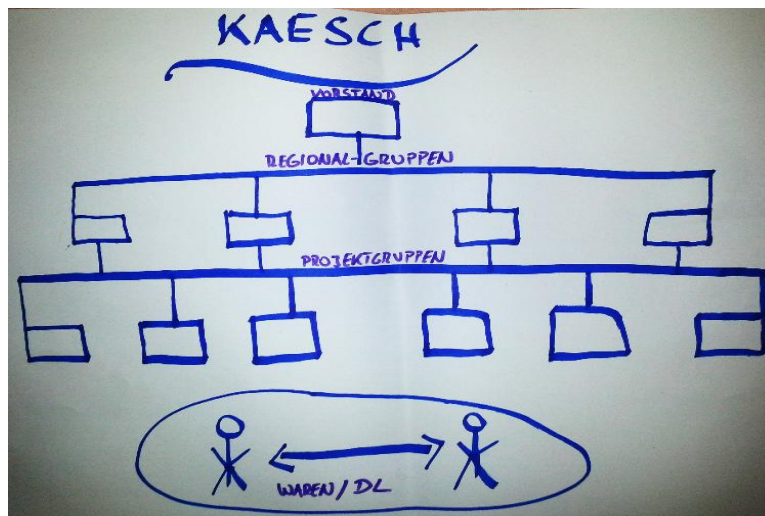


Figure 18: Picture of the NBM of KAESCH

On the one hand, the upper part of the drawing shows how KAESCH is organized and on the other hand, the lower part illustrates what it is all about – the exchange of goods or services between people.

For a mature exchange system it is necessary that it has a communicative size, because trust between the members is the prerequisite. In further consequence the creativity of the members plays an important role to be successful. They have to continuously generate and provide new products and services in order to create shared values. Additionally an exchange system needs to have some people with great networking abilities to sustain and extent the network. So, personal contacts are also decisive. Likewise in every other business some consequent people, who develop the necessary structure and who are responsible for the organisational stuff, are needed too.

What kinds of value KAESCH creates

When thinking about the ways value is exchanged, sharing is the most important one, because members can share their products and abilities (services) with every other member. But of course the category of swapping also refers to KAESCH, because it is an exchange system and for that reason people are swapping too. Also in this NBM, economic, environmental as well as social values are created. The association generates various shared values for the founders as well as for their members. First, social values are created because the ultimate goal of KAESCH is to bring people with different backgrounds together and members should care about each other. Instead of making profit, the exchange system is oriented towards a social way of doing business. Furthermore KAESCH strengthens the social competence of members and the abilities to trust other people. Second, economic values are created as the exchange is organized between private people. Thus, the members of

KAESCH benefit directly, if one product or service of them is exchanged. Furthermore, the members face lower expenses as if they would have to go to a shop or to a service company. Third, due to the reason, that people can sell products that they don't need any longer, resources are saved. Reusing is a very good way to save the environment. Exchanging or sharing can lead to fewer products and thus, also environmental values are created. As mentioned also in the previous section, the creativity of the members is an important part for being successful. People become really creative if they have a minus on their KAESCH account (if they have consumed something, but not exchanged). In this case the members often create 'new' products that can get swapped and create shared values.

Outcomes and Reflections

The following graph visualises KAESCH's rating regarding the typical characteristics of NBM.

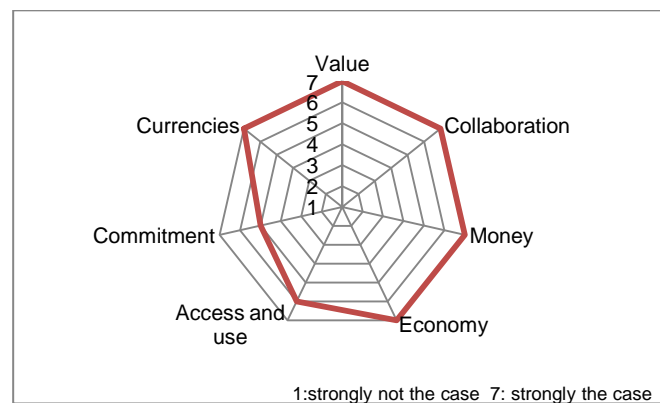


Figure 19: Spider diagram of the NBM of KAESCH

The criterion regarding shared value creation is fully fulfilled, because KAESCH creates shared values in various ways. As the ultimate goal of KAESCH is to bring people together and that they support each other, cooperative collaboration is a central principle. Of course money is not the only transaction medium, because members can exchange goods for goods or services for services for instance. Due to the fact that members exchange something they have for something they need, the business model is economy based on use and needs. Or in other words, they offer services, in which they are good in, for something they cannot do by themselves. Thus, the business model is also based on access and use. Due to the reason that the first established exchange system failed and one never knows what will happen in the future, founded on long term commitment received the lowest rating, although the founders would like to run KAESCH forever. Alternative currencies are allowed in this business model, due to the fact that members can also pay with 'Kaesch'.

The way in which KAESCH operates also leads to improvements in terms of sustainability. For them the social sustainability is of highest importance within the system. The socialized network of KAESCH, the interest-free transactions (neither positive nor negative ones), the

connection and support of people, which establishes friendships and their transparency strongly confirms that argument. Furthermore the principle of 'give-and-take' is of superior importance for KAESCH. Besides that, KAESCH can also lead to improvements for the environment, because exchanging or sharing can lead to fewer products.

2.10. Gärtnerhof Ochsenherz

Gärtnerhof Ochsenherz located near Vienna is so-called a community supported agriculture (CSA), which is also known as 'Gela – Gemeinsam landwirtschaften'. It consists of a farm and a community, who cooperate and share risks and benefits to establish a win-win situation. The community is also involved in the planning and decision making of the farm but still there are some internal decisions that are made by the company itself.

How and why the business model was developed

The basic principles of community-supported agriculture were developed in Japan during the 1960's with the aim to reduce the food supply chain and to have source safe food. Gärtnerhof Ochsenherz operated as a normal vegetable-producing farm until 2008, when the transformation into a CSA started. Some farmers got to know the model in the United States and then went back to Austria, making contact with consumers who had a major interest in food sovereignty and sustainability. Since 2011 the business model is fully functional, the farm has no longer need to sell their products on the normal market. Currently, there are more than 200 harvest shares/memberships of different sizes, ranging from family to single shares. The development process is still going on.

How does it work

Initially, members of the community and the Gärtnerhof agree on two things: on the one hand on the amount of vegetables which will be consumed by the members throughout one year and on the other hand on the amount of money which they pay for the vegetables (either monthly based or once a year). All in all, the money paid by all the members in a year has to be at least as high as the overall costs for the garden centre per year. Basically there exists no fixed amount or share which the members do have to pay, each person can individually decide how much he or she wants to pay, as long as all the other members do agree and the overall costs are covered. Besides, the consumers can also bring in their handcraft on the farm on a voluntary basis. After this negotiation process – which normally takes place at the beginning of the year – the members can consume this certain amount of vegetables. For getting the vegetables they have two options, either they pick up the products on certain market places or they will be provided with a "vegetable box" ("GemüsekiSt") from May to October.

Ochsenherz's new business model can be categorised as type B2C in which the farm provides food and added value to consumers.

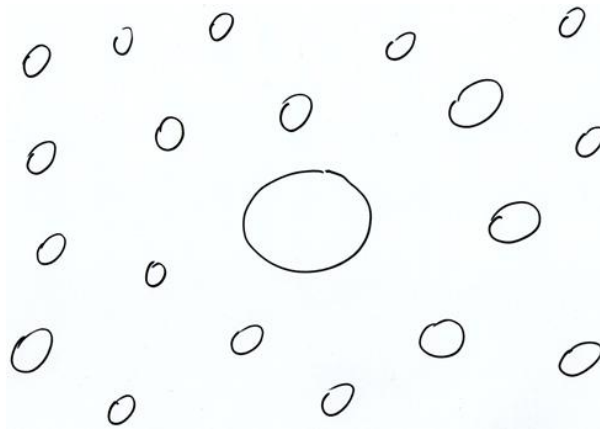


Figure 20: Picture of the NBM of Gärtnerei Ochsenherz

The farm – the biggest circle at the centre – plays a core role of producer/provider in the group. Other smaller circles are individuals – members of the community who contribute fund, labour, innovation and also consume farming products. The food is produced according to Demeter standards. All ideas and potential future developments are being discussed within the community in monthly meetings.

The value Ochsenherz creates

On one hand, this model is about sharing. The farm provides infrastructure, farming tools, fields, seeds and transportation while the community contributes capital, labour, knowledge and responsibility. On the other hand, the creating aspect becomes more important through time when member-consumers play bigger roles in business activities. It was an intended decision to create the business model as it is, where producers and consumers are not only highly interwoven but more than that, consumers themselves are bringing in their energy and time. By working on the farm, they can compensate an abated financial contribution. Anyway, in return they get unique high-quality food with a good price and a long-term commitment. By doing that, money is no longer the only transaction medium. Furthermore, community meetings are organized every month, so that members can freely discuss in groups about related topics. Therefore, they are able to take part in the management and strategies of the business. The business activities are highly transparent and reasonable and therefore the consumers know for which kind of product they are paying for, even if the prices for the vegetables might be higher compared to large and standardized farms producing tons of food. Again, both consumers and producers agree on the price democratically.

Outcomes and Reflections

This business model represents the characteristics below:

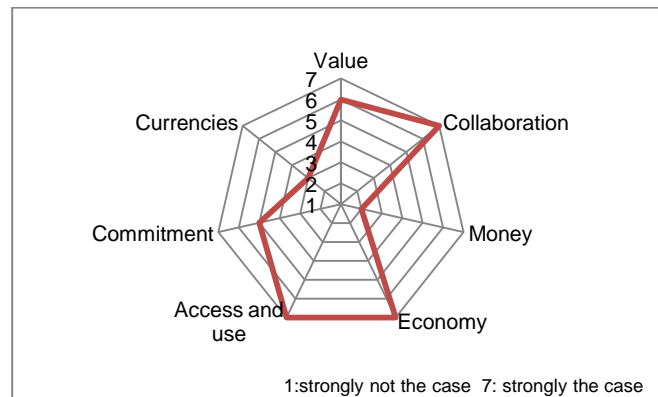


Figure 21: Spider diagram of the NBM of Gärtnerei Ochsenherz

This business model definitively creates multiple values, although the interview partners did not rate all aspects with the maximum score. Whereas, it is clear that there is a strong cooperative collaboration between the farm and the community. The criteria 'use and needs' (economy) and 'access and use' were rated as most strongly. Although fulfilling its function, this NBM has a slight problem in long-term commitment. There are more member-consumers only pay periodical fees and do not want to spend time working at the farm. At the moment there is a discussion going on whether there could be rules in the future which might encourage people to rather bring in their working time than paying a certain amount of money. The categories 'money is not the only transaction medium' and 'allows alternative currencies' have low ratings. In fact, the money transaction could be higher than rated in the interview. Our interviewee referred at these categories to the on-going development in these fields. Therefore the rating is lower, although it is more elaborated than other business models.

2.11. OMEGA

OMEGA is a non-profit organisation situated in Graz, Austria. It is a transcultural centre for mental and physical health and integration. OMEGA's aim is it to integrate refugees and immigrants into the Austrian society. The organisation tries to foster their client's independence, so that they can benefit from and participate in the Austrian offer of health, education, labour and public assistance benefits on their own.

How and why the business model was developed

The transcultural centre for mental and physical health and integration was established in 1995. They started with two employees and at the beginning of 2013 there were 35 employees. 50 % of their employees are from foreign countries. Thus, they not just promote and talk about intercultural opening – they practice it every day. First, the founders thought about building a trauma centre for immigrants and refugees. But very soon the founders realised that this kind of concept ideally should not exist. The health system in Austria should have the capacity to integrate this concept into already existing ones. Thus, they started with projects aimed on integrating their clients into the Austrian society. Therefore, at first they had to promote the respect towards other cultures and countries in the society.

How does it work

OMEGA comprised an interdisciplinary and intercultural team, consisting of doctors, psychologists, teachers, translators, therapists and social workers. They support refugees as well as immigrants in their integration into the Austrian society. Special target groups of OMEGA's work are high-risk groups, such as people with traumatic experiences, people who are at risk of exclusion, single mothers or fathers, the elderly, children and young people, as well as people with special needs. However, OMEGA does not want to establish anything parallel to the existing health or education systems in Austria. But, if there are some barriers, for instance the language, then the organisation can bring some extra support. The organisation operates within a strong network. There are various network partners in Styria, Austria and Europe, which means that they have national as well as international network partners (for instance Caritas of the diocese Graz, European Refugee Fund, Federal Ministry of Internal Affairs, etc.). The business model focuses on B2C, because OMEGA aims at supporting private people to become a part of the society.

The following drawing shows how OMEGA works:

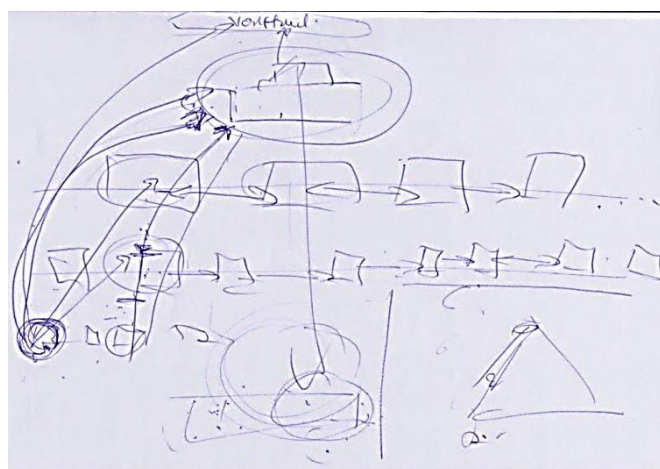


Figure 22: Picture of the NBM of OMEGA

The drawing focuses on the internal structure and the interactions within the business model. OMEGA has multiple connections with people from various sectors and three different levels. The first level is the level within the NGO. On this level, OMEGA is strongly linked with other NGOs. The second level includes the work with authorities, governments, the city of Graz, etc. The last level encompasses international organisations, for instance the European Union.

What kinds of value OMEGA creates

The business model of OMEGA belongs to sharing and creating values. It is a sharing business model because it is in constant (knowledge) exchange with its network partners. Knowledge is also shared to the society and to governmental and non-governmental organisations to take the necessary action. Furthermore, it is a creating business model which means that the model establishes a win-win situation for all actors involved in the business model. Basically, within this business model economic, environmental as well as social values are created. But, during the interview the focus was on the created social values. The main social value shared by OMEGA with their partners and also with their clients is the social responsibility. Through the various projects, they have a large impact on the issue of how refugees and immigrants are treated and integrated in today's society. Within the integration process, they do also consider to make the Austrian society more receptive to other cultures.

Outcomes and Reflections

The following graph visualises OMEGA's rating regarding the typical characteristics of NBM.

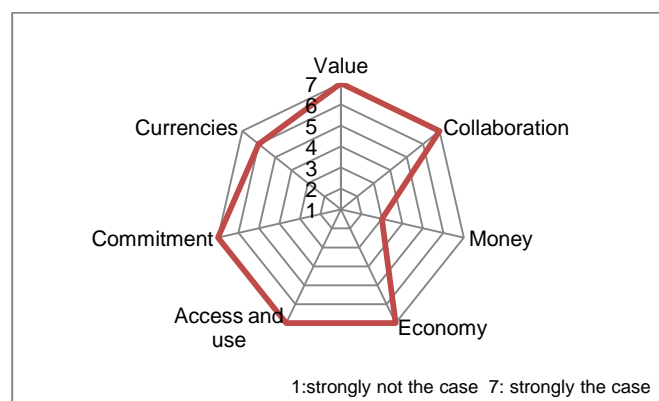


Figure 23: Spider diagram of the NBM of OMEGA

The business model of OMEGA absolutely works on shared value creation, because with their business model they try to support the whole society. Furthermore, the created values are more than just financial values. They create economic, environmental as well as social values. Moreover, integration is a never-ending process. Thus, OMEGA is funded on long-term commitment. Cooperative collaborations are one important part within OMEGA's

business model. There are a lot of external network partners, who enable and support the work of the organisation.

2.12. RUK

The company RUK (Rund Ums Kind) is a second-hand shop located in Voitsberg with a sub-office in Rosental. Its product line ranges from second-hand clothes, toys and shoes for children to baby buggies and other children's furniture, where about 80 % of the clothes are brand-named. Within the district of Voitsberg, RUK is the only firm doing business of this kind and there are no cooperations with other companies.

How and why the business model was developed

The company 'RUK' was founded in 2005. The foundation was initiated because the CEO always liked children's clothing and thought that it is unnecessary to throw products although they are still usable. In addition she worried about the fact that no one knew where to give used clothes. This was a market niche in Voitsberg and hence she founded the company RUK with a focus on merchandise for children and babies. There is one sub-office in Rosental, where second-hand maternity fashion and clothes for adults are traded.

How does it work

Although there are lots of second-hand shops, RUK is specific due to the focus on children's clothing and the opportunity to get coupons for your brought second-hand products. If people want to bring some clothes to RUK they need an appointment where they can then bring the used products. They are recorded as goods on consignment and controlled by the head of the company before they are sold on commission for the customers. After the sale, half of the sale price gets to the person who brought the product and half of it gets to RUK. If the product isn't sold after some time, people can get it back. It is very important for RUK to have many products that are not damaged, as good as new and cheap. The other second-hand shop (Second-Style) that is part of the drawing is leased to the mother of the head of the company.

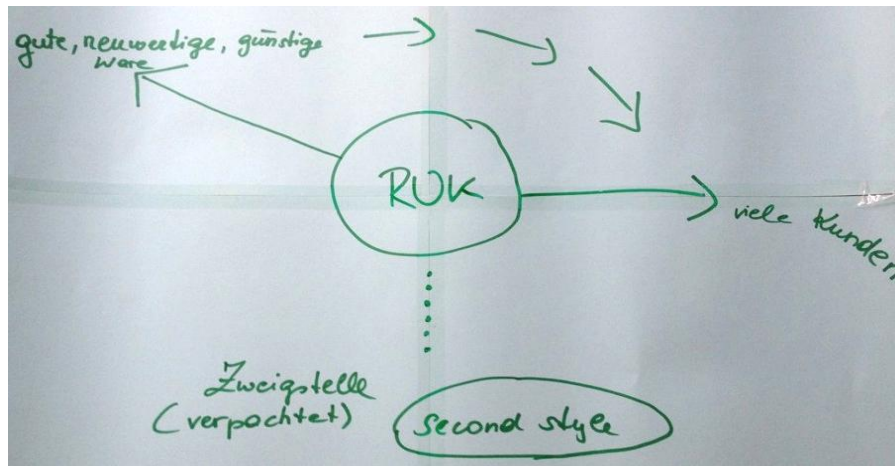


Figure 24: Picture of the NBM of RUK

The BM of RUK is classified as B2C and C2B, because people bring their used products to the company and the company pays to the consumer the half of the sell price. This means that products are sold directly to consumers. Concerning C2B, the enterprise works as an 'intermediary platform': the customers give things to the company for sale and wait whether they can be sold or not.

What kinds of value RUK creates

The business model of the company RUK is a mixture about sharing and swapping, because people can bring their used things to the company and get half of the sale price. In addition there is the possibility to change clothes with other clothes by the same amount and the opportunity to get a coupon from the company for the products brought. This coupon can be redeemed at any time. However, these kinds of exchanges are seldom as they depend on the condition of the merchandise and the individual duration of the customer relationships. RUK creates value for all parties involved in its business activities. There is the importance of social values within the business model: the relationships to the customers and the desire to make them happy beside other values, e.g. making economic profit and integrating sustainability. By implementing this BM the success of business is shared between the clients and the company (sale price, customer satisfaction). Sustainability issues are addressed, as reuse is one part of it.

Outcomes and Reflections

The spider web diagram shows the seven most important characteristics of NBM and how RUK rated them.

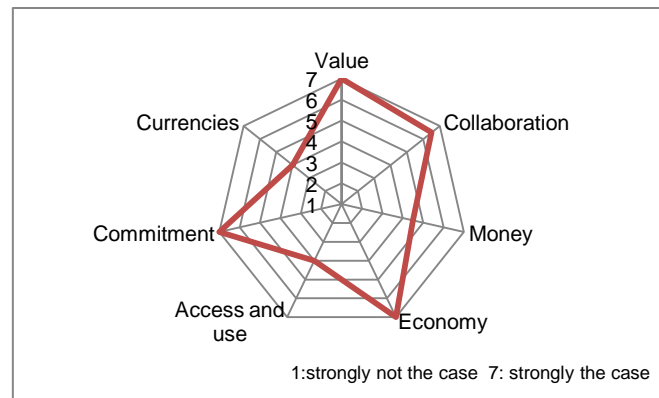


Figure 25: Spider diagram of the NBM of RUK

RUK creates shared value as the CEO, which can be seen in Figure above, also argued it point 1. The spider web diagram shows a checklist of seven features of new business models that were marked by the head of the company during the interview. Cooperative collaboration is a central principle, because of the establishment of a customer base and the maintenance of relationships to the clients, which was argued to be the case for the business model of RUK. Money is not the only transaction medium, because of the coupons, like it is mentioned above. Concerning economy based on access and use, the head of the company rated the statement with seven as the business model focuses on satisfying the needs of its customers and the reuse of products. The business activities are matched to the clients and can be achieved because of long-term relationships and trust to them. 'Based on access and use' was rated with four. The reason is that ownership of property is in most of the cases not a central issue. 'Long-term commitment' is strongly the case within the business model of RUK. It focuses on trust to the company and the wellbeing of customers over generations and is expressed by long-term commitment to each other. 'Alternative money or currencies' is related with 'Money is not the only transaction medium'. There is the possibility of coupons, but this is limited since money has more priority as a medium of exchange. The BM of RUK has a strong focus on sustainability by means of offering second hand goods. Thus, it is a small step towards the development from a throw-away-society to a reuse society. RUK also shows another point that characterizes new business models: the focus on long-term commitment to customers. Thus, it creates economic, social and environmental value.

2.13. TalenteTausch

TalenteTausch is an exchange platform, where people from different areas can exchange their talents. On doing so, primarily, they are able to save money and a certain service will be provided. People can do this in their free time. In recent times, this type of organisation is becoming more and more popular on the Austrian market, as people are becoming more interested.

How and why the business model was developed

TalenteTausch was developed in 1993. The number of members was steadily increasing and today TalenteTausch has more than 200 members. The first type of this kind of organisation was developed in ancient Egyptian times. Nowadays there are many organisations like TalenteTausch. Some of them are very famous, like the Time bank in London. In Vorarlberg (Austria) there is such an exchange platform with more than 2000 members that is very successful. TalenteTausch was developed based on the idea to get independent from the 'financial' world, as the company said, 'the world of money' and to make the local economy and local business stronger. People import for example agricultural products from all over the world, e.g. in the supermarket people can find apples from Spain, even though they are growing in the garden of the neighbour or by farmers nearby.

How does it work

The organisation provides a platform where consumers exchange goods and services. The main idea of the whole business is to make connections between different consumers. The figure shows the BM of TalenteTausch and describes an example how TalenteTausch is working.

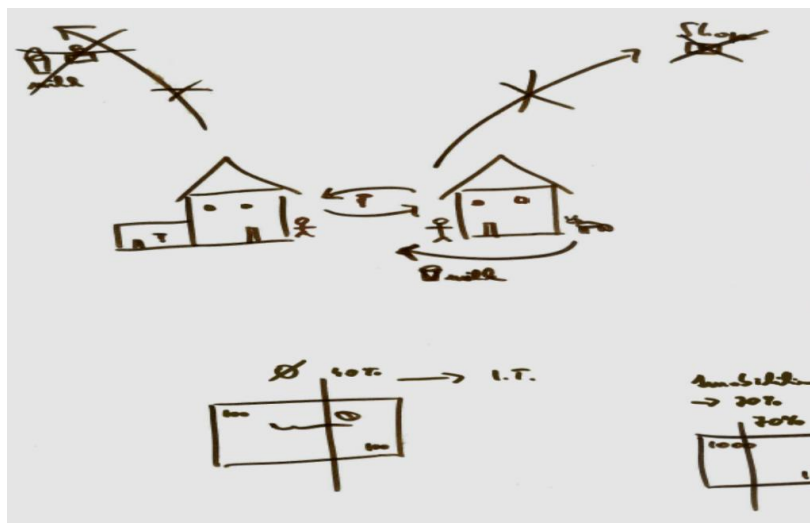


Figure 26: Picture of the NBM of TalenteTausch

Like it is already mentioned above, TalenteTausch wants people to get independent from money and wants to strengthen the local business by getting for example fruits from regional farmers instead of global companies. The BM of TalenteTausch focuses on people at a regional level as for example neighbours. This is to avoid long distances of transport. The two houses at the picture symbolize two neighbours. One of the neighbours owns certain products that his neighbour would need. Instead of going to a shop to buy it they can exchange the products. The example that is used in the drawing are two neighbours one has a sheep and the other one has a tool kit. One of the neighbours needs some milk and the other one for example a certain screw. If they exchange their products, in this case one

screw and one bottle of milk, they don't need any money at all, they don't need to use the car to go to the shop to buy the product they need and they can save some time. TalenteTausch is categorised as C2C model, due to the fact that all participants are about exchanging talents/services and work.

What kinds of value TalenteTausch creates

According to the interview partner the NBM of TalenteTausch consists of three categories, explaining that they have members from various areas such as artist, musicians and painters. Therefore, they are exchanging ideas and knowledge between each other through sharing, swapping and creating. The value added in the category sharing is collaboration; such as the sharing of knowledge and talents between group members. In category trading, members are using alternative payment transactions methods such as time, they don't use money as a tender. On doing so, TalenteTausch is creating social values of the capital and networking with the association. One of the positive impacts of the category sharing is that it creates multiple values in so called win-win situations. This BM refers to all three aspects of sustainability. On the one hand it is ecological, because thanks to this BM, long-distance transports for goods can be avoided and people don't have to go to shops to get what they need. On the other hand it meets the economic criteria of sustainability, because no money is needed at all, people can save money and they don't have to pay interest rates. The third aspect, the social aspect of sustainability is met by bringing people together to build up a local trading system, where no banks and government is needed.

Outcomes and Reflections

This spider web diagram represents the rating regarding the typical characteristics of NBM.

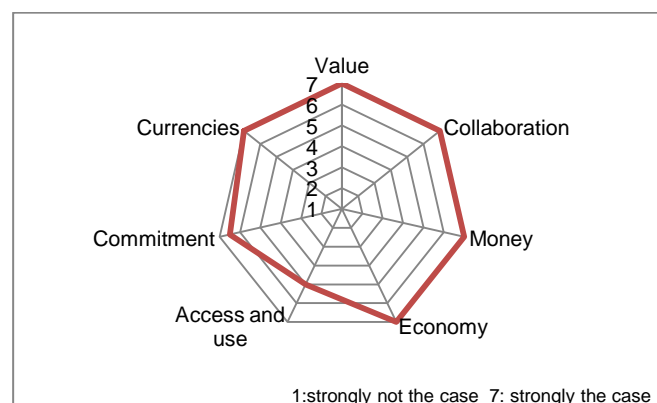


Figure 27: Spider diagram of the NBM of TalenteTausch

The kind of exchange the BM of TalenteTausch is using is quite old, and was used way before money came about. Based on the interview, this type of business is coming back to life as people are realizing the positive benefits of going back to the roots. This business model is about creating social, economic and environmental value, due to the fact that this BM helps people to save money, to avoid long transports for goods and to get people together to organize their 'own' trading system. The spider web demonstrates that almost all criteria for a new BM are fulfilled. Due to the interview the BM focuses on the social and the environmental aspect of sustainability. As it is mentioned before the BM helps for example, people to reduce the use of their car and it is bringing people together. They are independent from the global economy and to some parts they don't depend on the financial system.

2.14. Top Swap

TopSwap started in 2010 and it has 3 franchises in Austria at the moment: Vienna, Linz and Graz. It is based on 2-day events that facilitate the swapping of unwanted or unneeded clothing and accessories. In these events, people can bring their clothes, bags and shoes and take home with them an equal amount of different items.

How and why the business model was developed

The business model of TopSwap is in its early stages. It was developed when the CEO became frustrated with the growing amount of clothing that was being produced, while so much high-quality clothing remained unused. The business model took around 100 hours of development (lead time) before the first event was held. It is seen as the first step, the 'spark' to initiate a growing network of people with similar mind-set, in the hope that it will continue to grow and become more common over larger areas. TopSwap had 200 participants in the January 2012 event in Vienna, and in the event of November there were 380 participants. In January 2013 in Linz, 200 people came in 2 hours and they ran out of hangers.

How does it work

TopSwap is a two-day event, so far taking place in different cities in Austria. Participants come to the locations, pay an entrance fee, get a 'stamp pass' and start swapping. People bring their clothes, which are tagged by pieces or kilos in their 'stamp pass' (a kind of membership card), and then can take the same quantity back home. The participants do have to contribute a small amount of money (usually €5) to cover the running costs of the event and transport. It shows a high level boutique with music in the background in a comfortable atmosphere that makes customers feel of shopping rather than a flea market.

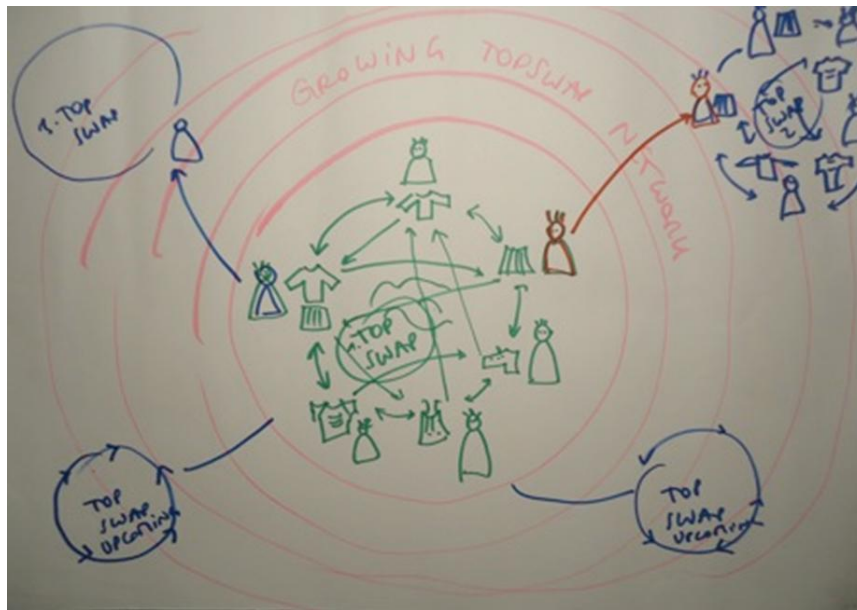


Figure 28: Picture of the NBM of TopSwap

In the middle is the base of TopSwap, where the CEO is as initiator and coordinator. People get in touch with the main TopSwap and want to do the same in a different city. So with more TopSwaps being organised the network grows. It is a customer-to-customer (C2C) model, based on swapping, sharing of experiences and environmentally sustainable due to lowering of production requirements and maximising the useful life of products.

What kinds of value TopSwap creates

From economic aspects, the CEO earns around 500€ per event and the business is still expanding. From environmental view, it encourages people to reuse clothing. Moreover, it creates social sustainable values by building a network bringing people together, changing their mind-set and creating new swapping phenomena. To change the mind-set about how clothes are consumed, people are asked to swap things by equal weight or pieces. Therefore, they could realise that once the clothes reach the end of their life, the label is meaningless and the items will likely be incinerated, releasing the same amount of CO₂ emissions. Besides, the whole network is getting bigger and many people want to contribute and be a part of it. People leave the event inspired to recreate it elsewhere, and the concept gets more popular. Experiences in organizing such events are shared in groups who want to make their own swapping events.

Outcomes and Reflections

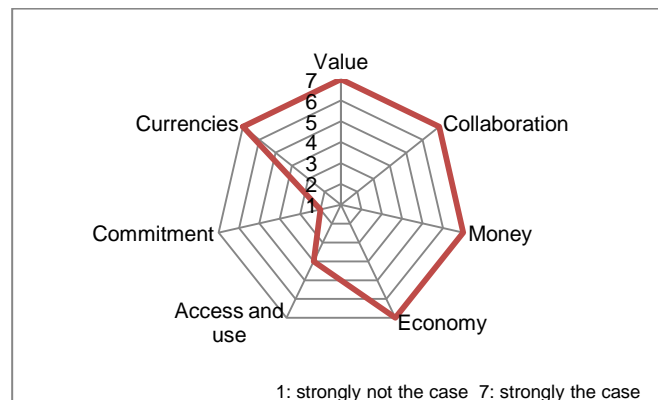


Figure 29: Spider diagram of the NBM of TopSwap

Regarding shared value creation, value of this NBM is not uni-directional. It comes from every direction and goes out on every direction. New values are created which is highly rated. Cooperative collaboration as a central principle is also scored the maximum mark because everyone has to collaborate for this model to work. Consumers play a providers' act in this case and a network is getting bigger. Money is not the only transaction medium since clothes are capital and there is a Stamp Pass that is valid for clothes-credit. TopSwap focuses on fulfilling needs: Clothing as a basic human need, therefore economy criteria reaches the point 7/7. However, this NBM is based on access and use only in a halfway, since it is not completely based on use but in a property exchange that everyone is entitled to participate in. In addition, there is no need to have long-term commitment in such model. It's a 'quick and dirty' 2-day event that people attend almost regardless of the brand loyalty. Each time, swapping event takes place in different cities and involves new customers. Lastly, alternative currencies are strongly the case with clothing as the currency.

2.15. SonnenZeit – Spiel des Lebens

SonnenZeit – Spiel des Lebens is some kind of game with its own economic system. This system encourages a high quality of life for everyone who is participating in the game and the system should be in harmony with nature. Although it is a game, it has strong effects on the real life of the people who play the game. The association NETs.werk – living sustainable, which was established in 2005, founded SonnenZeit.

How and why the business model was developed

The basis for this new economic system was already made a few years ago. The founders thought about an economic model, which does not harm humans and nature. Therefore, they wanted to create a network of suppliers and consumers, where regional, organic and fair priced products are available. This was the reason why the association NETs.werk – living sustainable was founded. Within NETs.werk, they faced two problems. First, often there is not enough money available where it is needed and second, prices often lead to decisions that have adverse effects on humans and nature. Faced with this first experiences and problems, the association developed an alternative. This was the beginning of SonnenZeit – Spiel des Lebens. It took more than three years for developing and building a first prototype-game, but in January 2013 the development was finally finished.

Within SonnenZeit,

- Own currency is used, which is sufficient available for everyone,
- Products are labelled according to their impact on humans and nature, which means that there exists a sustainability assessment for all products and
- Entrepreneurs are rewarded for their environmental and social commitment.

SonnenZeit is in its development just started. Maybe at the end of 2013 it is ready to pass it on to interested networks and regions.

How does it work

SonnenZeit provides a new interest-free money-system, where the new currency is life-hour (h). This interest-free money system is the contrary of common debt-money system and here money is shared among 'players' over three stages. In the first stage each player gets a start-up amount of 10 h. With these starting credits each player can buy products and services via an online market place. This market place is an Internet platform, where all players who participate in SonnenZeit can make offers and petitions. Additionally players can earn h by providing products and services on the online market place. Companies who participate in SonnenZeit can offer their goods and services entirely in h or partially with an h-rate. In other words, companies can decide on their own how much per cent of the traditional euro price can be paid in h. If the players have consumed the 10 h starting credits and if they have no revenues through selling their own goods and services, they come in the second stage of the game. At the beginning of the second stage each player gets 80 h as an income on their account. In the following month they will receive the amount of h they have spent in the previous month for products and services. However, this is not unlimited, but up to a maximum amount of 80 h per month possible. Nevertheless, there is one condition to become the 80 h income – each player has to join a small group (five to seven persons per group) and each group has to join a workshop with the aim to get a deeper understanding of SonnenZeit and the resulting rules. If SonnenZeit has grown to such an extent, that the

players easily can spent their 80 h per month on the market place, they come into the third stage. Here there does not longer exist a limit. Players can spend as many h as they would like every month and they will get exactly this amount of spent h in the following month back on their account. Furthermore, the business model of SonnenZeit focuses on B2C and C2C, because private persons as well as companies can offer goods and services on the online market place.

The following figure simplifies how SonnenZeit – Spiel des Lebens works:

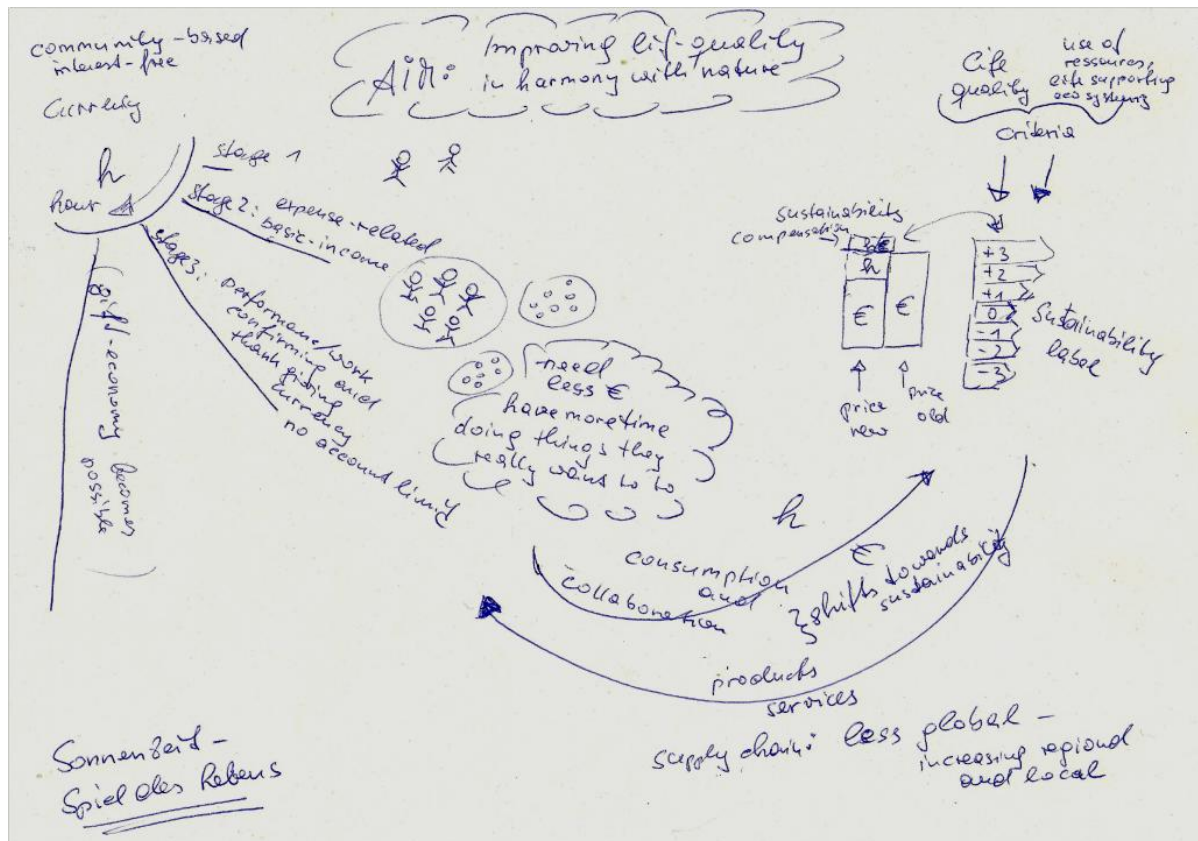


Figure 30: Picture of the NBM of SonnenZeit

On this drawing once again the rules and the different stages of the game are shown. Furthermore, also the overall aim of the game – to improve life quality in harmony with nature – is shown on top of the drawing.

What kinds of value SonnenZeit – Spiel des Lebens creates

The business model of SonnenZeit – Spiel des Lebens can be categorised as a creating, swapping as well as a sharing business model. Players can share goods and services with every other player in exchange for the alternative currency h. Thus, one can clearly see the aspect of sharing within the business model. But of course the categories of swapping and creating also refer to SonnenZeit – Spiel des Lebens. There is a new currency created within

this NBM and for that reason people are swapping too – they are swapping goods and services against this currency. Furthermore, SonnenZeit establish a win-win-situation for the players. As there is often not enough money available where it is needed, the players can make use of the alternative currency h. Moreover, SonnenZeit creates a market place for suppliers and consumers, where regional, organic and fair priced products are available.

Within this NBM, economic, environmental as well as social values are created. Firstly, social values are created because there is a currency that is sufficient available in the same amount for every player. Secondly, environmental values are created due to the reason that there is a sustainability assessment of each product. Thus, the traded products have less harm on the environment than 'traditional' bought products and people become aware of the ecological and social impact of goods and services. Thirdly, economic values emerge because SonnenZeit is an own economic system with a new alternative currency.

Outcomes and Reflections

The following graph visualises SonnenZeit's rating regarding the typical characteristics of NBM.

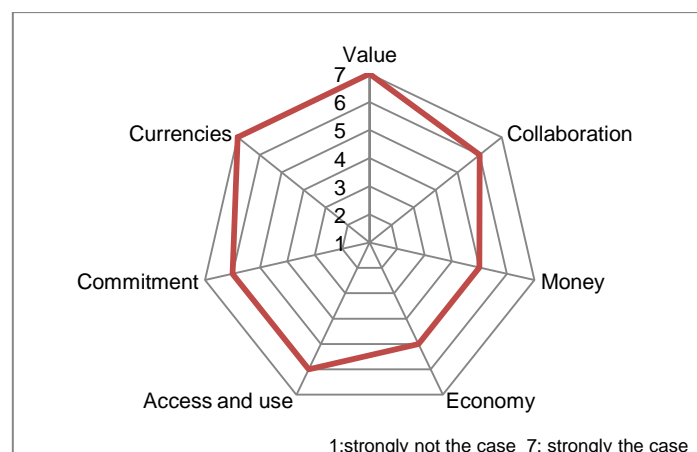


Figure 31: Spider diagram of the NBM of SonnenZeit

All of the seven characteristics are rated very well within this NBM. Due to the reason that within this business model an own currency is used, the criterion currencies are rated highest. More than just financial values are created in various ways. Thus, also the criterion value is rated with seven out of seven.

2.16. Go-Shred

Go-shred.com is a web portal for car sharing. Basically it acts as any other car sharing web portal does, but what is new is the specific goal of connecting winter sport enthusiasts. This means that go-shred explicitly wants to support people who go to the mountains for snowboarding, skiing or any other reason and want to share their car with someone else. Shortly said, the overall goal is the optimal use of the car.

How and why the business model was developed

The CEO of go-shred, who acts as the interviewee as well, started with the development of go-shred in 2009. And he did so for several reasons: First of all he is enthusiastic for winter sports and loves spending his time in the mountains, especially in winter. Secondly he spends too much money on gas. And thirdly the streets are more and more overcrowded while the glaciers are continuously melting. All in all, these are several reasons for improving something towards sustainability.

How does it work

Basically the use of the online platform is for free for the users. The web portal itself is financed by the rent of banners. After four years of running this service, the CEO states that generally too much people are still travelling alone, while on the web portal more people are looking for a ride than people offering one.

Go-shred is a business model which directly focuses on private persons, therefore it is acting in the field of C2C bringing people together.



Figure 32: Picture of the NBM of go-shred

What kinds of value go-shred creates

Besides creating (economic) profit the NBM creates values like social responsibility, environmental and economic consciousness and of course (shared) mobility. But it is not all about sharing, tight collaborations with other partners are necessary as well: in the case of go-shred this means that the company holds collaborations with all kind of industries acting in winter sports like brands, skiing resorts, newspapers, PR-agencies, athletes. According to the categorization concerning the three most important patterns go-shred clearly creates value related to sharing but additionally it also creates multiple values (higher rate of sharing, less environmental burden, more social cooperation and people get to know each other).

Outcomes and Reflections

Up to now the general results of this business model are twofold: First of all more and more people start car sharing to the mountain, which has several positive impacts. Secondly, brands and other responsible actors in tourism start to realise step-by-step how important it is that people find an ecological, economical and eco-friendly way to the skiing resorts.

The following figure shows the rating of the interviewee concerning the most important features of his business model. As it can be seen easily he rated all aspects with 'strongly the case'. Unfortunately there was no chance to ask for further details concerning that rating because not all aspects rated with '7' are that transparent.

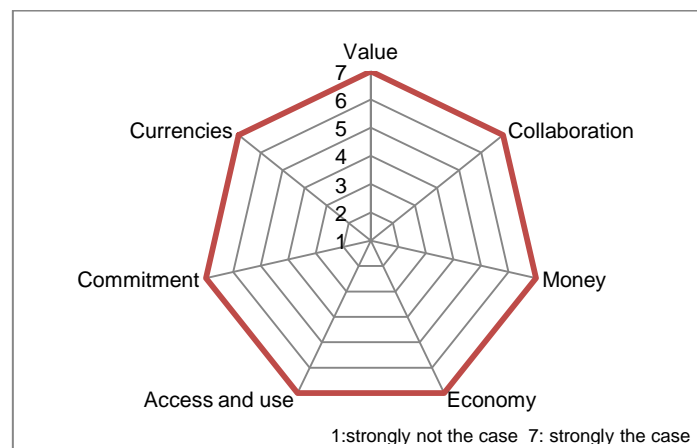


Figure 33: Spider diagram of the NBM of go-shred

3. Conclusions

The 14 (+2) cases presented in chapter 2 are now being analysed concerning the most important aspects, which are tackled by each NBM. The overall rating (see Figure 34) contains n = 14 cases instead of 16. The reason for that is the fact that the two additional interviews were not conducted personally.

Austrian enterprises analysed in this research fulfil seven features of NBMs in different levels. The fact that five out of seven characteristics got the highest scores from 6 to 7 affirms the existence of a developing NBM in Austria. Only two monetary features (*Money is not the only transaction medium* and *Alternative Currencies*) are rated lower than others.

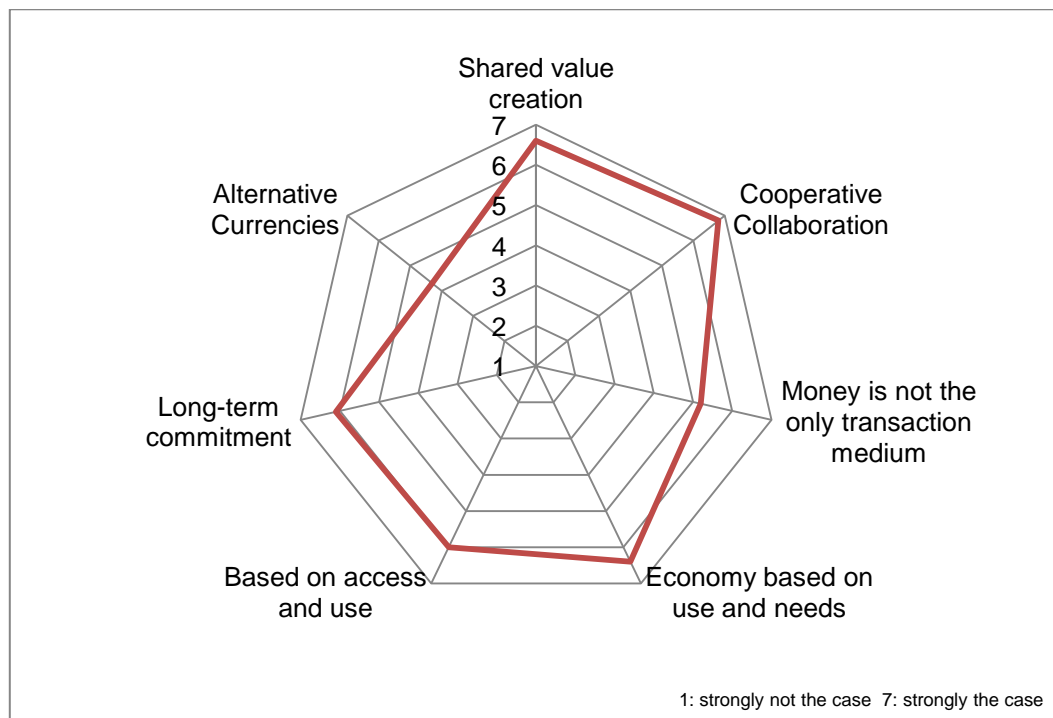


Figure 34: Overall rating of the NBM's checklist

According to the spider web, the three features *Shared Value Creation*, *Cooperative Collaboration* and *Long-term Commitment* are clearly shown in most cases.

These companies see *Cooperative Collaboration* as a central element; therefore doing business will be the art of the new collaboration. More than 70% interviewees rated their companies the maximum score in this feature. They mainly focus on building a strong

network of their clients (in cases of RUK and INTERVAC) and expanding it by other collaborators' involvement (in cases of BAN, OMEGA and Holzwärme Strobl). 'The whole business model is based on the active participation of swappers from around the globe', said INTERVAC's CEO. Therefore, in NBMs, customers and other stakeholders involve deeply in the early stages and communicate to each other through an effective platform.

Although firms describe themselves based on long-term commitment that is strongly the case in OMEGA, RUK and others, this category is not always highly focused. For example, INTERVAC's swappers continue changing their houses in a private way. The organisation is okay with that due to the success in bringing international swappers together. In TopSwap case, swapping event takes place in different cities always involve new customers, therefore no need to have long-term commitment in such model.

Concerning *Shared Value Creation*, all businesses got the average score nearly 7 with a comprehensive sustainable performance in Three Bottom Lines (social, ecologic, economic). First, social values are most significantly expressed in every case. It could be how a business creates a network of people sharing the same interests (strongly the case in Four Elements which gathers artists, writers, photographers and producers in Hip Hop world). It could be an opportunity to get new experiences in new living places, new skills/ knowledge or healthy organic foods (in cases of INTERVAC, TalenteTausch, Ochsenherz). In addition, some companies generate traditional social values such as jobs for unemployed workers (BAN) and good treatments for immigrants and refugees (OMEGA). Cultural aspects and mindset changing can also be counted as valuable achievements, especially in the cases of INTERVAC, Four Elements and TopSwap.

Second, environmental values are shown in most of the cases but sometimes as side effect. The idea of reducing, reusing and recycling can be seen as a common achievement in all business models which generate swapping and sharing values. Moreover, these firms make their transportation mostly at local level, thus mitigating total emission released. Some NBMs specifically pay attention in sustainable energy, for instance, e-Lugitsch – a photovoltaic company and Holzwärme Strobl – a wood-heating provider.

Third, while economic values are essentially the case for every market survivor, a couple of NBMs still survive without/ little money in their pocket by various innovative ways. They can provide services and get entrance fees or membership fees (TopSwap, INTERVAC, Ochsenherz and others). In an opposite way, they can also use community's investment and then pay back by their services (e-Lugitsch). In another way, money, free input materials, labour and innovation can come from different groups of partners within the network. Even if some new business models do not generate profits for themselves such as TalenteTausch and Four Elements, in the long run these models will bring more benefits to all parties involved and would therefore put themselves in a higher place on the market.

To look at the multiple values created by NBMs from a different point of view, the results indicate three main streams of exchanging values: sharing, swapping and creating (Sha, Swa, Cre). The results more likely refer to sharing and creating values in most cases while swapping values are mentioned in BMs which mainly work in swapping field (KAESCH, RUK, INTERVAC and TopSwap). Since maintaining these three values in balance makes the business models more sustainable, Gemüsewerkstatt, TalenteTausch and Sonnenzeit become most successful sustainable NBMs of this aspect among enterprises analysed.

Table 2: Categories of values and models in NBM

No.	Name	Value ³	Business Model
1	BAN	Cre	B2B, B2C
2	ContainMe!	Cre	B2C
3	e-Lugitsch	Cre, Sha	B2C
4	FGM	Cre, Sha	B2B, B2C
5	Four Elements	Cre, Sha	C2C
6	Gemüsewerkstatt	Cre, Swa, Sha	B2C
7	Holzwärme Strobl	Cre, Sha	B2C
8	Intervac Austria	Swa	B2C, C2B, C2C
9	KAESCH	Swa, Sha	C2C
10	Gärtnerei Ochsenherz	Cre, Sha	B2C
11	OMEGA	Cre, Sha	B2C
12	RUK	Swa, Sha	B2C, C2B
13	TalenteTausch	Cre, Swa, Sha	C2C
14	TopSwap	Swa, Sha	C2C
15	SonnenZeit	Cre, Swa, Sha	B2C, C2C
16	Go-shred	Cre, Sha	C2C

Among those three types (namely creating, sharing, swapping), creating values and sharing values are more strongly the case because these NBMs pay attention in network creation. As a result, they are creating values such as building an effective community of same-interests-different-talents partners. This, in turn, continuously creates various values in cultural aspect, education, care, trust and relationship. Besides, NBMs were designed in order to share everything not only infrastructure, equipment and transportation but also information and skills. However, in long term, there would be more NBMs fulfilling the three exchanging values due to the significant numbers of firms currently create two types of values.

³ Cre, Sha, Swa: Creating, Sharing, Swapping (types of values generated by NBMs)

Business models are also categorised based on different served constituents (B2B, B2C, C2B, C2C). In the models of FGM AMOR, BAN, RUK, INTERVAC and SonnenZeit, two or three types of BMs exist contemporarily that makes the models more complex because of the participation of multiple players, and the multiple roles of each player. These companies' wide networks could possibly create more sustainable values for all parties involved. Among four types, C2C provides direct trades normally without money, and thus it can give partners more expected values.

The four other features of NBMs can be divided into two levels: *Economy based on use and needs* and *Based on access and use* with higher scores, and *Money is not the only transaction medium* and *Alternative Currencies* with lower scores. Many interviewees rated their businesses highly in the category *Economy based on use and needs* due to the satisfaction of their clients. Because in most cases, customers come to find relevant firm, and actively participate in making value process, what they receive is closer to what they expect. It is clearly described in KAESCH case, when neighbours exchange something they have for something they need. Similarly, they can offer works in which they are good at, for something they cannot do by themselves. This is also a good example of the feature *Access and use*. Many companies in the research fulfil ownership of property or *Access and use* got high scores due to the fact that sharing values. The wood heating plant Holzwärme Strobl shows a good performance in providing a regional service that avoids the individual installation and maintenance costs since customers do not have to own a furnace themselves. Most businesses achieve the feature *Money is not the only transaction medium* with the approximately average of 5/7. Swapping business models definitely satisfy this criterion since their business activities based on the exchange of goods for goods or services for services. Vouchers and coupons are commonly used to exchange demands. For instance, e-Lugitsch sells a share to its customers who will receive 30 Euros (paid in vouchers) per year over 10 years. These vouchers can be used to purchase energy efficient electronic products at the e-Lugitsch's stores or pay electricity bills. Besides, instead of traditional monetary trade, time can be used as an alternative payment transaction in TalenteTausch case.

Among all NBMs' features, *Alternative Currencies* is most strongly not the case primarily due to the limits of legal procedure (Gemüsewerkstatt, Holzwärme Strobl), the requirements in financial reports (FGM-AMOR), or the company's interest such as *Alternative Currencies* may limit exchange in BAN case. However, the fact that throughout interviews, this concept seemed to be misunderstood comprehensively leads to some errors in evaluation. Therefore, descriptions of BMs indicate a higher performance in this category than the scores.

In conclusion, these NBMs establish a win-win situation not only for the company, but also for the region and people who participate in the projects. This can be clearly seen when we look either at the values the NBM are creating (13 of 16 NBM create more than one

value) or at the aspect that most of them deliver values for different groups of consumers (e.g. B2B and B2C). Many of them are in the early stages and still developing. Because they perform better in satisfying customers' demands and even more, create added sustainable values, these types of business models will be booming in the future. However, barriers of legal framework, customers and investors' awareness, uncertain risks and limits in the company sizes could be important future topics.

Finally regarding the research results gained out of this explorative study we have to come up with some methodological limitations before we add some ideas for future research questions focusing on NBM. Starting with the limitations we have to mention that each interview was done by another group of students. This means that although the students used the same interview guideline, each interview situation was different from all the others. This could lead to slight differences in the results as well. In addition to that the identified NBM are acting in very heterogeneous fields, some of them are real companies having redesigned their business models, and others are in the starting phase and have a strong entrepreneurial focus, while others are purely settled in the private sector, e.g. building up sharing networks. From the researchers point of view this means that we have a broad variety of NBMs and that we can shed a light on many different aspects of NBMs, but we cannot come up with some general conclusions stating them for 'all' new business models in Austria. Honestly, this was not the goal anyway.

For further research activities dealing in the field of NBM it could be useful to focus on one specific area and to identify beforehand NBMs that are heading in the same direction, e.g. concerning their target groups or their products and services which they are offering. In addition to that the question of value creating in the context of sustainable development is of high interest. While we have now talked about three main patterns, namely sharing, swapping and trading, the questions arises how the business models explicitly reduce environmental impact or increase social responsibility. Having this in mind, further research could lead to a detailed description of maybe five business models showing how they are dealing with the requirements of sustainability in detail.

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6. References and Sources

- BAN Sozialökonomische BetriebsGmbH (personal interview, Jan. 9th, 2013) http://www.ban.at/_lccms_/templates/startseite.php retrieved last on June 4th, 2013.
- Boons, F., Lüdeke-Freund, F. (2013). Business models for sustainable innovation: state-of-the-art and steps towards a research agenda. *Journal of Cleaner Production* 45: 9-19.
- Ceschin, F. (2013). Critical factors for implementing and diffusing sustainable product-Service systems: insights from innovation studies and companies' experiences. *Journal of Cleaner Production* 45: 74-88.
- ContainMe (personal interview, Dec. 18th, 2012) <http://containme.at/> retrieved last on June 4th, 2013.
- e-Lugitsch, (personal interview, Dec. 27th, 2012) <http://www.e-lugitsch.at/index.php> retrieved last on May 2nd, 2013.
- FGM-AMOR (personal interview, Dec. 7th, 2013) <http://fgm.at>. retrieved last on April 9th, 2013.
- Four Elements (personal interview, Dec. 26th, 2012) <http://fourelements.at> retrieved last on April 6th, 2013.
- Gärtnerei Ochsenherz (personal interview, Dec. 21st, 2012) <http://www.ochsenherz.at/> retrieved last on Jun. 4th, 2013.
- Gemüsewerkstatt (personal interview, Dec. 19th, 2012) <http://www.gemuesewerkstatt.at/> retrieved last on June 4th, 2013.
- Go-shred (interview protocol, April 2013) <http://go-shred.com/> retrieved last on June 4th, 2013.
- Holzwärme Strobl (personal interview, Jan. 3rd, 2013) <http://www.strobl.salzburg.at/system/web/zusatzseite.aspx?menuonr=218812657&detailonr=217446514> retrieved last on April 9th, 2013.
- Institut für Wärme und Öltechnik (2013). <http://www.iwo-austria.at> retrieved last on May 2nd, 2013.
- Institute of Systems Sciences, Innovation and Sustainability Research (ISIS) (2013) <http://isis.uni-graz.at/en/institute/> retrieved last on October 17th, 2013.
- INTERVAC Austria (personal interview, Dec. 19th, 2012) <http://www.intervac.at> retrieved last on April 6th, 2013.

- Jonker, J. (2012). New Business Models. An exploratory study of changing transactions creating multiple value(s). Working Paper, Nijmegen School of Management, ISBN: 978-90-8119-793-9.
- Kaesch – Network for neighborly help (personal interview Dec. 13th, 2012) <http://www.kaesch.at>. retrieved last on April 10th, 2013.
- Nidumolu, R., Prahalad, C.K. and Rangaswami, M.R. (2009). Why Sustainability Is Now The Key Driver of Innovation. Harvard Business Review 87: 56-64.
- OMEGA – Transkulturelles Zentrum für psychische und physische Gesundheit und Integration – Health Care Center Graz (personal interview, Jan. 21st 2013) <http://www.omega-graz.at>. retrieved last on April 10, 2013.
- OMEGA (2009). Transkulturelles Zentrum für psychische und physische Gesundheit und Integration. Jahresbericht 2009.
- OMEGA (2011). Transkulturelles Zentrum für psychische und physische Gesundheit und Integration. Jahresbericht 2011.
- Porter, M., Kramer, M. (2011). Creating Shared Value: How to Reinvent Capitalism and Unleash a Wave of Innovation and Growth. Harvard Business Review 89: 62-77.
- RuK-Rund ums Kind (personal interview, January 16th, 2013) no homepage available.
- SonnenZeit – Spiel des Lebens (interview protocol, April 2013) <http://spieldeslebens.netzwerk.at/> retrieved last on June 4th, 2013.
- Stahel, W.R. (1986). Hidden innovation: R&D in a sustainable society. Science and Public Policy 13: 196-203.
- Stahel, W.R. (1989). The Limits of Certainty: Facing Risks in the New Service Economy. Kluwer Academic Publishers, Dordrecht.
- Strauss, A., Corbin, J. (1998). Basics of Qualitative Research. Techniques and Procedures for Developing Grounded Theory. 2nd edition, Thousand Oaks, London, New Delhi: Sage Publications.
- Stubbs, W., Cocklin, C. (2008). Conceptualizing a ‘Sustainable Business Model.’ Organization & Environment, 21: 103–127.
- TalenteTausch Graz (personal interview, Dec. 21st, 2012) <http://www.talentetauschgraz.at/> retrieved last on May 2nd, 2013.
- TopSwap (personal interview, Jan. 19th, 2013) <http://www.topswap.at/> retrieved last on June 4th, 2013.
- University of Graz (2013). <http://www.uni-graz.at/en/university/information/about-the-university/> retrieved last on October 17th, 2013

Appendix 1

INTERVIEW PROTOCOL INTERNATIONAL RESEARCH PROJECT

(Version: November 2012)

MATERIALS

Voice-recorder/memory stick

Note: For each interview, bring a couple of thick pieces of A3 paper and some coloured markers.

INTRODUCTION

- (I) Interviewer(s) introduce themselves: education, course, thank the interviewee for sparing some of his or her time.
- (II) Explain the purpose of the research: research of new business models (key words, such as shared value creation, business community building, and sustainability as a practice).
- (III) Purpose of the interview: through interviewing people across Europe who are working on new business models, different emerging practices can be pulled together. This will help identify the principles and building blocks of NBMs.
- (IV) Background: Previous research in Holland in the spring of 2012 resulted in a report in the form of a working paper. The results were warmly welcomed (2000 downloads of the WP in two months). Anyone who is interested can obtain a free English or French translation of the first report.
- (V) All outcomes will be processed into a book that will be presented at a conference, probably late in the spring of 2013. The book will probably be written in English. In addition, working papers of national results will gradually become available for free – the consequences of living in what is gradually becoming a sharing economy.

INTERVIEW DESIGN

- | | |
|------------------|---|
| Design: | Explain the interview structure: It is based on a series of open questions, followed by asking the interviewees to draw their own NBM, and ending with a checklist. |
| Time: | The interview will take approximately 60 minutes. |
| Permission: | Does the respondent agree to the interview being recorded? The recording will only be used to comprehend and analyse the answers. |
| Confidentiality: | Confidential information will not be passed on to other parties. Collected data will only be used for the present research. |
| Summary: | The outcome of the research will include a short summary (maximum two pages), including public contact information (with website if available). |
| Questions: | Before starting, ask if there are any questions or clarifications. |

PART 1: CHARACTERISTICS OF NEW BUSINESS MODELS

- (1) Why is it a business model (what is the nature of the business the model generates) and why/what is new about it?
- (2) What is the role of sustainability within the new model (help question: 'Where is sustainability positioned in the model?' or 'What is the nature of sustainability in the model?')
- (3) When did you start developing this new business model?
- (4) Why did you start developing this model? (Ask for reasons and drivers – keep asking about the latter.)
- (5) How far do you believe the business is in its development – just started, halfway through or finished?
- (6) How much lead-time did it take? What can you say about the number of man hours used?
- (7) What criteria do you feel need to be met by a mature, new business model? (Ask for requirements/criteria of the model itself.)
- (8) How would you categorise your business model? Ask this question twice, the second time with a check on the categories. Used originally are Swapping, Sharing and Creating – see the paper that describes the preliminary Dutch research outcomes.
- (9) Could you illustrate your new sustainable business model for use?
(NOTE: bring thick pieces of A3 paper and coloured markers – ask the interviewee to draw the model right then and there, and insist gently even if they say they can't do it.)

PART II: RESULTS OF THE NEW BUSINESS MODEL

- (10) Does the business model generate value other than profit? If so, what kind of value?
- (11) Did you start new collaborations or strengthen previous collaborations for the new model? (If so, with which actors and what does that collaboration look like?)
- (12) Did the new business model lead to access to new products or markets?
- (13) IF RELEVANT: Up till now, what are the results of the new sustainable business model?
- (14) FILLING IN THE CHECKLIST: Ask the respondent to kindly fill in the checklist (see attached appendix).

CLOSING THE INTERVIEW

- (A) This concludes the interview. In your opinion, are there any subjects that have not been addressed or do you have anything to add?
- (B) Do you know other new business models or people working on it in your environment? Could you introduce them to us (ask for contact details/websites)?
- (C) Within a week, we'll e-mail you a one- or two-page summary of this interview for your control and approval.

- (D) May we contact you if things aren't clear to us when analysing the outcomes of the interview or for a possible follow-up interview?
- (E) Thank you very much for the interview and your time.

Thank you very much.

THE NBM RESEARCH TEAM *Nijmegen, Brussels, Toulouse and Oporto*

CLASSIFYING YOUR BUSINESS MODEL (part of Question 14)

Name of company:

Name of interviewee:

Date of interview:

Location:

Introduction

New business models represent a new generation of creating transactions in an increasingly collaborative world. They shape new ways of organising in order to balance individual needs with those of our communities and the planet. After combining and connecting all findings so far, seven prominent characteristics of NBMs were identified. These NBMs shape new ways of organising in order to balance individual needs with those of our communities and the planet.

Please be so kind as to indicate the extent to which your NBM represents one or more of the characteristics below:

1 = strongly the case – 7 = strongly not the case

Please circle what is most appropriate in your NBM.

- | | |
|---|---------------------|
| 1) Works on shared value creation | 1--2--3--4--5--6--7 |
| 2) Cooperative collaboration is a central principle | 1--2--3--4--5--6--7 |
| 3) Money is not the only transaction medium | 1--2--3--4--5--6--7 |
| 4) Economy based on use and needs | 1--2--3--4--5--6--7 |
| 5) Based on access and use | 1--2--3--4--5--6--7 |
| 6) Founded on long-term commitment | 1--2--3--4--5--6--7 |
| 7) Allows alternative currencies | 1--2--3--4--5--6--7 |

Thank you very much.

THE NBM RESEARCH TEAM *Nijmegen, Brussels, Toulouse and Oporto*

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Appendix 2 (ISIS, University of Graz)

The University of Graz, which was founded in 1585, is Austria's second oldest university and one of the largest in the country. With some 31,500 students and 3,900 employees the University of Graz contributes significantly to the vibrating life of the Styrian capital. Its location in Europe encourages a lively scientific, economic and cultural exchange with South-East Europe, from which not only the city benefits, but also its educational institutions (University of Graz, 2013).

The Institute of Systems Sciences, Innovation and Sustainability Research (ISIS) is part of the faculty of Environmental and Regional Sciences and Education and mainly investigates the transition towards sustainability. Therefore, the members of the institute study transition, innovation, and adaptation processes within human-environment systems, with a focus on firms and regions. They base their research on systems sciences, innovation and transition sciences as well as sustainability science, and develop inter- and transdisciplinary methods to analyse and model human-environment systems, develop scenarios and transition pathways, and assess regulatory strategies. ISIS is composed of a highly motivated interdisciplinary group of researchers from fields including natural sciences, social sciences, geography, and business administration (ISIS, 2013).

ISIS is outstanding in several ways (ISIS, 2013):

- It combines the three science fields: systems sciences, innovation & transition sciences and sustainability science.
- It is an interface institute and as such it has high collaboration potential with scientists from social and natural sciences.
- Given its transdisciplinary research focus it has strong collaborations with enterprises and within regions, allowing for high quality applied research.
- It combines qualitative and quantitative methods in its research projects.
- Being the coordinating institute of two international joint masters programmes, it is well embedded in international networks in both fields - teaching and research.

The institute is responsible for five different types of study: Environmental Systems Sciences (Bachelor), Sustainability Management (Master), Joint Degree Sustainable Development (Master), Joint Degree Industrial Ecology (Master) and the Doctoral School for Environmental Systems Sciences. For more information, see <http://isis.uni-graz.at/en/>

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Appendix 3 (Radboud University)

The Radboud University Nijmegen was founded in 1923 as the Catholic University Nijmegen. In 2004, the name was changed to Radboud University Nijmegen. The university is located on the Heyendaal estate. The university and the Academic Medical Centre St. Radboud employ approximately 5,000 employees and over 20,000 students. The Radboud University Nijmegen has 18 research institutes and offers 121 programmes (40 bachelor, 64 master and 17 teacher), divided among seven faculties including Management Sciences. The Radboud University Nijmegen is a student-focused research university. It is an institution where transfer and exchange of knowledge is central and scientists communicate with colleagues all over the world. Features are coherent collaboration and the many cross-connections. Education is mainly conducted in small groups, in which students and teachers have personal and intensive contact with each other.

Faculty of Management Sciences

Employees in this faculty connect scientific education and research in challenging programmes in the field of public administration, business administration, economics and business economics, geography, environment, spatial planning and political science. The faculty provides a rich and inspiring array of academic disciplines with a large emphasis on societal issues. These are only some of the themes our students encounter in their education and research. The excellent acceptance of our graduates on the labour market is testimony to our efforts to educate good academic professionals. In total, there are approximately 3200 students in the bachelor and master's programmes of the Faculty of Management Sciences.

Part-time PhD Programme RESORG

Since September 2010, the Faculty of Management Sciences offers a part-time promotion trajectory in light of RESORG. It is a four-year trajectory for people working and wanting to get their PhD. The focus of this trajectory is on researching changing responsibilities of organisations in light of the increasing importance of sustainability, trust and transparency. During a period of four years, the participants in the programme are educated in scientific themes and guided towards a promotion at the Radboud University Nijmegen. The first year of the promotion trajectory is focused on educating and takes shape in monthly meeting of multiple days. Attention is given to areas such as scientific writing, literature research, methodology and science theory. At the end of the first year, the candidate must defend his or her research proposal. The four-year English programme is based on publishing a series of refereed articles, based on which the candidate composes a defensible manuscript. That defence is expected to take place in the fifth and final year. During their research and educational period, the candidates are offered a so-called '0-appointment' as employees of Radboud University so they can use the rich facilities. For more information, see www.ru.nl/resorg.