

VIVENGE

A Circular Economy Business Model Case

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Source: Vivenge



Table of Contents

E>	Executive Summary4							
1	Introduction							
	1.1	Back	kground and context	5				
	1.2	Busi	iness overview	5				
	1.3	The	case study analysis process	.10				
	1.4	Rep	ort outline	.11				
2	Vive	enge's	s business context analysis	.12				
	2.1	Scop	pe of the business context analysis	.12				
	2.2	Con	textual factor analysis	.12				
	2.2.	1	Demographic trends	.13				
	2.2.	2	Rules and regulations	.15				
	2.2.	3	Economy and environment	.15				
	2.2.	4	Competition	.17				
	2.2.	5	Technology trends	.18				
	2.2.	6	Customer needs	.19				
	2.2.	7	Uncertainties	.19				
3	Busi	iness	model assessment	.21				
	3.1	The	Vivenge's business model	.21				
	3.1.	1	Business model overview	.21				
	3.1.	2	The Value Network	.27				
	3.2	Busi	iness model circularity assessment	.29				
	3.2.	2.	Financial and non-financial outcomes assessment	.33				
	3.2.	3.	SWOT analysis	.33				
	3.2.	4.	Final assessments	.35				
4	Disc	ussio	n & Conclusions	.38				
	Appen	dix A	: Contextual analysis tool results	.41				
	Appen	dix B	: Vivenge's circularity assessment	.42				
	Appen	dix C	: Brandbility programme recommendation for managing waste	.43				
	Appen	dix D	: Brandbility certificate audit – control list	.45				
	Appen	dix E	: Vivenge's business model strengths and weaknesses	.47				

TABLE OF FIGURES

Figure 1: Vivenge's Employment	9
Figure 2: Vivenge's Revenues	9
Figure 3: Brandbility Programme Basic Assumptions and Organization	
Figure 4: Case Study Process Structure	¡Error! Marcador no definido.
Figure 5: Context Map Canvas for Vivenge	¡Error! Marcador no definido.
Figure 6: Respondents Willing to Pay More for Environmentally Friend	lly/Socially Minded Brands 13
Figure 7: Internet Purchases by Individuals	
Figure 8: Respondents with Very Little/No Confidence in Large Corpor	ations/Brands 17
Figure 9: Value Proposition Canvas	
Figure 10: Vivenge Business Model Canvas	¡Error! Marcador no definido.
Figure 11: Vivenge Project's Financing Sources	
Figure 12: Vivenge Group's Cost Structure in 2017	
Figure 13: Vivenge's Material Flow Pattern	¡Error! Marcador no definido.
Figure 14: Value Flow Map for Vivenge	
Figure 15: Circular Business Model Patterns	
Figure 16: Vivenge Circular Business Model Patterns	
Figure 17: Vivenge Swot Analysis	¡Error! Marcador no definido.
Figure 18: Proposed Modifications To The Brandbility Programme	¡Error! Marcador no definido.

Executive Summary

One of the $R2\pi$ project's missions is to identify and develop sustainable business models and guidelines that will facilitate the circular economy implementation in new entities and markets. Having those objectives in mind Vivenge was chosen as one of the case organizations because of their circular ambitions and the long-term effort Vivenge was willing to put in the pursuit of sustainability of their business model.

Vivenge is a Polish family company established in 1997. Since day one of their operations they are producing items for visual identification purposes. Currently the company is a one-stop-shop for durable visual identification as they provide both outdoor (outdoor signage, small architecture) and indoor visual identification (durable indoor signage, furniture, small architecture) as well as related services (e.g. installation, logistics). The company has experienced considerable growth since its inception. Currently its clients comprise of 48 brands in 9 countries.

The visual identification industry is strictly cost-oriented and could not compromise yet profitability with a costly image of being environmentally friendly. Although rebranding waste is not a media-worth issue yet, Vivenge has started The Brandbility programme as a sustainable rebranding process based of selected recommendations.

Currently they employ two circular business models, first of which is "resource recovery". In every disassembly and utilization practice Vivenge recovers the resources from the products using their own sorting facility. Part of the reclaimed parts is reused once again without the need for recycling. This process could be described as a "re-make" business model as it returns the end-of-life parts into a new overall product.

A detailed look at Vivenge's circularity assessment indicates that the company is extremely heterogeneous when it comes to implementing circular economy elements in their business model. The visual identification products' circularity is highly graded, mainly thanks to visual products' characteristics. This fact is counterbalanced by Vivenge's business model itself and the system it operates in. The business model is driven by assets sale, with a focus on the sale transaction. The system lacks circularity specifically in the end-of-life phase.

Nevertheless, it seems that Vivenge's business model has important traits that make it easily adaptable to incorporate circular elements beyond what has already been done. The Brandbility programme could be modified to incorporate more circularity elements and at the same time to influence demand for the new circular products and services. The main proposed approach concerns servitizing the industry and putting more effort on the end-of-life phase of the products life cycle.

Furthermore, those two objectives could be attained simultaneously. The visual identification products could be offered as a service. In this arrangement it is the producer that is responsible for the whole lifecycle of the product. That way the customer pays only for the time the visual identification product is on display (with prearranged quality). The producer would have an incentive to design with durability, quickness of assembly and disassembly and standardization on his mind. The greater extend of reuse of parts could further diminish the costs of production. This approach could be easily replicable and transferable to other entities and markets.



1 Introduction

1.1 Background and context

 $R2\pi$ – Transition from Linear to Circular is a European Union Horizon 2020 project focused on enabling organisations and their value chains to transition towards a more viable, sustainable and competitive economic model. One of the missions of the project is therefore to identify and develop sustainable business models and guidelines that will facilitate the circular economy.

A core part of this project is to work with organisations that are on the journey towards developing circular economy business models, as well as those who have the ambition to do so but haven't yet begun or haven't been successful yet. Through these engagements, the $R2\pi$ team's aim is to provide participating organisations with independent analysis and possibly facilitate the whole industries to challenge current business model assumptions, identify new opportunities, and catalyse change.

 $R2\pi$ examines the shift from the broad concept of a Circular Economy (CE) to one of Circular Economy Business Models (CEBM) by tackling market opportunities and failures (businesses, consumers) as well as policy opportunities and failures (assumptions, unintended consequences).

The case organization for this report was chosen because of their circular ambitions and the long-term effort Vivenge was willing to put in the pursuit of sustainable business model. This was recognized particularly during meetings among United Nations Global Compact Poland council members. The focus of Vivenge's business model investigation was the certification programme they have developed. The programme was aimed at implementing circular elements not only in the company activities but also in the whole industry.

For a more detailed overview of the case organisation business see subsection below.

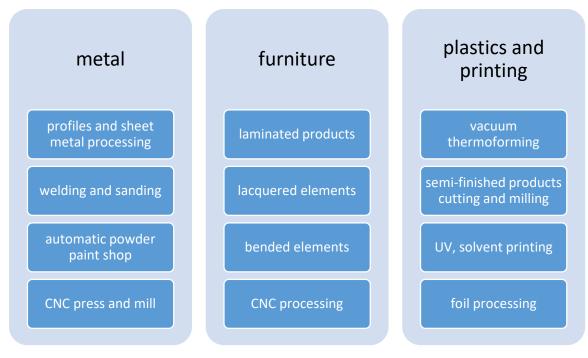
1.2 Business overview

Vivenge is a Polish family company established in 1997. Since day one of their operations they are producing items for visual identification purposes. Currently they operate as a group of four different limited liability companies:

- Vivenge sp. z o.o.
- Vivenge Produkcja 1 sp. z o.o.
- Vivenge Produkcja 2 sp. z o.o.
- Vivenge Transport sp. z o.o.

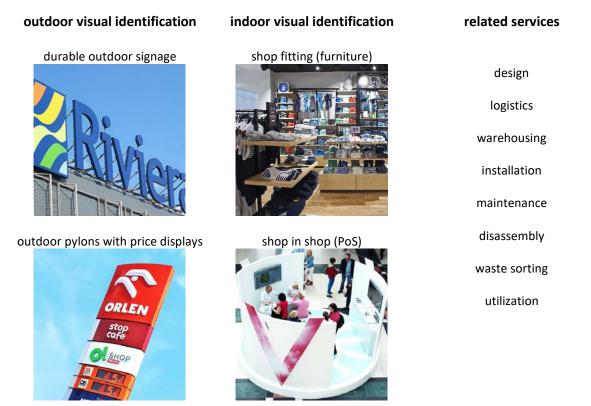
As the industry they operate in is changing rapidly the company evolves accordingly by increasing the scope of their operations. In result, throughout the years, Vivenge's portfolio has broadened considerably. Currently the company is a one-stop-shop for durable visual identification as they provide vast technological options for their customers.





SOURCE: VIVENGE

The products they offer could be classified in two groups, that is in the outdoor visual identification (outdoor signage, small architecture) and indoor visual identification (durable indoor signage, furniture, small architecture). Thus, Vivenge can offer the whole bundle of made to measure visual identification products. Currently they cover almost every aspect of durable visual identification together with related services (e.g. installation, logistics). The industry they operate in does not cover non-durable signage (billboards, price labels in convenience store, etc.).



small architecture - false ceilings

small architecture - facades



SOURCE: VIVENGE

indoor information signage





decorations (digital printing)



They offer their products to two main groups of clients that require relatively high numbers of visual identification items like signage, furniture, etc. The first and the most important of these segments are commercial chains. The second one is public authorities that require appropriate signage, especially information type signage.



commercial	gas stations
	convenience stores
chains	banks
	restaurants
	clothing stores
	shopping centres
	pharmacies
	telecomunication operators
	cosmetic producers
	etc.
public	railway operators
authorities	municipalities
	road operators
	local governments

SOURCE: VIVENGE

Most of their clients are in Poland however the company was able to broaden its reach throughout the years of their operations. This aspect is further reinforced by visual identification industry becoming supranational, especially on European Single Market. Currently Vivenge's clients comprise of 48 brands in 9 countries.



SOURCE: VIVENGE

The company currently has two production facilities located in the east side of Poland. Furthermore, it has six logistics centres, that also work as servicing facilities, which are in strategic parts of the country. This enables Vivenge to quickly respond to customer needs e.g. servicing, modifications. Vivenge's production and logistics facilities (marked red and blue respectively) are presented below.





SOURCE: VIVENGE

Vivenge has seen considerable growth of the number of their employees. Currently they employ approximately 400 people most of which are working in production, installation, design, engineering and construction. Revenues have seen a considerable growth surpassing EUR 30 million in 2017 (unconsolidated value).

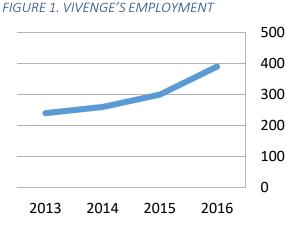
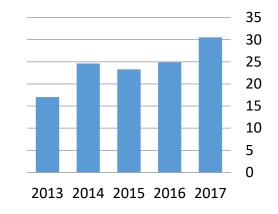


FIGURE 2. VIVENGE'S REVENUES (MILLION EUR)



SOURCE: VIVENGE

Throughout the years Vivenge was using a traditional, linear business model. Seeing that the industry they operate in, their customers and the environment could benefit from applying circular elements in their endeavours, they joined United Nations Global Compact (UNGC). UNGC is the biggest international initiative that supports corporate sustainability and responsibility. In cooperation with this organization Vivenge developed a programme named Brandbility.



FIGURE 3. BRANDBILITY PROGRAMME BASIC ASSUMPTIONS AND ORGANIZATION



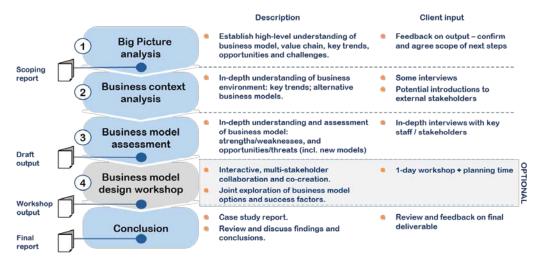
SOURCE: UN GLOBAL COMPACT POLAND / VIVENGE

Since its inception in 2013/2014 there has been an almost non-existent demand for the certificates. The Brandbility programme is still available although because of the lack of customers' interest Vivenge's circular ambitions are realized throughout its standard operations, whenever it's economically viable.

1.3 The case study analysis process

The case study process was structured in three main steps and concludes with this document as the final report (see diagram below).

FIGURE 4. CASE STUDY PROCESS STRUCTURE





Prior to starting the big picture analysis, a kick-off and planning session with Vivenge was conducted to discuss the project's objectives. The meeting also resulted in establishing the processes for communication (email and telephone contact), identifying a Project Sponsor within Vivenge (assistant to the CEO with direct contact with relevant senior employees), confirming the project timeline and plan of activities and identifying key Vivenge stakeholders who will be relevant for the project.

Following the kick-off meeting several valuable internal materials were sent for investigation. Basing on this source and publicly available information big picture analysis was conducted. After discussing the findings with the company, business context analysis was conducted, mainly in the form of desk research, supplemented also by targeted interviews with Vivenge's representatives. Findings from the business context analysis were then used in business model assessment - this particularly concerned financial and design department. Business model design workshop was not conducted.

The process of gathering information, desk research and interviews took place in February-June 2018. The preparation of the final report ended in June 2018 with additional changes implemented later.

1.4 Report outline

In line with the case study process analysis depicted in the last section of the report, big picture analysis, that was already presented, will be followed by business context analysis in section 2. This will be based specifically on business context canvas with description of elements of the canvas and referrals to sources on relevant business trends.

Section 3 takes on business model assessment based specifically on the business model canvas elements and their description. The investigation on the business model focused on identifying its strengths and weaknesses.

Last section discusses the main findings and concludes on the assessment of the business model, focusing on further circular possibilities, scalability and replication. Key recommendations for business leaders and policy makers are part of that section.



2 Vivenge's business context analysis

2.1 Scope of the business context analysis

The business context analysis identifies the key trends and developments that impact Vivenge's business model and broader value chain dynamics. In fact, any trends that seem important for the durable visual identification industry were investigated. The objective was to identify the main external factors that need to be considered to explain the success and failure of Vivenge's business model, its elements as well as initiatives for circular economy implementation. Their potential role in accelerating the transition towards a circular economy was also considered. Specific focus was given to the identification of key barriers and enablers to circular economy business models with the case organisation's business environment and that of its value chain.

2.2 Contextual factor analysis

The dimensions considered in the Vivenge's contextual factor analysis are summarised below using the context map canvas. Contextual analysis tool was used for this investigation (its results are attached in appendix A). During interviews all the dimensions on the business context checklist were considered. However only contextual factors relevant for the durable visual identification industry and notably Vivenge's business model, are described next.

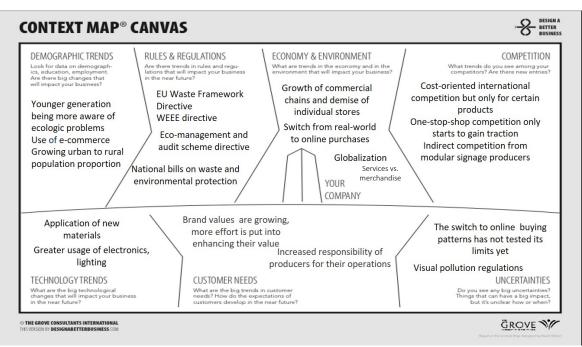


FIGURE 5. CONTEXT MAP CANVAS FOR VIVENGE

SOURCE: OWN RESEARCH

The following sub-sections present the findings of the contextual dimension/ factor analysis based on the Context Map Canvas framework in greater detail.

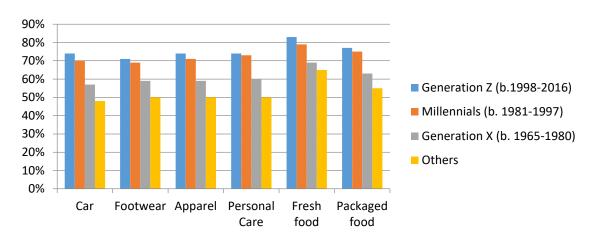


2.2.1 Demographic trends

Among the contextual factors that play a significant role for the Vivenge's business model are the demographic trends. Firstly, the younger population seem to have certain characteristics that affect the company and the whole visual identification industry. Consumption patterns, ecological awareness, etc. differ depending on the consumer generation. Secondly, the whole visual identification industry is dependable on urbanization that is quintessential for the development of commercial chains – the main customer for durable visual identify products.

2.2.1.1 Young vs. older population

The rising importance of the young generation may play an important role in Vivenge's business model. Vivenge's sustainability initiatives should be applauded by the young who are the most environmentally-friendly generation. Furthermore there are able to make sustainability-conscious choices even if the price comparison are not in favour of the "green" product or service (see figure 10).



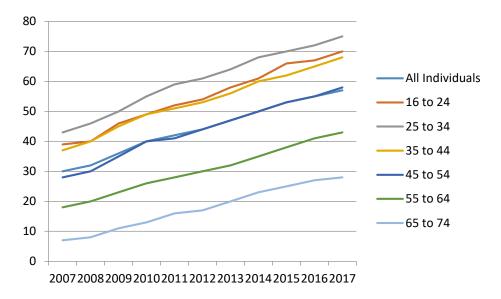


SOURCE: THE CONSUMERS OF THE FUTURE, 2017

The factor that plays a negative role in the Vivenge's business context is the growing use of ecommerce, especially among young people. The proportion of individuals in the European Union aged of all individuals having purchased online in the 12 months prior to the Eurostat 2017 survey stood at 57 %. Consumers appreciate the convenience of being able to shop anytime, anywhere, having access to a broader range of products, comparing prices and sharing their opinion on goods with other consumers. Online purchases by internet users increased notably compared to 2007. E-commerce picked up over the 2007-2017 period among all age groups, with individuals aged 16-44 showing the biggest increase. This trend has negative consequences for the brick-and-mortar commercial chains that are the core customers for the visual identification industry and is discussed in more detail in chapter 2.2.3.2.



FIGURE 7. INTERNET PURCHASES BY INDIVIDUALS



SOURCE: EUROSTAT

2.2.1.2 Urban-to-rural population ratio

Powerful economies of scale have made urbanization one of the most important forces driving global consumption growth in recent years. Cities tend to have disproportionate numbers of skilled workers, with better education and training systems that feed the talent pool and attract students from elsewhere (Glaeser & Gottlieb, 2009). Because of these forces, urbanization gained momentum. Its results were the raise of commercial chains and in consequence the growth of the visual identification industry.

However, it seems that in the next years the industry must stop relying on urbanization and its consumption effects as the process, according to McKinsey (2016), will stall as global population growth is slowing and rural-to-urban migration or urbanization is plateauing in many countries. Expanding populations have been the key driver of urban growth, contributing almost 60 percent of urban GDP growth between 2000 and 2012. Natural land constraints and regulatory barriers to housing construction have raised the cost of living in many cities and slowed down population growth. Different housing policies will also contribute to diverging population growth patterns between cities.

According to World Bank in 2014 almost 54 percent of the world's population lived in cities and towns of all sizes, up from 34 percent in 1960. This leaves less room for further rural-urban migration to fuel the growth of cities' populations. Additionally, the weight of consumption is shifting rapidly toward the cities of emerging economies, including working-age population in China. According to McKinsey (2016) in 2030, just 315 large cities in China and North America are likely to contribute more than 40 percent of global consumption growth. Therefore, it seems that the growth of commercial chains that was observed in last decades in Europe will be somewhat smaller, affecting the growth of the visual identification industry.



2.2.2 Rules and regulations

Rules and regulations place significant burden on the visual identification industry. This specifically concerns national legislation on waste and environmental protection (acting in accordance to EU Waste Framework Directive, WEEE directive, Eco-management and audit scheme directive). They require considerable administrative work and financial expenses.

It seems that a significant number of entities in the industry does not meet the regulatory demands and does not intend to do it in near future (e.g. most of them do not pay the packaging fee for using plastic foil packaging). Otherwise their costs will certainly rise due to the increased workload and the need to pay the appropriate fees. But no specific numbers are available – it is just an opinion popular in this industry often raised during conferences and in the media.

Seeing that visual identification producers do not comply with the regulations in force, UN Global Compact and Vivenge has designed Brandbility programme in such a manner to incentivize the companies participating in the programme to meet the environmental regulations.

The regulations that indirectly influence the growth of the visual identification industry are the trade agreements. Those regulations made the globalization and global commercial chains possible. This was particularly relevant in the last two decades of the last century. At that time the pace of globalization was quickened by the multilateral trade negotiations of the General Agreement on Tariffs and Trade (GATT); the liberalization of trade and investment; deregulation and privatization of national industries; and increasingly cheaper cost of foreign trade from technological developments in telecommunications and transportation. In result GAAT and World Trade Organization (GAAT successor) has been notified of over 200 trade agreements at the beginning of XX century.

Today the trade policies seem to lose it recent popularity especially in the US. Possibly the global economy could see trade wars happening in near future that could trigger negative consequences for the commercial chains and therefore visual identification industry.

2.2.3 Economy and environment

2.2.3.1 Globalization

Essentially, chains have been interpreted as a group of stores or service providers which are similar in external appearance, which deal in the same type and quality of merchandise, have a centralised management and ownership and which get their supplies from the central/head office.

Urbanization and globalization have both supported the rise of multinational commercial chains that are the core customers of visual identification industry. The rise of chains is attributed firstly to the effects of scale. These have led the companies to source their products at considerably lower prices than neighbourhood stores, but also lower than department stores. Secondly the effect of scale is also visible in building trust and customer loyalty.

Since the chained stores and services providers offer similar merchandise and services customer trusts the network in its purchases even if one visits a certain point of sale for the very first time. This is particularly important due to globalization and increased transportation possibilities. The chains are in places were population consumption abilities are considerable. Thus, the growth of commercial chains may be attributed also to urbanization which was already mentioned in the chapter 2.2.1.2.



2.2.3.2 Online sales

Online share of retail trade is constantly growing throughout recent years. Online sale has been the next step in cutting costs compared to the commercial chains. The cost advantage is gained by decreasing the number of locations (virtually only to warehouses) and at the same time limiting needed workforce (specifically through process automation). The online retail industry sells standardized products, mostly branded one. This diminishes trust issues for the customer.

The online retail business is growing steadily in Europe. The highest portion of online sale is seen in relatively small countries with shallow internal markets. Those countries seem to use the cross-border selling abilities of online retail to increase their revenues (see Czech Republic, Hungary). As for now it seems that e-commerce popularity has not tested its limit yet. However, it is still too soon to say if they are a threat that could someday cause the demise of commercial chains. It is rather unlikely.

2.2.3.3 Services vs. merchandise

One of the standard effects of economic growth is the raise in the portion of services bought instead of goods and consumables. At some point it seems that the society becomes saturated in material belongings and praise experiences more (thus raising the role of services). Services are largely local in nature, e.g. restaurants or caring for children. Therefore, they are far less internationally traded than goods because many services have an intrinsic link to person-to-person interactions.

According to World Bank data services sectors account for roughly two thirds of global GDP, yet crossborder flows of services are less than one-quarter those of goods. This makes globalization effort connected to commercial chains more difficult. However, there are successful examples of chains offering services on a global scale (e.g. McDonalds). Thus, the growing position of services in developed economies does not preclude commercial chains from entering those markets. However, it must be interpreted as an impediment to already existing business based to a large extend on selling goods. Those commercial chains will possibly see their markets shrink in relation to services, especially in developed countries.

2.2.3.4 Role of brands in consumption choices

Confidence in the brand as a proof of quality is weakening all over the world. The proportion of population that has either none or very little confidence in brands rises quickly especially in highly developed countries. In the case of four surveyed markets this proportion surpasses 50% mark. The lack of confidence in the brand suggests that customers could be less loyal. The outcome is that the value of brands and the effort companies put in them could diminish. In effect durable visual identification could be used to a lesser extent, reducing the industry's revenues.



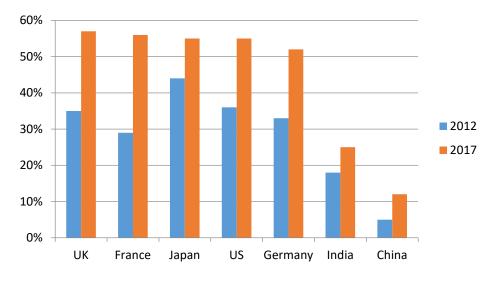


FIGURE 8. RESPONDENTS WITH VERY LITTLE/NO CONFIDENCE IN LARGE CORPORATIONS/BRANDS

SOURCE: THE CONSUMERS OF THE FUTURE; 2017.

2.2.4 Competition

The durable visual identification business is a relatively shallow industry. It comprises of a few companies that cater to international clients. They characteristics are that they have a broad range of production abilities and related services. Furthermore, they typically produce visual identity items in high numbers to meet their basic clients, i.e. commercial chains, needs.

Among those companies Visotec boasts itself as being the European leader in this industry with yearly revenue amounting to approximately EUR 100 million. Its main production facilities are in France and Poland. However, this is not a one-stop-shop for durable visual identification Vivenge claims to be. Their offer lacks furnishing and point-of-sale preparation. Also, Kaufmann – a German owned company, with production facilities in Poland, has a narrower offer compared to Vivenge. The company specializes in outdoor signage.

Among the companies that are trying to enter the exact same market Vivenge currently operates in is Grupa Synergia, which recently started to cater to commercial chains instead of individual clients and has a relatively broad range of production abilities including furniture.

Besides the two main competitors and one contender mentioned above, that can cater to multinational commercial chains there are several advertising agencies that offer signage solutions. Some of them concentrate on one segment of customers (e.g. Graffico main offering is directed towards gas stations). Most of the companies offer one-time signage solutions for a certain location. Among those companies are:

- Novum Invest
- Redeye
- Kontrast
- Mabit
- ARA
- Aktreklama
- Imart



- Plastmedia
- Provision
- Oznakujbiuro
- Profil
- Advert
- Media Vision
- Impel-vs
- Prosignum

They do not pose direct threat to Vivenge's business as Vivenge does not produce items below a certain number, whereas the above-mentioned companies manufacture even individual items.

Other competition consists of international entities that do not necessarily operate in the same locations as Vivenge (US company PrioritySign) or because the offered products are not exactly like Vivenge production. This particularly concerns modular sign systems that are not made to measure but offer a considerable amount of flexibility to modify signage to customer likings. Two main examples of companies offering such products are Modulex and Cosign. Both operate on the global market (Europe, Americas, Asia).

2.2.5 Technology trends

As it was already mentioned visual identification industry is evolving continuously. This concerns firstly the scope of the items considered part of the identification (e.g. furniture, architectural facades). Secondly the evolution concerns technologies used in production of visual identification items.

Currently the most visible technological trends are:

- Incorporating lighting to products lighting is present in signage for decades now. However currently lighting is incorporated also in furniture, small architecture, expositions, points-ofsale. Integrating lighting into every visual identification item became a trend that seems to stay on the market for the years to come.
- Usage of materials previously absent in the visual identification industry the industry uses more materials than ever before. This particularly includes wood – that is associated with quality and prestige. Because of these characteristics wood signage and small architecture, currently gains in popularity.
- Technological advances in processing vinyl is an example of a material that has been used in signage for decades. However nowadays the creation of vinyl signs differs from the previous production process. To create a vinyl sign, one would have to heat press pieces of vinyl together. The evolution of digital printing means that graphics can simply be printed out and applied directly to signage. Vivenge has its own innovative system to produce vinyl signs (system for vinyl stretching).
- Signage surveillance services companies are more and more aware of the need to keep the quality of their visual identification at highest levels. There are examples of monitoring systems that seem to answer those needs, e.g. automatic 24/7 monitoring of outdoor signage (OVS – Online Visual System by Vivenge).

Due to the growing size of the projects and number of locations serviced there is a need for better supply and material management. Enterprise Resource Planning (ERP) systems can meet this demand by applying information technology to the management of the resources. Vivenge has implemented



such a system with the help of EU financing with great success. The ERP system helped the company to limit the warehousing needs and simplify the management of the supply value chain¹.

2.2.6 Customer needs

In 2018 the ranking of World's most valuable brands (BrandZ Top 100) has seen its largest-ever annual increase in value – almost \$750 billion i.e. growth by 21%. The overall total brand value amounted to \$4.4 trillion, up by 204% over 12 years since the rankings were first published in 2006. This is also the first year that all categories reported growth.

The growth of brands value outperforms the stock exchange (S&P500) and broad global equity indices (MSCI World Index). This means that company should put more effort in their brands to keep their value at highest levels possible. This also means that visual identification quality and related services should be of highest standards to ensure that brand value would not be damaged. This particularly concerns the utilization of branded products, signs, packages.

Increasing number of companies pays attention to the social and environmental impact their activities have. Those companies support the notion that sustainability management can be profitable while at the same time minimizing their negative impact on stakeholders. Some analysis indicates that companies with higher sustainability ratings outperform their counterparts who score lower on sustainability practices (oekom, 2012). This increased level of sustainability results also in ensuring their supply chain management does not damage the reputation or the value of a certain brand. In effect the quality of business-related services, e.g. visual identification providers, must increase along the way.

2.2.7 Uncertainties

2.2.7.1 Visual pollution regulations

Visual pollution regulations have been present in developed countries for quite some time now. However, in the less developed European countries such regulations are only started to gain popularity. It seems that in effect the aesthetic quality of municipalities should rise, however it is still uncertain if the visual identification items would be less present.

A form of visual pollutions is light pollution. Regulation of this kind of pollution gain prominence especially in the developed countries. These regulations pose considerable uncertainties for the visual identification industry. The consequences for the industry could be significant, as more and more visual identification items incorporate some form of lighting.

2.2.7.2 Limits of online proportion of sales

According to eMarketer report (2017) worldwide retail ecommerce sales reached \$2.290 trillion in 2017, making up 10.1% of total retail sales. This share will surpass 16% by 2021, when sales will hit

¹ The aim of the project titled "Implementation of a B2B system to automate business processes at Vivenge Production 1 and its partners" was to increase the competitiveness of the company by automating business processes with partners. For this purpose, the purchase of an innovative ERP system was made. This system combines an innovative interface with capabilities and functionality that allow to manage company's commercial and production profile more effectively and provides functionalities that allow comprehensive support of all critical business processes in the company. The total cost of the project was PLN 1 million with approximately 55% of the sum being financed from EU funds.



\$4.479 trillion. However, the examples of certain European countries suggest that the portion of goods and services purchased online in the future may be considerably higher than that. This fact could suggest that there would be less and less demand for durable visual identification items. However, recently brick and mortar experiences – physical, on site interactions – gain prominence among online retailers. Merchants try to combine showrooming and webrooming, events, product demos, in-store experiences and more.

Online merchants will grow their physical footprint as consumers continue to place a premium on both the flexibility and depth of e-commerce and the convenience of purchasing, picking up and returning items locally.

These two trends pose uncertainties for the visual identification industry as traditional commercial chains lose their popularity and the growing physical footprint of e-commerce could not gain enough size to compensate for the lost business.



3 Business model assessment

The business model assessment has been conducted through a combination of publicly available information, interviews with managers and employees of the case organisation and internal documents provided by the organisation.

The objectives were to gain a deeper understanding of the circular business model and to map out the value chain and interactions in more detail to enable an analysis of the strengths and weaknesses as well as to consider the replicability and transferability of such a model to other entities and sectors.

3.1 The Vivenge's business model

Vivenge's business model was evaluated using both Value Proposition Canvas and Business Model Canvas. By doing so it was possible to assess:

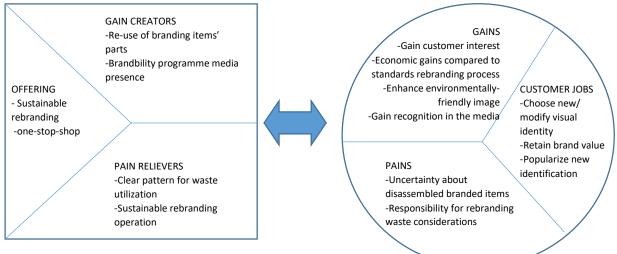
- the 'circularity' of the business model;
- business model strengths and weaknesses;
- the 'value flow' between value chain/network players;
- opportunities (and threats) and potential new business model options.

3.1.1 Business model overview

Vivenge provides products and services for rebranding purposes of various organizations. This typically starts with design that must be approved by the customer, followed by the production process itself. Vivenge uses the materials reclaimed and sorted from end-of-life visual identification products and sells them to companies that recycle the material and then to other production companies.

Rebranding/refreshing/remodelling is a very delicate process that may result in several negative consequences. Final consumer's trust in the brand may diminish. In effect the brand may lose value and revenues and profits may fall. This effect is quite common as final customers exhibit reluctance for change (Descotes & Pauwels-Delassus, 2015). Therefore, the popularization of the new visual identification is essential for the business and its future financial results.





SOURCE: OWN RESEARCH



The value proposition of providing sustainable rebranding one-stop-shop has considerable advantages compared to the standard rebranding process. Of course, it increases customer interest just as the standard rebranding. However, there are additional economic gains mainly in the form of decreased costs resulting from reusing parts from the disassembled items. Waste management proposed in the Brandbility programme (see appendix B) would further enhance the environmentally-friendly image of the rebranded company. The programme has already had considerable media presence using it would leverage the public recognition gains from the sustainable rebranding operations.

Sustainable and thoroughly organized rebranding process tackles the problems companies face when they modify or change their visual identification. The process of branded items utilization is often ambiguous. In effect company image may be compromised. This is directly connected to the responsibility of the company for its waste. Both issues are handled through a clear and environmentally oriented process Brandbility process has already established.

Business model canvas was used to assess Vivenge's business model. A detail description of specific items on the canvas could be found in consecutive sub-sections.

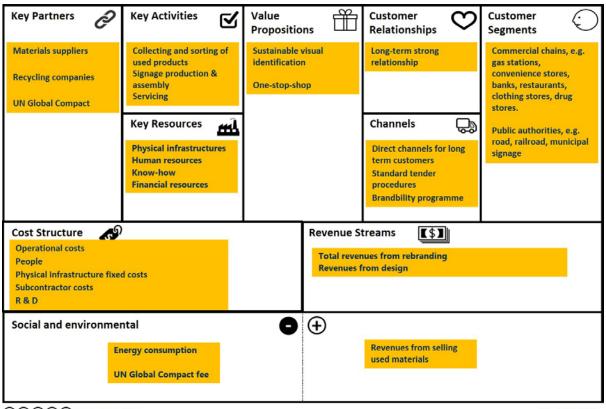


FIGURE 10. VIVENGE BUSINESS MODEL CANVAS



Adapted by R2Pi

SOURCE: OWN RESEARCH

Key partners

For the production purposes the company uses a wide range of raw materials suppliers as their production portfolio is quite broad. The market for raw material suppliers can be described as vast and therefore in case one supplier is not able to deliver requested material, other market entities are



available. The raw materials used in visual identification industry are traded globally. In such environment the pricing is quite competitive and there is little option to acquire the raw material with significant bonuses. The price of the raw materials is dependent on currency exchange rates, prices of underlying feedstock (e.g. oil for plastic production) and of course global demand. However, the location of raw material supplier also plays a role, as it decreases logistics costs and time necessary to deliver the goods. That is why Vivenge typically uses Polish suppliers of raw materials.

As the industry changes rapidly so are the materials used in visual identification products. Vivenge tries to answer those changes as quickly as possible by acquiring appropriate technology. This is however preceded by a search of the specific raw materials suppliers. Obviously, the suppliers of the materials for those new technologies are scarcer than the standard ones. Additionally, they require more effort, specifically in terms of finance and logistics.

Vivenge sells the materials reclaimed and sorted from end-of-life visual identification products to several companies that recycle the material and then sell it to other production companies. This particularly concerns plastic and metal recycling. Just like in the case of raw materials suppliers, selling the reclaimed material is dependent on the location of the entity. Vivenge typically sells to Polish recycling companies.

One partner that was expected to play a significant role in Vivenge's business model was the United Nations Global Compact (UNGC). This organization is a voluntary initiative based on CEOs commitments to implement universal principles on human rights, labour conditions, environmental protection and anticorruption. Members of the UNGC develop programmes to support those principles and try to support those ideas using the network and relationships offered by the organization. In case of the programme developed within UNGC Poland by Vivenge the partnership was not as fruitful as predicted as there is little to zero interest for the Brandbility programme.

Key activities

Vivenge's main activity is the visual identification items production. This typically starts with design that must be approved by the customer, followed by the production process itself. The production is typically higher than the number of locations the products should be installed at. This is because in some point in time in the visual identification products lifecycle (that typically last 10 years) some items lose its quality (e.g. because of plastic signage fractures). The additional products are warehoused by Vivenge in their facilities and quickly installed when such need occurs. In most cases the customer is not interested in the choice of materials used in the process, with price being the number one factor for purchasing decision. In some cases, notably for multinational companies, certificates for being in line with work safety regulations can play a vital role.

Usually Vivenge is also responsible for the logistics of their products, making use of their car fleet and well communicated logistics centres. However, in some cases Vivenge uses subcontractors for logistics services.

The visual identification market typically requires the current contractor to utilize the end-of-life products, even if the contractor was not the producer of the disassembled items. The disassembly should be considered as one of the key activities of Vivenge as it is a crucial part of almost every rebranding operation (there are cases where the ordering party is responsible for utilization activities). The company has its own sorting facility that usually groups parts and materials in the following manner:



- Parts eligible for reuse
- Plastics
- Metals
- Furniture materials

The company has a shredding machine, used to prepare the furniture material (e.g. plywood, MDF boards) for the future purchaser, in this case the insulation producer.

Key resources

Human capital is one of Vivenge's key resources. Employees should be able to meet most of the customers' needs without subcontracting activities to other entities. Vivenge's workforce, as of 2016, consists of inter alia:

- 11 employees employed in the construction and engineering bureau
- 7 employees in the interior design team
- 37 own installation crews
- Logistics team handling 45 car fleet
- Production team that is the major part of the almost 400 employees' workforce.

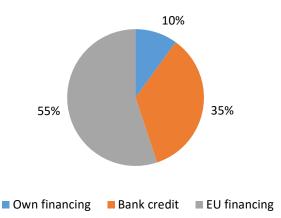
The significance of Vivenge's human resources has grown considerably in recent years. This is mainly due to the changes in the labour market in Poland that has seen an unprecedented growth in employees bargaining power, especially concerning the blue-collar workers. Polish labour market evolution is a consequence of the outflow of employees to western-European countries and the high GDP growth observed in recent years. This effect has been somewhat mitigated by the inflow of low-skilled workers from the eastern countries, notably Ukraine. Nevertheless, this has not halted the overall trend on the labour market.

Due to an ongoing evolution of the visual identification industry, particularly the application of new materials and technologies, physical capital is essential to thrive in this business. Vivenge from the very beginning of their operations tries to keep its production up-to-date with the latest industry trends. Today its production abilities can meet almost every demand from customers. A recent example is the construction of a second production facility equipped with machines able to produce visual identification items in line with the latest market trends in the years 2014-2016.

The production abilities broadening would not be possible without the financial resources. The construction and purchasing activities carried out in 2014-2016, made use not only of Vivenge's own financial resources but also bank credits and EU financing. In fact, "The implementation of products innovation in the visual identification industry" project was mainly financed from EU resources and bank credit.



FIGURE 11. VIVENGE PROJECT'S FINANCING SOURCES



SOURCE: VIVENGE

When own financing sources are concerned the current financial report for the last day of 2017 states that the amount of money available is relatively low (PLN 1,1 million, year on year drop by ca. 66%). However, in this specific case the current assets in total have grown by ca. 39%. This indeed suggests that financial resources have not been diminished and this occurrence is an effect of contracts being executed in a specific point in time.

Value proposition

Vivenge's value proposition could be summarized as "sustainable visual identification one-stop-shop". Currently only part of this proposition is delivered to Vivenge's clients as the sustainability value for the customer is not yet fully captured.

The other aspect of their value proposition, i.e. being a one-stop-shop in visual identity production and related services, is the road they took relatively early in their business operations. This changes that took an evolutionary form, as the scope of their operations increase, was possible when their business gained critical mass, and free financial resources were available. UE resources also supported this process.

Customer relationships

Vivenge boasts their customer relationships to be long-term and relatively strong. According to company's sources 70% of their revenues come from long-term clients. This is even though switching suppliers of visual identification products has been assessed as effortless.

Channels

Direct communication channels are the main form of obtaining business. This particularly concerns long-term customers. Standard tender procedure is the second customer communication channel applicable in Vivenge's operations. This particularly concerns public entities that are obliged to use tender procedures.

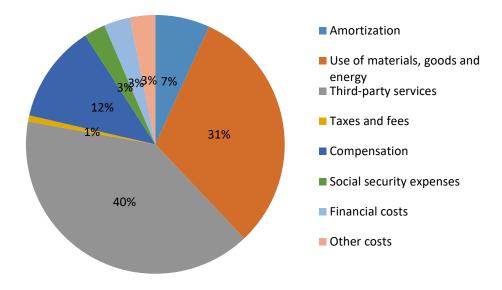


The creation of Brandbility programme was designed to supplement the direct communication channel by enabling ecologically-engaged companies to manage their rebranding operations in a sustainable manner. Brandbility initiative is still available through direct contact with the company or through UN Global Compact Poland website.

Customer segments

A clear majority of Vivenge's revenues comes from a wide array of commercial chains. This customer segment is highly heterogeneous. The common characteristics for the entities grouped in this segment are that those customers typically have a vast network of branches under the same brand. Commercial chains can have different scales and can range from regional to global.

Vivenge also caters to public entities which typically are road and railroad operators, local administration and municipalities. In most cases the company provides information signage (e.g. signs with name of the street, railroad station signage). This segment is considerably smaller revenue source than commercial chains.



Cost structure

FIGURE 12. VIVENGE GROUP'S COST STRUCTURE IN 2017

SOURCE: VIVENGE

Human resources play the key part in Vivenge's costs structure. Regarding the cost advantage aspect of the company's operations, Vivenge clearly benefits from its location in the eastern regions of Poland. Wages in this part of the country are considerably lower than in other locations.

Material costs are the second most important item in the cost structure. This category mainly comprises of raw materials, parts and energy. Material expenditure category would have been even more significant if it had not been for the reuse of parts reclaimed during disassembly of the end-of-life products.



Physical infrastructure fixed costs are also quite important for Vivenge. Operating in the visual identification industry requires constant additions to the machine park related expenses, notably appropriate facilities for those machines. A recent example, with building the second production facility shows that investment in physical infrastructure is a significant part of the company's cost structure. The physical infrastructure costs result in significant financial costs, most notably due to repayment of bank credits. In effect of using those sources the company could increase the scope of its operations and achieve higher economies of scale.

Revenue streams

The main source of revenues for Vivenge group is contracts for rebranding operations and related services. Those contracts may differ in form and scope. Most of the contracts concern only rebranding operations. The price of the contract is fixed, thus changes in material prices, currency exchange rates, etc. in some cases play a significant role in profitability of the contract. In other cases, long-term permanent contracts are applied.

There are few examples of the subject of the contract being limited only to certain related operations. Warehousing service is one example.

Environmental/social costs and benefits

The social costs are connected to the fee for partnership with UN Global Compact – those costs are used for promotion of environmental issues.

The environmental cost in this case is energy consumption – the whole process is energy intensive. Indirect costs are connected to the coal-based energy sector in Poland with the high level of CO2 emission.

There are some environmental benefits from the usage of end-of-life products. A small portion of revenues originates from selling of the material reclaimed during the disassembly of the end-of-life products. These sources amount to less than 1.6% of the total revenues (exact number is unknown).

3.1.2 The Value Network

Mapping the value network is an important task that proves helpful in the consideration of business circularity and the sustainability of the enterprise. Through using material flow and value flow maps the business model assessment can also identify challenges and opportunities. The subsections below present those maps and their description.

3.1.2.1 Material Flow

Material flow in the Vivenge's business model is simple. However, there are some nuances when it comes to timing and composition of certain material flows. Namely the process of rebranding starts with end-of-life visual identification products disassembly. In most cases it is the current contractor that takes care of utilizing the used products and it does not matter who was the producer of the end-of-life products. It is important to notice that only 10% of customers would like to see the documents confirming the utilization of the old visual identification products.

This seems particularly puzzling as company's logo and branded products are essential for their image, thus those products should not end up in the landfill. It seems that part of the companies takes on the



burden of responsibility for utilizing the old visual identification products themselves because of this possibility. Though there is no information on material flow of end-of-life products that were utilized by the customers it seems highly probable that those customers employ subcontractors to disassemble products and utilize or segregate materials from them.

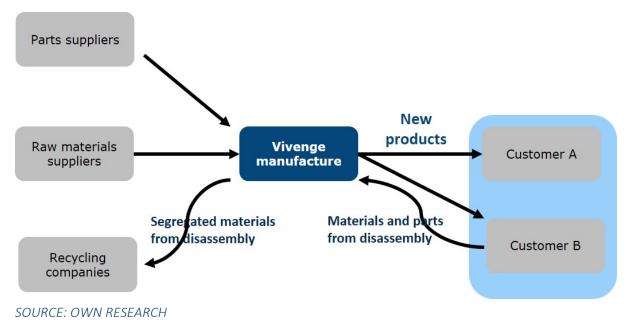


FIGURE 13. VIVENGE'S MATERIAL FLOW PATTERN

In case Vivenge is responsible for the disassembly of the old visual identification products the company strives to make use of the reclaimed parts to the highest extend possible. This particularly concerns parts that are most standardized and most durable, i.e. pylons, poles, displays, energy supplies. They are examined for their quality and in case they are assessed as suitable for further use they are given the same guarantee as the new parts. In case the parts cannot be reused they are segregated in Vivenge's own facility and then sold to recycling companies. Part of the materials that are not easily recyclable (plywood, MDF or laminated boards) are processed, in most cases shredded (also at Vivenge's facilities) and the materials are then sold to an insulation producer or other manufacturing company.

For the production Vivenge uses two sources. The first one, that already been mentioned, is the use of reclaimed parts. The second one is the use of raw materials (e.g. plastic pellets) and new parts that concern especially electric and electronical parts (e.g. lighting products, displays). From those materials and parts, the final product is made and then transported to and installed at customer' premises.

3.1.2.2 Value Flow

Building on the material flow the diagram depicts the value exchange between entities present in Vivenge's business operations. When Vivenge receives an order from a customer it usually consists of specifying the final product and related services. The specification of the product could be very strict (customer can present a prototype) or Vivenge can take on the design of the product to be later confirmed by the customer. Related services are disassembly (which is typically done by the Vivenge), logistics, warehousing etc. Depending on the order a total price for the contract is payed to Vivenge.



Vivenge acquires raw materials and specific parts from their suppliers and produces the ordered products. After installation, Vivenge is typically responsible also for maintenance and servicing.

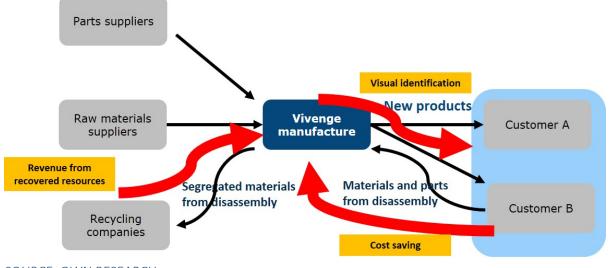


FIGURE 14. VALUE FLOW MAP FOR VIVENGE

SOURCE: OWN RESEARCH

Regarding the utilization practices for the disassembled visual identification products the company effort is to reuse as many parts as possible. Of course, these parts are checked for their quality before using them again. Vivenge has an economic incentive to use the parts again.

The reclaimed material is sorted and in most of the cases sold to recycling companies. This typically concerns plastic and metal pieces as the major part of the end-product. Recycling of the materials in the visual identification industry is relatively simple as most of the parts consists only of one type of material and typically are large. In case the part is made of combined materials they are easy to separate. Materials that are considered less suitable for recycling, specifically the materials from furniture (e.g. plywood, MDF and laminated boards) can be reuse.

Both elements of circularity are not the effect of answering sustainability issues for their customers. They are motivated economically as they result in additional revenue (resource recovery) and decrease in costs (re-make).

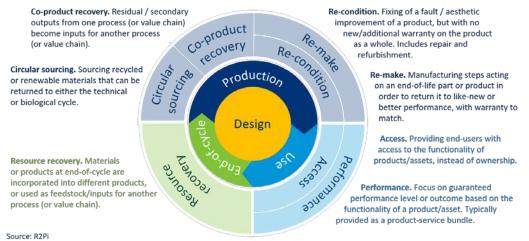
3.2 Business model circularity assessment

In this section the business model that has been presented previously is assessed from a circularity point of view. The business model circularity assessment builds on the seven circular economy business models identified by the R2Pi project and describes which of these patterns are utilised by the case organisation. The objective is to reveal strengths and weaknesses of the Vivenge business model, and to identify the business model opportunities and threats, based on the case study presented, literature and discussions with Vivenge respondents. The assessment is based on a specific tool presented in the Appendix.

To understand circularity within Vivenge business model, we use the circular business model patterns figure – CEBM. This model presents the different steps of products life-cycle from production to consumption and end-of-life. It is presented in a circular way to illustrate the possibilities of creating circular business model by connecting products' end-of-life to the production of new products.



FIGURE15. CIRCULAR BUSINESS MODEL PATTERNS



The next figure illustrates how Vivenge model can be considered as fulfilling different circularity logics, according to the different options. Part of the service offered follows the circular sourcing logic, the other part follows the re-make logic to prevent turning them into waste.

Part of those practices was already incorporated as Vivenge sorts the disassembled visual identification items and sells them to recycling companies. In effect materials or products at end-of-life are incorporated into different products or used as feedstock/inputs for another process (or value chain). This part of the business model could be described as resource recovery.

Vivenge also repossesses parts that could be used for production of new visual identity items, e.g. poles, pylons, displays, power supplies. The parts are inspected for their quality and given the same guarantee as the new product. This part of the business model could be described as re-make.

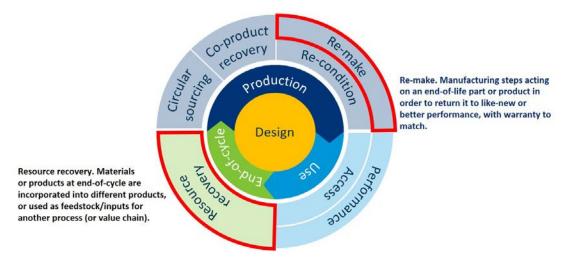


FIGURE 16. VIVENGE CIRCULAR BUSINESS MODEL PATTERNS

SOURCE: OWN RESEARCH

The current standard pattern of visual industry's operations requires the company that installs the new products (e.g. signage) to disassembly the previous one. This means that in most cases the visual



identification company is responsible for the end-of-life product of someone else (it happens rarely that the customer takes on the burden to utilize the old products by themselves). In every disassembly and utilization practice Vivenge recovers the resources from the products using their own sorting facility. Most of the resources are then sold to recycling companies. Part of reclaimed materials are processed and sold to specific companies that use it as a feedstock for their production (i.e. shredded plywood sold to insulation producers). It is the "resource recovery" model.

Part of the reclaimed parts is reused once again without the need for recycling. This particularly concerns metal poles and pylons, displays and power supplies. Each of the parts reclaimed are examined for their quality and given the exact same guarantee as for the newly produced part. This model is described as a "re-make" as it returns the end-of-life parts into a new overall product.

A detailed look at Vivenge's circularity assessment (appendix B) indicates that the company is highly heterogeneous when it comes to implementing circular economy elements in their business model. The visual identification products circularity is highly graded, mainly thanks to the size of the elements used and the easily separable and recyclable materials used. The products are designed for durability and as such are easy to service and repair, even by the third party.

Additionally, the design allows for a quick disassembly and segregation of material for recycling purposes. One would have to bear in mind that visual identification products must have high aesthetics. Thus, recycled material use is somewhat limited (e.g. recycled plastic has worse visual characteristics compared to the raw material) and the visual parts can be only replaced and not repaired (e.g. fractured brand signage).

3.2.1. Vivenge's attempt to implement circularity – Brandbility programme

Except for the circular elements that are already present in Vivenge's business model the company strived to implement sustainable, circular operations by engaging both visual identification products suppliers and recipients in a certification programme called Brandbility. The programme was developed in cooperation with United Nations Global Compact Poland. This collaboration was designed to leverage certificate's value and prestige. It is not working currently though the offering is available.

The rationale

Image changes of the company, i.e. rebranding, remodelling, refreshing, revitalization and renovation is a process during which a significant amount of waste is generated. According to Vivenge and UNGC a considerable portion of this waste is sent to landfills although official statistics are unavailable. The lack of sustainability of the rebranding actions is related to the two forms waste management could take in such processes:

- The entire waste management process is entrusted to a specialist company, and the recipient of the service is not actively involved in process quality control and compliance with environmental protection regulations. Such a solution does not guarantee proper management of the generated waste. According to Vivenge in some cases the branded waste was spotted on so-called "wild landfills", which very quickly can become a problem not only for visual identity service provider but above all for the company that changes its image.
- The second much less common practice is the situation when a company or institution changing its visual identification takes responsibility for the waste produced in this process, expressing its concern for the natural environment. However unexperienced company may



have a problem in specifying appropriate standards and operations and may be ineffective in their actions.

Brandbility certificate target users

The program is addressed to a wide group of recipients. Due to the specificity of processes related to rebranding waste management, the certificate is awarded in two forms:

- Brandbility: process certificate during the verification an audit of the entire rebranding process is carried out. This certificate is obtainable by any company that executes rebranding operations.
- Brandbility: company certificate for companies in the visual identity industry.

Benefits of the certificate

Participation in the Program offers a responsible approach to rebranding. Except the care for the natural environment it offers the possibility to reduce process costs by subjecting some of the waste to recovery processes. Transparency of the implemented activities is guaranteed by an audit carried out by UN Global Compact experts.

Benefits of the certificate include:

- Reducing the company's operating costs due to a more rational management of waste generated.
- Increased ecological awareness among employees of companies and their clients.
- For end users of rebranding and remodelling services, cooperation with a certified company will guarantee proper management of waste generated in the processes and, consequently, ensure compliance with management standards in the field of environmental protection.
- Establishing the image of a company as environment-friendly.

Certificate holders obtain the right to use the Brandbility logo and join the group of companies cooperating with the Global Compact. Companies joining the Program automatically gain access to certified, environmentally responsible process contractors, and thus gain the confidence to entrust their services to a company that meets the requirements in terms of environmental protection.

Certification process

The certification process differs depending on the nature of the entity wishing to participate in the program. In both cases, the certification procedure begins with the notification of the willingness to participate in the programme to the person responsible for the UN Global Compact. Subsequently, the application is forwarded to the auditors of the UN Global Compact.

In the case of a visual identification service provider the next step is to check whether the abovementioned requirements are met. Next, a brief report is sent to the auditors of the Global Compact, in which the audited company / institution describes the internal waste management method, lists the required permits and indicates any changes introduced to comply with applicable law. Next, the auditors carry out an appropriate audit, after which a report describing the waste management method in the company is prepared, indicating the necessary changes. During the audit, points are awarded for meeting each of the requirements necessary to obtain a certificate (see appendix D). Basing on the audit and other documentation Global Compact decides to grant the Brandbility Certificate. Thanks to the receipt of the certificate, the company data is added to the database of



recommended contractors and subcontractors. The certificate is awarded for a period of two years. Later recertification is necessary.

The second form of the certificate is for the rebranding process itself (remodelling, refreshing, revitalization, renovation, etc.) and not the company. To start the procedure of obtaining the Brandbility certificate for a given rebranding process both the company receiving the service and the contracting company is obliged to enable the auditors to control the rebranding process (the company that is the recipient of the rebranding process places the appropriate record in the contract for the execution of the process). If it uses the services of a company that has a Brandbility certificate, this audit has a simplified form, due to submission of the rebranding company to a previous audit, and additional points are awarded. After obtaining the appropriate recommendation of Global Compact experts, the Project Jury assigns the Brandbility certificate for a given rebranding process.



Source: Vivenge

3.2.2. Financial and non-financial outcomes assessment

The financial outcomes of the business model are assessed based on the financial report for the year 2017. The circular elements have contributed to the profitability of the company. Notably less than 1.6% (other operating revenues category) of revenues comes from the selling of the material reclaimed from the end-of-life products. It is however difficult to tell what portion of this category is directly connected to this revenue stream.

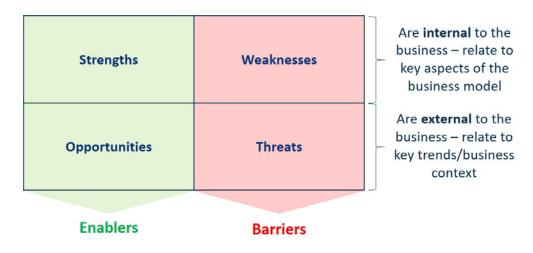
It is also difficult to assess what is result of reusing parts from the end-of-life products. However due to the use of those parts costs are significantly diminished. The use of reclaimed parts additionally results in less carbon, dust and other harmful substances emission (for the specific substances used in the industry see appendix C). The socio-economic effects of sustainable visual identification industry are negligible due to the small size of the industry.

3.2.3. SWOT analysis

This section contains an analysis of the strengths, weaknesses, opportunities and threats (SWOT) associated with the circular business model of Vivenge. The analysis of strengths and weaknesses is based on previously prepared questionnaire - see Appendix E. The assessment of opportunities and threats is based on business context assessment presented in Appendix A.

A SWOT is a basic matrix to give a useful overall, view of a company possible strategic orientation. It is composed of internal positive and negative dimensions (strengths and weakness, top of the matrix) and external positive and negative dimensions (opportunities and threats, bottom of the matrix).





Source: R2Pi

The main strength of Vivenge's business model is the current position on the market, which has seen considerable growth throughout recent years. This position was established due the rising economies of scale and the cost-advantage that is its result. These scale effects have been possible due to sensible use of different form of financing, notably EU funds. This growth would not be possible without their resources and key activities matching customers' expectations.

Vivenge's weakness concern asset heavy cost structure that is needed to become a one-stop-shop for durable visual identification. Despite the financial resources needed to acquire those assets the replication of the business seems rather simple. The financial constraint is reinforced by the standard timing of revenues that come only after the costs have been incurred.

Among the external factors that affect Vivenge's business the positive ones are firstly the brand value growth experienced in the last decades that suggest that more effort should be put to rebranding operations. Secondly the rising ecological awareness of final consumers and the growing level of corporate social responsibility. But clients of the visual identification industry are in majority cost-oriented and easily switch their visual products suppliers. The whole industry is also threatened by the possible concerns e-commerce and urbanization slowdown poses on the commercial chains that form the main segment of their customers. Local regulations on the visual pollution (also light pollution) may also limit the use of durable visual identification.

Vivenge's business model has important traits that make it easily adaptable to incorporate circular elements beyond what has already been done. This particularly concerns the product itself that is easy to disassemble, segregate and recycle or reuse. As for the time being the sustainability elements already incorporated in the business model are not captured in the customer value. However, it seems that external factors may support the implementation of sustainable initiatives in the industry.

FIGURE 17. VIVENGE SWOT ANALYSIS

 Customer loyalty is Costs are predictab Key activities easily Key activities matc 	are nannels ned with customers' expectations high le y scale with growth h the core competencies support the needs of the business model n is high	 Weaknesses Sustainability value for the customer is not yet captured Asset heavy cost structure Partners and customers do not contribute any value for the company for free and do not support circular business models directly Revenues follow costs of goods/services Key activities are easy to copy by competitors Key resources are easy to build or acquire by competitors
 The standard visua recyclable/reusable Growing corporate Rising ecological av Quickly growing br Popularization of s 	social responsibility vareness of the final product consumers and values	Threats • Clients social responsibility focused on publicity not effects • Customers can switch to a competitor at any time • Local regulations on visual pollution observed in many regions may limit the use of durable visual identification products • The market is cost-oriented • Lack of green public procurement in Poland • High labour demand and employees bargaining power growth • Limits to development of commercial chains (e.g. due to e-commerce growth and urbanization slowdown)

SOURCE: OWN RESEARCH

3.2.4. Final assessments

Vivenge's business model has incorporated elements of circularity in the form of reusing reclaimed parts and recycling material from end-of-life products. However overall circularity must be assessed as low. The reuse and recycling of parts and materials are not the core part of Vivenge's business model. Therefore, the sustainability value for the customer is not yet captured. The rationale for the recycling and reusing materials and parts is based strictly on economic factors that are not significant for the overall profitability of the business.

Circularity assessment of the visual identification products is counterbalanced by Vivenge's system it operates in. The business model is driven by assets sale, with a focus on the sale transaction. However, because of the bundled products and services Vivenge offers, i.e. its one-stop-shop approach, value proposition is supplemented by maintenance, warehousing and other related services that raise the business model circularity assessment. The circularity is also enhanced using reclaimed parts from the disassembly of the end-of-life products.

The system lacks circularity specifically in the end-of-life phase. It is usually the case that it's the supplier of the new visual identification products that utilizes the old ones. There is no:

- Permanent take-back system
- Incentives to return products at the end-of-life
- Information on the product at the end-of-life
- Information on recycling process and the outcome materials.

The system the company operates in is rather a standard, linear model, described specifically by the lack of sustainability in the end-of-life phase of the products life cycle. The linearity also manifests itself in the focus on the sale of assets not the long-term value for the customer. Although the current business model cannot be considered sustainable it seems that the linear approach can be quickly modified to a circular one. This assessment is based both on Vivenge's business context and the recognized internal factors. The product itself is easy to disassemble segregate and recycle or reuse. Other external factors that could facilitate the transition to circular economy are the rising ecological



awareness of final consumers and the growth of sustainability approach at the companies that cater to them. The growing value of brands is also a considerable advantage in the transition process.

Among the internal factors the growth of Vivenge's business facilitated by the economies of scale is serious advantage. The prerequisites of company's current business relations: the ability to answer customer expectations, strong contact channels and loyalty ensure that circularity transition could be established without compromising customer satisfaction. The customer could even gain by improving its environmentally-friendly image.

Throughout the report, based on the use of different methods, enablers and barriers have been described.

Key enablers:

- The standard visual identification product is highly recyclable/reusable
- High economies of scale
- Growing brand value
- Environmental awareness growth among customers

Key barriers:

- Sustainability management is not yet the norm at the company level
- Sustainable value is not yet captured
- The market is highly cost oriented

The current approach has focused on the enhancement of the brand image through rebranding processes in the cost-oriented market. Another approach - the servitization of the industry, i.e. visual identification as a service – can be more effective. The customer would pay only for the time the visual identification products are used, possibly using their money more effectively. At the same time standardization of the products parts and materials and the fact that end-of-life responsibility would fall on the manufacturer of the products considerable savings could be made. By relying on the price, the main purchase factor would be addressed. At the same time key enablers, such as high recyclability/ reusability could be enhanced further, economies of scale could be applied and the quality of the product (due to surveillance efforts both on the producers and user side) could be improved.

Now	Future				
Customer is the owner of the product	Producer is the owner of the product				
Customer pays for the product in a one-time transaction	Customer pays for the time visual identification is on display				
The end-of-life phase effectiveness and outcome is not visible	The producer is responsible for the whole life cycle of their product				
The product is not standardized and not designed for reuse	The design is focused on durability beyond one- time usage				
The surveillance of the products quality is on the customer side	The surveillance of the products quality is on both sides of the transaction: the owner of the product and its user				

TABLE 18. PROPOSED MODIFICATIONS TO THE BRANDBILITY PROGRAMME

SOURCE: OWN RESEARCH



The elements of circular solutions that are already incorporated in Vivenge's business model are easily replicable and scalable. The implementation of the proposed solution would require a whole new approach. The price factor would be crucial for such an operation to be successful. To do so technical aspects for standardization, reuse, increased durability beyond one-time usage must be further considered. The proposed solutions in the pursuit of sustainability of Vivenge business model have a high chance of achieving success and possibly replicate among the main industry players.

4 Discussion & Conclusions

One of the R2 π project's aim is to identify and develop sustainable business models and guidelines that will facilitate the circular economy implementation in new entities and markets. Having those objectives in mind Vivenge was chosen as one of the case organizations because of their ambition to change the way people think of visual identification. Their winning ambition is: "be visible".

The focus of Vivenge's business model investigation was the certification programme they have developed. The programme was aimed at implementing circular elements not only in the company activities but also in the whole industry. The analysis provided in this report has recognized the circular elements already present in the case organization business model and gave insights that are challenging the whole visual identification industry. To do this we identified new opportunities which is the first step to catalyse transition from linear to circular economic models.

Vivenge's current business model has is linear in nature however elements of two circular economy business models have been identified. This particularly concerns the resource recovery business model that is present at the company through the process of disassembly of the end-of-life products, sorting and preparation of the material at their own facilities and selling of the materials to recycling companies or as a feedstock for other companies' production. This business model brings little revenues and is not a core activity but rather a mean to increase revenues.

Vivenge business model can be considered as fulfilling different circularity logics, according to the different options. Part of the service offered follows the "circular sourcing" logic, the other part follows the "re-make" logic to prevent turning them into waste. Materials or products at end-of-life are incorporated into different products or used as feedstock/inputs for another process or value chain. This part of the business model could be described as resource recovery. Vivenge also repossesses parts that could be used for production of new visual identity items, e.g. poles, pylons, displays, power supplies. This part of the business model could be described as re-make.

The above implemented circular business model patterns seem replicable and transferable to other entities and offer substantial potential for positive environmental and economic benefits, not only in the visual identification industry. Companies in different sectors can reflect on their specific context and product design based on resource recovery and re-make.

Among key managerial considerations are:

- Make efficient use of resources in different phases of the life cycle
- Investigate the entire value chain for opportunities and resource efficiencies
- Collaborate across companies and sectors to find the best solutions for resource recovery
- Design for re-make and for the lowest negative impact on environment.

Key considerations for policy makers

- Introduction of restrictive requirements in waste management is necessary
- Well-designed regulation and creating financial incentives are important for the development of circular models in different industries
- Monitor implementation of circular package legislation in different EU countries
- Ensure consistent regulations across EU.

The circularity level in the industry could be raised and Vivenge decided to incorporate more advanced approach to their business through the Brandbility programme. This certification programme tried to



tap the corporate clients need for a more sustainable operations and the final consumers growing interest in environmentally-friendly corporate behaviour. The programme's goals were to:

- Optimize the number of materials and parts used
- Standardize the materials and parts used
- Implement materials and parts identification system
- Limit the disassembly time
- Limit the use of dangerous materials

However, these objectives have not been met yet. The programme is still in action but the customers and visual identification producers' interest in it is minuscule or non-existent. The possible reasons for that outcome are:

- Customers reluctance to limit their possible supply of contractors to only those that are certified
- Other producers' aversion to cooperate for Brandbility initiative
- Sustainability initiatives are still not popular, concentrating only on topics already present in the public debate.

It seems however that the Brandbility programme could be modified to incorporate more circularity elements and at the same time to influence demand for the new circular products and services. The main approach concerns servitizing the industry and putting more effort on the end-of-life phase of the products life cycle. Those two objectives could be attained simultaneously.



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Appendix A: Contextual analysis tool results

		DRI				Disease and the following second in the barrier where the data of a data of the mission which the			BAR	RRIER		
all		ately	import		N/A	Please, rank the following according to how much of a driver / barrier you think they represented for implementing your CEBM (put an X where appropriate)	all	import	tely	Very import	Extrem	N/A
mport	ant	import	ant	import		CE roadmap / initiative at the national / regional / local level	import	ant X	import	ant	import	
						Setting of end-goals and monitoring (CO2, noise, movements) at the national / regional level						
						Activity permit (license)		x x				
					x	Warranties law (e.g. second-hand products)		^				
					x	Intellectual property rights (e.g. components susceptibles of being reused)						
					^	International trade agreements (e.g. requirements in certain markets)		x				
								^				
						Dramatic change in a target market regulation (e.g. banning the use of plastic bags in China)	х					
						Competition regulation (e.g. positive discrimination for CE products is not permitted in public						
						procurement) Public subsidies that support linear economy (e.g. subsidies to fossil fuels, car purchase	x					
					x	incentives) Resource efficiency targets, requirements of reusing percentage of components and raw						
						materials in new products		x				
						Waste regulation, recycling regulation, water regulation, energy regulation and choice restriction		x				
						End of life regulations	х					
					х	Mandatory take-backs						
					х	Extended Producer Responsibility						
					х	Material and design standards (national and across industries)						
						Controls and penalties (e.g. controls and sanctions on the use of specific products)		x				
						Fiscal measures (green taxes): land-value taxes, value-extracted tax, product levy and recovery						
						rewards			x			
					x	Differentiated VAT rates (e.g. products with high recycled content included among VAT reduced goods)						
		x				Green public procurement (e.g. performance procurement by public sector)						
	x					Public subsidies for eco-innovation, eco-design						
						Public support for demonstration and commercialisation of innovation in Circular Economy						
		х				(technology platforms, pre-commercial procurement, lead markets)	_					
	x			x		Availability or prices of raw materials that support linear economy (water and energy included)						
	x			x		Availability or prices of raw materials and products that support CE						
		x				General economic "health" of incumbent companies in a sector (crisis, decline, stability, growth)						
	x					Competition trends in the market						
	x					CE-supportive business environment (technology providers, advanced services, eco-design businesses)						
					x	Relevant and expanding CE / environmentally oriented market segment in the country / region						
			x		~	Market purchase capacity						
	x					Suitable infrastructure for recycling and recovery / other (e.g. supporting shared use)						
						IT-infrastructure (supporting transparency and information sharing; joint collection systems;						
	х					match-maker mechanisms)						
					х	Extensive raw materials information service						
	x					Funding opportunities / venture capital for CE-related investment						
	х					(Green) lending programmes from banks						
		х				Apropriated technologies for CE						
					x	Major technological trends in the sector; new sectoral developments						
	x					R&D capacities and strengths (innovation agency, university research groups supportive to CE)						
	х					R&D capacities and strenghts in green energy						
			x			Public support for CE-related R&D (new materials, new products/services, supply chain resource tracking)						
					x	Training in CE-oriented activities						
		x				Rural vs urban distribution of population						<u> </u>
					x	Ratio of young vs old population						
	x					Social attitudes towards waste and recycling in the country						
	x					Social attitudes towards eco-friendly production and consumption in the country						<u> </u>
	x					Social attitudes towards water use in the country						
	x					Social attitudes towards energy use in the country						
	~				x	Social movements pressure regarding environmental problems (NGOs, civil society)						
					x	Preference for green brands / products, services by consumers in the country						



Appendix B: Vivenge's circularity assessment

	Tending towards LINEAR model	N/A	1	2	3	4	5	Tending towards CIRCULAR model
	We have not characterised the identity of our products in terms of generic materials (e.g., aluminum, polyethylene, steel etc.)					x		The product is 100% characterized by its generic materials (e.g., aluminum, polyethylene, steel etc.) and/or product categories and names (e.g., coatings, paints, detergents, seating furniture).
	We have not assessed the chemical composition of materials (recycled materials included) used within our product.					x		We have fully assessed the chemical composition of all materials (recycled materials included) used within our product.
	We do not seek to use recycled materials in our product					х		We maximise the use of recycled materials from pre- or post consumer waste in our product and source these from outside of the manufacturer's
	We do not seek to use third party co-product or waste streams as an input to our own production			х				We maximise the use of third party co-product or waste streams as an input to our own production
	We do not seek to use remanufactured, refurbished, or repaired parts and components within our products				х			We maximise the use of remanufactured, refurbished, or repaired parts and components within our products
	We do not not seek to use rapidly renewable materials in our product We do not not seek to use compostable/biodegradable materials in our	na		x				We maximise use of rapidly renewable* materials in our product We maximise use of materials in our product that are commonly known to the dependence of the induce the base of the second secon
PRODUCT	product We do not consider the 'recyclability' of materials used in our products				x			biodegrade or are able to undergo biological decomposition We only use materials in our products that are proven to be technically and economically recyclable (e.g. non-toxic, separatable into material streams, etc.)
	Planned obsolescence is built into product design						х	Product is designed for durability
	Product technical lifetime is below industry average				х			Product technical lifetime is above industry average
	Product functional lifetime is below industry average				Х			Product functional lifetime is above industry average
	Product warranty period is below industry average				х			Product warranty period is above industry average
	Product is not designed for disassembly to enable component/material recovery or reuse; nor is it biodegradable					x		Product is designed to be economically disassembled enabling component/material recovery or reuse; OR is biodegradable with no further intervention needed to reclaim the nutrients
	Product is not designed with the intention to return to a 'technical' or 'biological' cycle, nor is there a defined plan for product recovery and reutilization.			x				Product designed to return to a 'technical' or 'biological' cycle, and a plan for product recovery and reutilization is defined.
	Product is not designed to be repairable						Х	Product designed to be economically repairable (by user or third party)
	Product not designed to be upgradable			х				Product designed to be upgradeable, adapting to changing customer needs
	De la construction de la const				v			(e.g. by being modular, via software upgrades, etc.)
_	Re-manufacturing is not taken into account in product design Revenue driven mainly by asset sale		х	-	х			Product is designed to be economically re-manufactured Revenue driven mainly by monetising usage and/or performance of asset
	Value exchange mainly focused on driving a product sale transaction (e.g.		^	х				Value exchange focuses on customer lifetime benefit (including
B	competitive price)			^				reducing/controlling cost of ownership; asset performance)
ss mo	Value proposition focuses on the product			х				Value proposition is positioned as a service (including product/service bundle)
BUSINESS MODEL	Value proposition does not include maintenance or other value-added services					x		Value proposition includes bundled maintenance or other value-added services
	We do not seek to reuse and put back into our production the co-products or waste streams from our operations.					x		We maximise the reuse of co-products or waste streams from our operations, putting them back into our production.
	Repair services and availability of spare parts are not actively established					х		Repair service network and spare parts are actively established in the
	Re-manufacturing services not actively established in market		х					Re-manufacturing services actively established in market (own, or third
	We do not seek to reuse co-products or waste streams from our operations as an input to third party production (e.g. through direct or indirect supply					x		party) We maximise the reuse of co-products or waste streams from our operations by supplying them to third parties as an input into their and while (or the web distribution benchmistic action).
	relationships) We do not have in place a take-back or recovery scheme for our products at end-of-life (own or via a third party)				x			production (e.g. through direct or indirect supply relationships) We have in place a take-back or recovery scheme that fully covers all our products at end-of-life (own or via a third party, e.g. EPR arrangement)
	We do not have in place a take-back or recovery scheme for components our products at end-of-life (own or via a third party)				x			We have in place a take-back or recovery scheme that fully covers all components from our products at end-of-life (own or via a third party)
SYSTEM	We do not have in place a recycling arrangement for materials within our products at end-of-life (own or via a third party)						x	A recycling infrastructure is widely available for this type of product, and the material is already commonly recycled in practice with no special disassembly required
•,	We do not provide incentives to return our product at end-of-life		х					We provides incentives to return our product at end-of-life (e.g. deposit, exchange, cash)
	We have no visibility on the actual effectiveness of our product take-back at end-of-life		х					We have full visibility on the actual effectiveness of our product take-back at end-of-life
	We have no visibility on the destination of our products taken back at end-of- life		х					We have full visibility on the destination of our products taken back at end- of-life
	We have no visibility on the actual effectiveness of material recycling from our products recovered at end-of-life		х					We have full visibility on the actual effectiveness of material recycling from our products recovered at end-of-life
	We have no visibility on the destination of materials recycled from our products at end-of-life		х					We have full visibility on the destination of materials recycled from our products at end-of-life



Appendix C: Brandbility programme recommendation for managing waste

Activities aimed at preventing and reducing the amount of waste should consist mainly of:

- proper information to employees, carried out by conducting training for employees of the company in the field of waste management, including emergency response.
- improving the management of stored products and raw materials through proper control of deliveries and stocks, so that most raw materials will be delivered in bulk packages.
- optimization of the consumption of raw materials used for production, carried out, inter alia, by adherence to predefined parameters of technological processes.
- carrying out permanent control over the type and quantity of waste generated, to detect potential emergency situations that deviate from the established assumptions.
- substitution of goods and products carried out by replacing non-organic goods and raw materials with those which result in the maximum reduction of the amount of waste generated and which can be recycled.
- proper use of machines and devices carried out by their regular servicing and use in accordance with the manufacturer's requirements.
- modifications of technologies and devices implemented by modernizing used devices and technologies.
- implementation of environmental management systems and / or the principles of Clean Production, which emphasize the reduction of pollution at the source.
- proper organization of workplaces and storage of materials or products.
- subjecting the company to regular internal environmental audits.

Specific recommendations (for selected groups of problem and hazardous waste)

- Fluorescent (discharge) lamps in places where it is possible, it is advisable to replace fluorescent lamps with other (more ecological) light sources (e.g. LED diodes).
- Wiping cloths and protective clothing contaminated with hazardous substances limiting the production of this type of waste.
- Hazardous substances (organic and inorganic) and sorbents preventing the spreading of hazardous substances by employees.
- Packaging of hazardous substances Use products in reusable packaging as far as possible. If it is possible, then it is advisable to buy hazardous substances in returnable packaging
- Lead and nickel-cadmium batteries and accumulators proper handling through timely charging, etc.
- Alkaline batteries use batteries that allow recharging and further use;
- Used oils (motor, gear and lubrication) These wastes must be stored in a proper way, i.e. in sealed containers additionally placed on pallets (baths) catching spilled pollutants and transferred to appropriate companies dealing in the recovery of this type of waste.
- Waste electrical and electronic equipment limiting the generation of waste should be implemented by extending their service life (proper handling and storage, purchase of branded equipment with an extended warranty period). In addition, if a company has many plants with different types of activities, one should strive to create a central hardware



warehouse and delegate a person responsible for maintaining the equipment and taking care of it.

- Dibond boards, plastic boards, chipboards if possible ordering these elements (plates) with predetermined dimensions to minimize the need to cut them.
- Technical film, plastics determined to use paints, varnishes, adhesives that are more easily biodegradable.
- Mesh, banners, vinyl film such a product should be bought only to size and the company providing materials should also deal with its receipt as waste (in settlement). When storing this type of waste, make sure that they are not contaminated with hazardous substances (oils, chemicals, etc.) because they can be further used to produce new products
- For batteries, accumulators and waste electrical and electronic equipment, it is recommended to use special containers recommended by recipient (or battery collection partner).
- Discharge lamps, monitors, picture tubes, etc. attention should be paid to proper operation of this equipment and preventing its breaking, depressurizing, etc.



Appendix D: Brandbility certificate audit – control list

To receive a Brandbility certificate visual identity items producer must audit its operations by independent auditors from UN Global Compact. The audit has a form of a list of questions. The audited entity receives a score for each question. Basing on the total amount of points for the whole control list the decision to grant a certificate is made. The certificate is available in three classes depending on the total score.

Brandbility certificate classification:

- Insufficient number of points to obtain a certificate (<12 points)
- certificate at the basic level (12-25 points)
- certificate at the secondary level (26-39 points)
- certificate at the highest level (>39 points)

Question	points					
Does the company have an implemented and functioning environmental management system in accordance with the PN-EN ISO 14001 standard confirmed by the current certificate?	34					
Does the company have a current entry in the EMAS register?	34					
Does the company follow the guidelines of the ISO 26000 (CSR) standard?	3					
Is the company promoting environmental education among employees, customers and stakeholders (e.g. participation in ecological actions, contests, etc.), especially in the field of waste management?						
Has the company received penalties or mandates issued by environmental protection authorities within the last 5 years?	3					
Does the company have an integrated permit?	3					
Does the company have the required permits and permits in the field of waste management?						
Permission to generate waste						
Permission to collect waste Permission to transport waste						
Other (specify what)						
Does the company have regulated formal and legal issues regarding the introduction of gases and dust into the air?						
Permission to introduce gases or dust into the air						
Reported installations causing emissions to air	1					
Other (specify what)						
Does the company have regulated formal and legal issues regarding water abstraction and sewage disposal?						
Water-law permit for water abstraction						
A water permit for the introduction of sewage into waters or land	- 1					
A water permit for the introduction of industrial wastewater to sewage equipment						
Other (specify what)						
Does the company fulfil its obligations regarding environmental reporting?	1					



Reporting and paying fees for using the environment (e.g. fuelling cars, boiler rooms, emissions from production processes)						
Submission of annual statements on the quantities and types of waste generated and their handling						
Entering data into the KOBIZE database (National database on greenhouse gas emissions and other substances)						
Other (specify what)						
Does the company conduct quantitative and qualitative records of pollutants introduced into the air?	1					
Does the company keep a quantitative and qualitative record of the generated waste?	1					
Does the company keep a quantitative and qualitative record of the groundwater collected and sewage discharged?	1					
Does the company have contracts for waste collection (all intended for production)?	1					
Is the generated waste subject to initial segregation at the place of their formation?	1					
Are waste storage locations compatible with the regulations?	1					
Are waste containers permanently labelled so that they can be distinguished?	1					
Are hazardous wastes stored separately and in a way that does not pose a threat to the environment (space inaccessible, appropriate containers, secured soil, etc.)?	1					
Are the machines and devices used technically sound and have the required inspections, admissions etc.?						
Does the company have an internal instruction / procedure to regulate tasks and responsibilities in the field of environmental protection, including for suppliers (goods or services)?	2					
Does the company have internal instructions / procedures for dealing with waste?	2					
Does the company have internal instructions / procedures for dealing with emergency situations (fire, leakage of harmful substances, etc.)?	2					
Does the company conduct employee training in the field of environmental protection?	2					
Will the company conduct external audits in companies that provide services that have an impact on environmental protection (e.g. collecting waste, sewage, providing maintenance services)?	3					
Does the company set itself goals and set out activities in the field of environmental protection (especially in the field of waste management) and constantly monitor their implementation?	2					
Does the company monitor aspects that may affect the company's impact on the environment?						
water consumption						
consumption of electric energy						
fuel consumption for vehicles	2					
fuel consumption for heating facilities and production processes						
other (specify what)						
Does the company keep up to date with the changes in the environmental protection regulations regarding its operations?	2					



Appendix E: Vivenge's business model strengths and weaknesses

Weaknesses	N/A	1	2	3	4 !	5	Strengths
					-	_	
Our value proposition leaves significant customer segments' needs unmet					1	х	Our value proposition fulfils all significant needs of target customer segments
Customer satisfaction is low				3	x		Customer satisfaction is high
Our value proposition has no network effects				1	x		Our value proposition has strong network effects
Our charging and pricing models don't meet customer needs and expectations				3	×		Our charging and pricing models effectively meet customer needs and expectations
We do not capture 'sustainability value' created for customers		x				_	We fully capture 'sustainability value' created for customers
Our margins are low compared with competitors	1		,	×	T		Our margins are high compared with competitors
Our revenues are unpredictable					x	_	Our revenues are predictable
Each sale requires additional effort			,	x	_	_	Each sale generates follow-on recurring revenue / repeat purchases
We earn no revenue before incurring costs of goods/services sold			x	<u> </u>	+	_	We earn revenue before incurring costs of goods/services sold
Our costs are unpredictable			-	,	x		Our costs are predictable
Our product cost structure is substantially higher than that of competitors		\square	-	x		_	Our product cost structure is substantially lower than that of competitors
Our service cost structure is substantially higher than that of competitors			_	x	+		Our service cost structure is substantially lower than that of competitors
Our cost structue has low economies of scale				-	x	_	Our cost structure has high economies of scale
Our cost structure is asset-heavy and costs are mainly fixed			x		^	_	Our cost structure is asset light and costs are mainly variable
Our cost to serve customers is misaligned with customer segments			^		x		Our cost to serve customers is aligned with customer segments
our cost to serve customers is moungiled with customer segments			_		^		ou cost to serve customers is anglied with customer segments
Our key activities can be easily copied by competitors			1	x			Our key activities are hard to copy by competitors
Our key activities need significant investment in order to scale with growth					1	x	Our key activities easily scale with growth without needing significant investment
Our key activities do not fulfil the core competencies we need					1	x	Our key activities match the core competencies we need
Our key activities poorly support circular economy within our business model			х				Our key activities fully support circular economy within our business model
Our key resources do not meet the needs of our business model					1	x	Our key resources fully support the needs of our business model
Our key resources poorly support circular economy in our business model				1	x		Our key resources fully support circular economy in our business model
Our key resources can be easily built or acquired by competitors			x				Our key resources are very hard to build or acquire by competitors
Key partners do not provide us with competitive advantage		x					Key partners provide us with exclusive competitive advantage
Key partners poorly support circular economy within our business model		x					Key partners enable circular economy within our business model
Key partners do not contribute any value to us for free		x					Key partners contribute value to us for free
Customers do not contribute any value to us			x				Customers contribute value to us (for free)
We do not understand the full potential value that could be created for customers					x	ŀ	We understand the full potential value that could be created for customers
Customer loyalty is low			_	_	x		Customer loyalty is high
Customer churn is high (customer retention is low)			_	_	x	_	Customer churn is low (customer retention is high)
New customer acquisition rate is low			1	x	_		New customer acquisition rate is high
Our market share is shrinking	_		_	1	x	_	Our market share is growing
Our customer channels do not effectively communicate our value proposition			_	_	_	_	Our customer channels effectively communicate our value proposition
Our customer channels do not effectively deliver our value proposition					_	_	Our customer channels effectively deliver our value proposition
Our customer channels are misaligned to target customer segments		Ц	-	_	_		Our customer channels are well aligned to target customer segments
Our customer channels do not effectively reach target customer segments		Ц			_	_	Our customer channels effectively reach target customer segments
Our customer relationships are weak		Ц	-	_	x	_	Our customer relationships are strong
Our customer relationship model(s) are misaligned with customer expectations				_	x	_	Our customer relationship model(s) are aligned with customer expectations
Our customer relationship model(s) are misaligned with our value proposition		Ц)	x	_	Our customer relationship model(s) enhance our value proposition
Our customers can switch to a competitor at any time			x				Our customers are locked into long-term relationships