UDC 304

USTENKO TAMARA. DERKACH TETIANA

Kyiv National University of Technologies and Design, Ukraine

DESIGNER PRODUCTS FROM TEXTILE WASTE: CREATION & SALE

Goal. Conduct research into the prospect of creating a company that can provide upcycling of second-hand clothes & textile offcuts to create new products.

Scientific novelty. As follows from statistical data, textile waste products average 7% of all waste in Ukraine. Some local solid waste recycling companies down cycle only 3%. The rest of 97% of textile waste goes to landfills and remains a source of pollution. Therefore, the conversion of textile waste to a resource can be an important part of the "circular economy" of Ukraine.

Practical value. The results obtained will help to organise a company for upcycling of second-hand clothes & textile offcuts to create new products.

Key words: Textile waste, upcycling, second-hand clothes, textile offcuts.

Objectives. The paper evaluates scope for the creation of a company that focuses on the upcycling of second-hand clothes & textile offcuts to create new products. To achieve the goal of work, the following tasks are solved: definition of the essence of textile waste and identification of the critical problems in the given field and ways of their solution.

Research Methods. Literature analysis, classification of facts and generalisation of information, methods of questioning.

Research results. Conversion of waste to the resource is an important part of the "circular economy" of many countries. If every one of 40 million Ukrainian people bought one recycled product each year, it would save more than one million liters of water and 320 tons of chemical dyestuffs. Whether we like it or not, environmental problems will still force us to produce recyclable products to save our planet [1].

The fact is that after the collapse of the USSR, the textile waste disposal system was almost destroyed in Ukraine. The network of textile waste collection points named Stimulus was closed. That recycling system perfectly stimulated people of our country to collect and recycle textile waste. For example, 10 kg of textile waste could be exchanged for interesting books or consumer goods that were in short supply at that time.



Interim solution of the problem is to start a sewing workshop for upcycling of second-hand clothes & textile offcuts to create new products The first stage of the project is to start sewing products from textile offcuts; to promote these products on the market (social events, fashion shows); to study technologies of sewing from textile offcuts; to sell the products from textile offcuts through online channels.

Long-term solution of the problem is to start a company that can provide a full-cycle technological process from collecting and recycling textile waste to the creation of recyclable designer eco-products.

We have developed a business plan to solve the problem. According to the business plan, we are developing a product line for different target customer segments. We will create the following products by upcycling textile offcuts and second-hand textile:

- designer clothes: dresses, skirts, blouses, robes, uniform
- designer accessories: different size of bags, handbag organisers, aprons, gardening gloves, oven mitts, shawls, head scarves, cases for smartphone etc.

We expect that our clients will be the following key consumer groups depending on the specific type of products:

- standard clothes and accessories clients aged 35 60 years, mostly female gender who concern about the environment and ethical products;
- custom-made clothes and accessories. The prevailing focus on middle-class clients aged 18 35 years, mostly female gender.

At this stage of the project, promotion activity and sales of the products are made mainly in Internet on social networks: Facebook and Instagram. We also use online clothes & accessories sales sites.

In the future we will use more efficient channels:

- through our online store in Internet;
- through retailers specialising in the sale of clothes and accessories.

We are planning to sell my products to both individuals and various organisations.

The textile market is oversaturated with second-hand goods. Over the past ten years, more than 1 million tons of second-hand clothes have been imported to Ukraine (2.6 kg per each Ukrainian). The volume of textile waste increased significantly due to imports from abroad. It is a great opportunity to repair, reuse or recycle.

Our competitors:

- upcycling companies and handmade products manufacturers;
- designers and manufacturers of standard textile products.

Raw materials for our products are very cheap in Ukraine due to:

- there is no any active system for recycling textile waste and



- the producers of conventional textile products do not know what to do with textile offcuts [2].

We will install containers for textile waste in public places. We will buy raw materials in second-hand markets, in clothing factories, in design studios, as well as on the Internet, for example, waste.ua.

One of the directions that we are studing for the implementation of this social project is cooperation with people who need social assistance: unemployed and people with disabilities[3].

Solution is to establish sewing workshops where unemployed and the most vulnerable people will work and create new products by recycling textile offcuts. Our goal is to provide their training and employment.

We created the Lean Canvas business model to show how to emplement at this stage[4]. The Lean Canvas is a quick sketch the business idea. It was divided into 9 components (table 1).

Table 1

	Table 1			
№	Component	Summary		
1	Customer	clients aged 35 - 60 years, mostly female gender who		
	segments	concern about the environment and ethical products		
2	Problem	97% of textile waste goes to landfills and remains a source of pollution. There are thousands of vulnerable people in Ukraine: women with disabilities and unemployed young single mothers		
3	Revenue	Revenue streams: revenue from sales of products,		
	streams	revenue from repair & reuse service, revenue from		
		participating in new projects, from government		
		subsidies and private grants		
4	Solution	Solution is to establish sewing workshops where unemployed and the most vulnerable people will work and create new products by recycling textile offcuts		
5	Unique Value Proposition	Reduce the amount of textile waste that goes to landfills. Provide work for people in need of special social protection		
6	Sales channels	Social networks, online store, retailer network		
7	Key metrics	Sales revenue, net profit, employee happiness, customer acquisition cost, monthly website traffic		
8	Cost structure	Purchase of equipment, rental of premises, marketing channels, staff salaries, costs for carriers and textile waste suppliers		



No	Component	Summary	
9	Unfair	Special technologies, affordable prices, the client	
	Advantage	database	

To start a sewing workshop, we are planning to rent premises, to buy necessary sewing equipment; to hire people with disabilities; to provide them with the offcuts and second-hand clothes to create new products by upcycling & repair.

Conclusions. Our products can successfully compete at the expense of affordable prices, in design and quality, but our unique value proposition is that our project solves problems competitors cannot do:

- we can decrease the amount of textile waste that goes into landfills;
- we can provide work for people in need of special social protection.

We are going to realise our project step by step, but each stage should be an optimal investment solution with minimal financial risks.

References

- Fashion Industry Waste Statistics. Sait "Emerging Designers Get Exposed". edgexpo.com. Retrieved from https://edgexpo.com/fashion-industry-waste-statistics/
- 2. Комплексні послуги поводження з відходами по всій території України. [Електронний ресурс]. Режим доступа: http://xn--80aeecanme1c1d6j.xn--j1amh/utylizatsiya_tekstylyu.html
- 3. Сайт Всеукраїнської громадської організації «Народна академія творчості інвалідів» [Електронний ресурс]. Режим доступа: https://nat.org.ua/osnovy-pererobky-tekstylyu
- 4. Lean Canvas [Електронний ресурс]: bmtoolbox.net Режим доступа: https://bmtoolbox.net/tools/lean-canvas/