

Chapter 18

Social Innovation Repair – The R.U.S.Z Case: A Systemic Approach Contributing to the Unplanned Obsolescence of Capitalism

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Abstract Repair and Service Centre R.U.S.Z (Reparatur- und Service-Zentrum R.U.S.Z) is a social business and a service for consumer protection and sustainability. In 1998 it started as a work integration social enterprise for long-term unemployed persons creating and using the business model of a sustainable repair shop. R.U.S.Z founded the success story Repair Network Vienna with some 80 SME members. It was among the initiators of the Austrian umbrella organization RepaNet and its EU equivalent RREUSE, which gather social enterprises with activities in re-use, repair and recycling. These networks help making advocacy work successful. Today, R.U.S.Z is Austria's biggest independent repair centre for electrical and electronic appliances for all kinds and brands and a centre of excellence for the fight against planned obsolescence, for consumer protection and social businesses. Moreover, R.U.S.Z is working for the transformation of the current linear economy into a circular economy.

R.U.S.Z' primary objectives are resource efficiency and social inclusion. R.U.S.Z provides repair services for household appliances, consumer electronics and IT. It sells certified, high-quality used equipment as well as new washing machines that were diagnosed in the in-house R&D department as particularly durable and easily repairable. From 1998 to 2007, R.U.S.Z was commissioned by the Public Employment Service Austria (AMS). R.U.S.Z was successfully transformed into a not-for-profit private enterprise in 2008. Today, it operates on a cost-recovery basis and employs more than 20 former long-term unemployed people. R.U.S.Z has been leading many initiatives to replicate its model and also lifts the barriers it is facing, both in Austria and Europe by initiating changes in national and EU policies.

Keywords Growth driven economy • Planned obsolescence • Resource depletion • Circular economy • Repair services • Product service systems

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18.1 The Beginnings

R.U.S.Z (Reparatur- und Service-Zentrum) was founded in 1998 in Vienna as a social economy enterprise¹ for reintegrating long-term unemployed persons and other people at risk into the labour market. Initially, the project was commissioned by the Austrian Public Employment Service (AMS) and supported by the Vienna Adult Education (VHS), the Environmental Counselling Vienna (Umweltberatung Wien), the Viennese Municipality (MA 48) and the European Union. R.U.S.Z started its activities with 12 people at risk who got working contracts limited up to 12 months (temporary workers), two administrative employees and one qualified social education worker. The temporary workers included long-term unemployed persons, persons with disabilities and former offenders. Most of them were men over 45 years of age.

All repair activities were carried out by the temporary workers. This was only possible because some of them were already trained technicians who could train the others, who in turn would train newcomers. Therefore, it was one of the important gains of R.U.S.Z when the first technicians got permanent contracts in 1999. For every temporary worker who became a permanent staff member, four new temporary workers had to be employed, following the guidelines of AMS.

Regarding operational activities, the original intention was to offer repaired second-life washing machines and dishwashers to socially deprived households and to service and repair these devices exclusively. But the initiative was so well received by the citizens of Vienna, that they soon started lining up in front of the repair shop with their vacuum cleaners, TVs, hairdryers and other appliances that they had stored in their garages and attics. They all appreciated the unique offer of having electronic and electrical appliances of all kinds repaired at reasonable prices and the R.U.S.Z team was more than happy to meet this demand.

Coming from a public environmental counselling agency (Umweltberatung Wien) which he had initiated in 1988, R.U.S.Z founder and CEO Sepp Eisenriegler had put the focus on prolonging the lives of electrical and electronic appliances and thereby conserving resources and reducing the e-waste of private households. The support of the previously mentioned institutions allowed R.U.S.Z to operate at prices below the market price. Therefore, R.U.S.Z not only created job opportunities for the long-term unemployed, but also offered repair services for those who would not have been able to afford it otherwise. The latter would have been forced to throw away possibly repairable devices, and in exchange they would have probably chosen a new and affordable, but low-quality device of short durability, hereby creating more waste of resources and e-waste in the near future.

¹In Austria, a social economy enterprise is a project commissioned by the Public Employment Service Austria (AMS) that serves the purpose of taking over outsourced AMS duties and responsibilities by offering trainings to people at risk at the labour market aiming at reintegrating them into regular jobs. Social economy enterprises are an important instrument of active labour market policy in Austria.

After 1 year of activity, the business was flourishing, but R.U.S.Z was also overwhelmed by the volume and variety of repair-requests; for example, the increasingly famous repair shop received a request to repair an auxiliary motor of a sailing yacht. As a solution, R.U.S.Z founded the Vienna Repair Network (ReparaturNetzWerk Wien) together with 12 smaller repair businesses in the area in 1999. Today, the network contains more than 80 small and medium enterprises (SMEs) which repair all kinds of electrical and electronic devices and other household goods.

R.U.S.Z was among the initiators of the European umbrella organization RREUSE (1999) and its Austrian equivalent RepaNet (2004) two lobby organisations for durability, reparability and re-use of products like electrical and electronic equipment, textiles, furniture and building materials.

In its early years R.U.S.Z already became a respected institution for repair services and repair standards. In 2005, R.U.S.Z created the “Ö3 Wundertüte”, the most successful mobile phone collection system in the world, in cooperation with Ö3 (the most widely heard radio station in Austria) and Caritas Austria. From 2006 to 2007, experts from R.U.S.Z developed the Austrian standard ONR 192102 “Sustainability mark for electric and electronic appliances designed for easy repair (white and brown goods)” (Austrian Standards 2006) in cooperation with the Ministry for Agriculture, Forestry, Environment and Water Management, the Austrian Standards Institute and other partners.

18.2 Transformation into a Private Limited Enterprise and Years of Struggle

By the end of 2007, R.U.S.Z had become a well-known repair shop and a retailer of second-life electrical and electronic devices. By then, R.U.S.Z had grown to a remarkable size employing 124 temporary workers and permanent staff (88 temporary and 36 permanent). Over the years it had employed around 450 temporary workers. More than 300 of them were placed into regular jobs.

The year 2008 brought some big changes to R.U.S.Z. The long-term partnership with the Austrian Public Employment Service (AMS) ended, which was not only a major change in the organisation’s setup but also heavily influenced R.U.S.Z in its today’s shape. Ten one-year contracts with the AMS had been signed and fulfilled. The main reason for the end of the cooperation was a crucial change in strategy by the AMS. At this point it was communicated that cutting the costs of the temporary work places would be prioritized over the employment of people at risk. As a consequence, R.U.S.Z would have had to reduce the overall costs and additionally, the maximum training period was cut down from 12 to 6 months. The short amount of time that a temporary worker would now have spent in R.U.S.Z would not have sufficed to train a person effectively and making him or her employable.

Instead of giving up its activities, as many other social economy enterprises did at the time, R.U.S.Z was transformed from a VHS project into an association and its

activities were carried out on a not-for-profit basis. Since then, R.U.S.Z has taken part in numerous public and private social initiatives and projects. R.U.S.Z received several awards, including the Energy Globe Austria Award 2008, the Austrian Climate Protection Award 2009 (Klimaschutzpreis), the Innovation Price “Ideas Against Poverty” 2009 (“Ideen gegen Armut”), the Viennese Award for Environmental Protection 2012 (Wiener Umweltschutzpreis) and the famous Austrian CSR award TRIGOS 2017 in the category Social Entrepreneurship. In 2014, the CEO was decorated with the Golden Merit-Medal of the Federal State of Vienna.

In 2011 R.U.S.Z Ltd., held by CEO Sepp Eisenriegler (52%) and three employees (48%), was founded as a not-for-profit enterprise with the core business of repairing electrical and electronic devices and the sale of second life products. Since then the association R.U.S.Z – Association for the Promotion of Social Economy (R.U.S.Z – Verein zur Förderung der Sozialwirtschaft) is in charge of research and development, product testing and the development and acquisition of new projects.

The first years after the privatization of R.U.S.Z were also the hardest in the business’s history. After having to give up the public funding of the early years as a work integration social economy enterprise, a severe increase in the prices for repair services and second hand products was unavoidable in order to cover costs. Since then, R.U.S.Z’ CEO has intensified his media campaigns and is, as an expert for reparability of electronic and electrical devices and planned obsolescence, a frequent guest and interview partner for various Austrian TV and radio channels, newspapers and magazines. As a consequence, R.U.S.Z is now recognized by many citizens as a centre of excellence not only for repair, but also for political activism against planned obsolescence and for resource efficiency. The number of sympathisers and the customer base have grown. In 2014, the seventh year after privatization, the company performed cost-effectively for the first time.

Even in the years of struggle, R.U.S.Z stayed faithful to its initial mission and exclusively employed formerly unemployed persons, and it still does today with few exceptions. Long-term unemployed can join R.U.S.Z as trainees for 3 months. If possible and feasible, they are then employed. The second part of R.U.S.Z’ social mission is to find the economically best solution for every customer while saving resources. R.U.S.Z employees always advise customers to repair a device rather than throw it away and buy a new one, which is usually more expensive in the long run. One of the broader goals has always been to raise awareness amongst customers and the general public regarding the so-called planned obsolescence of electronic and electrical devices. Today, R.U.S.Z is the biggest independent and most well-known repair service in Vienna, and its awareness raising media campaigns reach out to all of Austria, and even enters other European member states and Switzerland at times. CEO Sepp Eisenriegler is member of various EU committees and is frequently invited by consumer initiatives as an expert for reparability and longevity of electronic and electrical devices and planned obsolescence.

In 2014, when the first surplus became available, a position for product testing was created with the objective of testing the reparability of various electrical device categories. The same year, the above mentioned unique Austrian standard on durable, easily repairable electrical and electronic equipment was updated and rede-

ned (ONR 192102:2014 Label of Excellence for Durable, Repair-friendly Designed Electrical and Electronic Appliances) (Austrian Standards 2014). This is an internationally unique standard for household appliances and consumer electronics. It still is the first benchmark for durability and also includes guidelines for the construction of appliances that allow repair services at reasonable prices. It consists of 93 mandatory and voluntary criteria. For example, an appliance must be easy to open and disassemble. Instead of gluing and welding joints together, screws and snap connections must be used in order to fulfil the criteria. The components must be standardised and spare parts must be available for an additional 10 years. The access to blueprints and other appliance service documents must be easily available to independent repair shops. Otherwise the search for information will be too time-consuming and can make the repair much more expensive or only possible through a small number of manufacturer approved service partners. The standard was used to test 28 new washing machines in 2015 and 40 vacuum cleaners in 2016. The results of these tests show that newer products tend to be less repairable than older generation products of the same brands. The trend of the last 10–15 years of new electronic and electrical appliances being less durable than their older counterparts becomes obvious in R.U.S.Z' everyday activities.

In the first years of the initiative, social inclusion was the main focus of R.U.S.Z and the long-term environmental approach was secondary to this. Today the social side of the business focuses on training people (mostly former long-term unemployed) and employing them, if possible, for an unlimited period of time, while at the same time advocating for resource efficiency and the circular economy on the national and the EU levels. In this way, R.U.S.Z has turned into a centre of excellence for the economic interests of repair shops, e.g. shifting taxes from labour-intensive work to critical resources (environmental tax reform), fighting planned obsolescence, lobbying for reparability of new electronic and electrical devices and the disclosure of diagnosis software codes which are necessary for certain repairs, but also for resource efficiency and the circular economy.

R.U.S.Z also advocates for a mandatory warranty that reflects the promise made by the producers regarding the longevity of devices. Producers of high end appliances would gain market shares if they communicated, for example, a five-to-ten-year full guarantee to consumers. As a consequence, producers of low-quality products would have an incentive to improve the durability and reparability of their products (Alt et al. 2015). Together with an industrial supply of product service systems this range of requirements would lead to a sustainable, resource efficient economy.

18.3 R.U.S.Z as a Social Innovation and Its Socially Innovative Projects

R.U.S.Z is regarded as a social innovation (CASI 2016; Brunauer and Schartinger 2016). Several aspects of the business contributed to this perception.

18.3.1 *Services and Processes*

R.U.S.Z aims to connect social and ecological requirements by bringing back to life technical goods and re-integrating people at risk into the labour market. It creates jobs for unemployed people and qualifies them as professional technicians. Moreover, R.U.S.Z contributes to resource conservation and prevention of (hazardous) waste (CASI 2016).

18.3.2 *Degree of Innovation*

Customer services of manufacturers today are hardly considered anything more than an external marketing unit. Various TV contributions with hidden cameras² have shown that very often, a service technician will come into a customer's home, take a look at the product to be repaired, and state that it would cost way too much to repair it and that, if they buy a new product instead, they can even save the costs of this diagnosis. In this market situation a serious, forceful repair service is a quite radical change and even a threat to the status quo.

R.U.S.Z has had a high success rate for the reintegration of long-term unemployed people back into society from 1998 until 2007. These individuals were trained to be service technicians and received assistance for financial and social issues, e.g. declaring private bankruptcy and finding new housing. Most of the people trained at R.U.S.Z were men over the age of 45, and in some cases immigrants and ex-offenders were trained while finding themselves in very challenging life situations. These people got the chance to start over again, which in the experience of the R.U.S.Z team is very empowering: 71 percent of R.U.S.Z temporary workers have been re-integrated into the labour market and thus into society. Nowadays R.U.S.Z does that at a smaller scale: the business provides practical training for 16 long-term unemployed people and apprentices per year, free of charge (CASI 2016).

²Reparaturdienste im Test:

PULS 4: SUPERNOWAK! Waschmaschinentest 10.5.2016: (<https://www.youtube.com/watch?v=2bWDUkocLnM>)

PULS 4: SUPERNOWAK! Geschirrspülertest 05.11.2015 (<https://www.youtube.com/watch?v=gtDijkwnnSg>)

ATV: DER GROSSE ÖSTERREICH TEST: Waschmaschinentest 02.03.2015 (<https://www.youtube.com/watch?v=U9Py3pKlrXo>)

ATV: DER GROSSE ÖSTERREICH TEST – Reparaturtest Flat-TV 25.11.2013 (<https://www.youtube.com/watch?v=F2VZqHeD06Y>).

18.3.3 Recent Social Innovations

Since 2010, R.U.S.Z makes use of the know-how it gained from the mobile-phone-collection project “Ö3-Wundertüte” and collects household appliances donated by private households. The resource efficiency project *Donate Your Old Washing Machine – The Environmentally Sound and Social Reallocation of Household Appliances*³ enables the in-house accredited Re-Use Center to refurbish and sell some 1.000 high end, second-life products per year. The products are good for another 10 years, and sold at prices comparable to new low-quality devices which in most cases are dead after 3–5 years. In addition to contributing to resource efficiency and climate protection (53 percent of environmental impact is due to production and distribution), the donation program enables R.U.S.Z to offer additional jobs for former long-term unemployed.

In 2010 and 2011, the in-house R&D unit developed the so-called “Tuning of Washing Machines”, a technical innovation to increase the energy efficiency of old washing machines from category C to A. This helps save energy and resources and creates new jobs in the EU, instead of enhancing the shift of production to the Far East, where much of the fully automated production takes place. Moreover, it shows that resource efficiency and energy efficiency do not contradict each other. The disputable alternative is to buy a new supposedly energy efficient device and to dispose of the old one.

In 2012 R.U.S.Z started a media campaign against planned obsolescence. In the following years, some 500 awareness-raising newspaper articles and TV contributions were launched.

The Austrian Public Employment Service (AMS) commissioned R.U.S.Z in 2013 to perform “StarGate”, a vocational training program at R.U.S.Z for mechatronic engineers who have quit their primary education before graduation. This innovative pilot project proposed by AMS ended after 1 year, as AMS could not provide enough trainees. Nevertheless 55 percent of the trainees succeeded in finalizing their education within 1 year.

Since January 2014, the in-house repair-café “schraube14” takes place on a weekly basis and empowers consumers to repair their electrical and electronic appliances. On average, 25 customers are helped free of charge to generate DIY-repairs with a success rate of 65 percent. The customers get professional advice, tools and coffee for free.

The product-service system “Clean Laundry” is offered since February 2016. Thirty-five washing machines and dryers are currently rented on an unlimited basis to private households and a refugee camp. A product-service system is a competitive system of products, services, supporting networks and infrastructure. The system includes product maintenance, parts recycling and product replacement, which sat-

³“Spenden Sie Ihre alte Waschmaschine – Die ökosoziale Umverteilung von Haushaltsgeräten.”

isfy customer needs competitively and with lower environmental impact over the life cycle. If producers of household appliances made their profits by renting their products, consumers could rely on the intrinsic incentive of manufacturers to design durable, repairable products.

18.4 Conclusion and Outlook

Since 1998, R.U.S.Z has been able to build its reputation as a reliable partner in repairs of electronic and electrical appliances, re-use and social entrepreneurship both in the eyes of customers as well as in those of other organisations and the general public. For many years, R.U.S.Z has now been a pro-active actor in the field of resource efficiency. Its corporate responsibility is therefore not only directed towards its close sphere of activity, but to a growing sphere of influence e.g. in national and EU politics.

In the years to come, R.U.S.Z will be part of the shift in paradigm of the economic system of the EU towards a circular economy. Currently, the R.U.S.Z CEO is leader of the Austrian delegation to the CEN-CENELEC⁴ Joint Technical Committee 10 “Energy related products – Material efficiency aspects for eco-design”. The technical committee is commissioned by the European Commission until 2019 to develop standards for durable, repairable and re-usable products which will be crucial to put the Circular Economy Concept in place. These standards will find their way into European legislation and improve the Eco-Design Directive which currently is a mere energy efficiency directive.

Social franchising of the general business model of R.U.S.Z or parts of it are going to be offered soon. At the moment R.U.S.Z is working on the reality check of its social franchising handbook by developing a new branch in the city of Graz in southern Austria.

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⁴CEN and CENELEC are two recognized European Standardization Organizations. CEN stands for the European Committee for Standardization, CENELEC stands for the European Committee for Electrotechnical Standardization.