



“UPCYCLING: A DESIGN STRATEGY FOR PRODUCT OPTIMIZATION WITH REFERENCE TO INDORE”

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Abstract

The purpose of this paper is to introduce ‘upcycling’ – a well-known term within design practice – to the field of social innovation. A mix between ‘upgrading’ (adding value) and ‘recycling’ (reusing) creates the word upcycling, which, in its simplest terms, is the practice of reassessing waste and transforming it into something valuable. In this paper, we ask: How does an upcycle mind-set and practice contribute to situated social innovation? This conceptual paper seeks to combine insights from the fields of social innovation and co-design with the ideas inherent in upcycling. To ground the theorizing of what we term ‘social upcycling’, four cases are used to illustrate what upcycling practices look like. The cases illustrate the diversity of actors, activities and materiality involved in social upcycling processes. Concluding, the paper outlines a new promising area of social innovation and some practical implications.

Keywords: upcycling, innovation, co-design, learning, sustainability, social work

Introduction -

Do not throw anything away. There is no ‘away’.

The motivation behind this paper is to present 'upcycling' - a notable term inside plan practice - to the field of social development. We reliably take assets, make them into esteemed items, and sooner or later, think of them as junk and discard them. We esteem the new, and not the old. A manageable option in contrast to this succession is upcycling – a word made by a blend between 'overhauling' (adding worth) and 'reusing' (reusing). In the least complex terms, upcycling is the act of reevaluating waste or rubbish and changing it into something significant. A reason for upcycling is the thought of manageable utilization, and the fundamental thought is to rejuvenate old material by setting it into new heavenly bodies and by proposing new ways of utilizing it, while simultaneously, safeguarding its substance as a primary worth adding highlight (McDonough and Braungart, 2002).

Upcycling.

By reusing old material in items and giving them new life, makers significantly diminish how much CO₂ expected to deliver an item, when contrasted with one made straightforwardly from unrefined components. This reuse of materials is a foundation in the idea of the roundabout economy, which is a hypothetical structure fully intent on making a semi-limitless lifecycle for items, with just a negligible number of new

assets expected for each new emphasis. While this training may yet be in its outset inside the modern area, it has seen a naissance in the style, - and clothing industry. Here, organizations like Lindex and H&M get together attire things toward the finish of their life expectancies and reuse them into altogether new things available to be purchased to their clients.

Recycling

The demonstration of taking an item or material toward the finish of its life expectancy and reusing its center materials so that the final result is of a comparative worth or quality as the first thing. For instance: Melting down iron bolts to make new, indistinguishable ones.

Upcycling

The act of recycling a product or material at the end of its lifespan in such a way that the end product is of a higher value or quality than the original item. For example: Using old parachutes to sew sturdy backpacks.

Downcycling (part of traditional recycling process)

The act of recycling a product or material at the end of its lifespan in such a way that the end product is of a lower value or quality than the original item. For example: Breaking down old plastic bottles into carpeting material or fleece fibres.

Circular economy

An economic system whose main aim is the elimination of waste as well as a continual (circular) use of resources. By utilizing upcycling, repairs, recycling and sharing, one creates a closed-loop system, which minimizes both the requirements of new resources and the creation of excess waste products and pollution.

Linear economy (traditional economy)

An economic system whose main mantra is “take, make, dispose”. A traditional product cycle would be taking raw resources or materials and using them to create new products. Then, once they have reached the end of their lifespan, they are discarded in their entirety. This creates excess material waste and pollution.

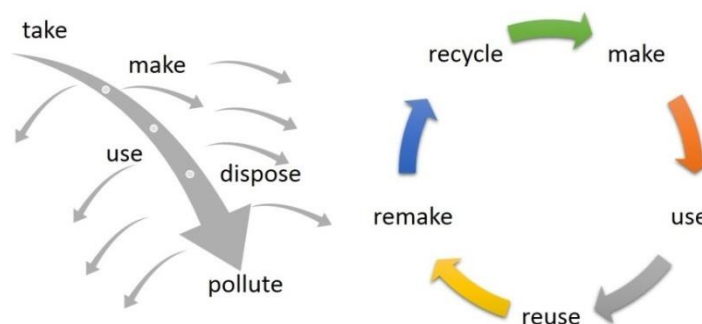


Fig – 1. A comparison between the concepts of the linear and circular economy

Fast fashion

An approach to fashion which emphasizes the quick and cheap creation of garments with ready availability to the consumer. Large companies such as H&M belong to this category.

Slow Fashion

The opposite of fast fashion. The small-scale production of garments, made from materials sourced locally, and produced with the fair treatment of people, ecology, and animals in mind. Local producers such as Marja Rak (prev. Noolan) are examples of this.

Aim and research questions -

The purpose of this study is to analyse the Awareness, Attitude towards upcycling, Purchasing habits and adaptation of upcycling among Designers from fashion & Non fashion background and individuals of fashion & non fashion background in the production or selection of garments. The aim of this study is to find out what main driving factors may spur the respondents to adopt upcycling into their production as well as making it part of their daily life.

The main questions this research paper aims to answer are-

1. Have you heard of the term 'Sustainable Fashion?'
2. What do you think 'sustainable clothing' means?
3. How did you come across this information and knew about this term?
4. What drawbacks you feel about upcycled/recycled clothes?
5. How do you dispose of unwanted clothes?
6. Is Upcycling a new design principle for circular fashion?

Review of Literature –**Sustainability and clothing**

'Our Common Future' of Bruntland Committee characterized supportability as 'Fulfilling the need of current age while not hindering what group of people yet to come requires (Merchant 1989).' Like this, manageability gets ready rules in a drawn out view, considering the effect of present conduct burdening group of people yet to come.

Albeit many examinations barely view maintainability by restricting it just on environmentalism, supportability includes the whole area of society and culture. We need to think about the maintainability in financial, social and social region of the world, while attempting to perceive and limit the effect of uncontrolled human conduct on climate. Perceiving that uneven financial development upon restricted asset can't be proceeded, supportability jam climate and depends on steady and long haul benefit making and subjective development. Additionally it seeks after fit advancement of local area and doesn't neglect social obligation. Also it extends natural insurance or subjective development of economy, puts significance on mental worth and morals, and cultivates social variety (Na 2011).

Where slow style is a manageable way to deal with design creation and utilization, it concentrates on 'esteeming and knowing the item' (Clark 2008). This implies understanding the course of natural substance to completed item as a component of the experience of utilization. This type of feasible utilization is focused in a shopper esteem framework that draws in with experience values over self-upgrade values (Manchiraju and Sadachar 2014).

Up-cycling and dress

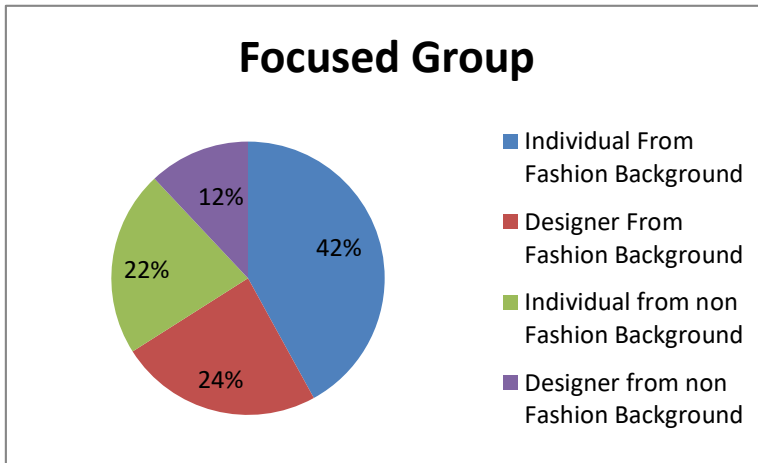
The first objective of up-cycling is to lessen squanders, and it rehashes and flows the existence pattern of items by changing its utilization in the last phase of item life cycle, without going through the whole course of arranging, creation, and utilization of item. This relates to the maintainability where re-planning refines ecological effect and recuperates normal environment. It additionally is, on a fundamental level of reasonable plan, to reconsider the plan for acknowledgment of re-pattern of material course and beneficial interaction of human and nature, and up-cycling limits the interaction by greatest utilization of unique capacities, in view of re-pattern of squanders. This prompts the refining of ecological effect, and we can see that up-cycling depends on manageability established in re-plan and reexamine of advantageous interaction. The quick design peculiarity has changed the dress business throughout the most recent ten years. Changing shopper mentalities to attire utilization, connected with minimal expense creation and obtaining of materials from abroad modern business sectors has prompted a culture of motivation purchasing in the design business, where recent fads of apparel are accessible to the normal purchaser consistently. Buyers are rehearsing up-cycling, which is significant in the time of quick style at home (Turker and Altuntas 2014)

Methodology –

In this Qualitative Research, a constructionist way to deal with research was taken to explore the manners by which people and gatherings take an interest in the development of an upcycling interaction as a feature of their training. Subjective exploration techniques were utilized as the concentrate essentially manages members' perspectives on their own training. An inductive methodology was utilized to foster experiences to propose speculations and shape hypotheses got from the subjective information gathered (Bryman, 2008). Secondary research in this study was focused on issues concerning environment and economy, eco-fashion, eco-label, textile recycling, and new product development.

For Primary research a questionnaire survey can provide accurate and relevant data through thoughtful design, testing, and detailed administration (McClelland, 1994).

Sample Collection –



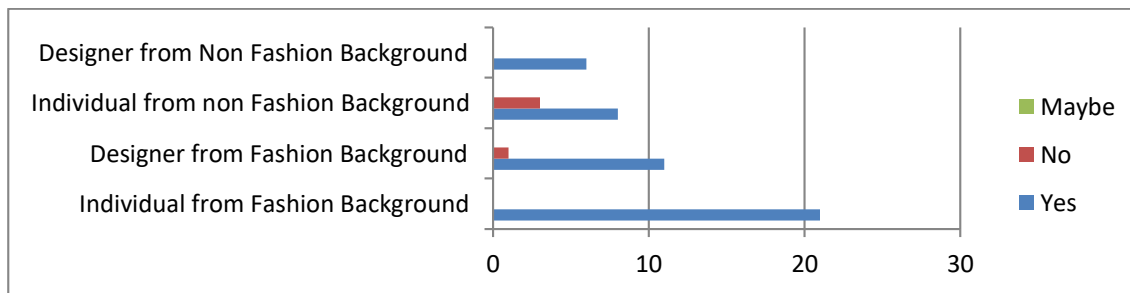
This research was done on 4 focused groups – 1. Individual with fashion background – 42% , 2. Individual from non fashion background – 22%, 3. Designers from fashion Background – 24% and 4. Designers from non fashion background – 12% of 50 respondents through questionnaire survey via Google form to collect the primary data, it is aiming to evaluate the Awareness, Attitude towards upcycling, Purchasing habits and adaptation of upcycling among Designers from fashion & Non fashion background and individuals of fashion & non fashion background in the production or

selection of garments.

Findings –

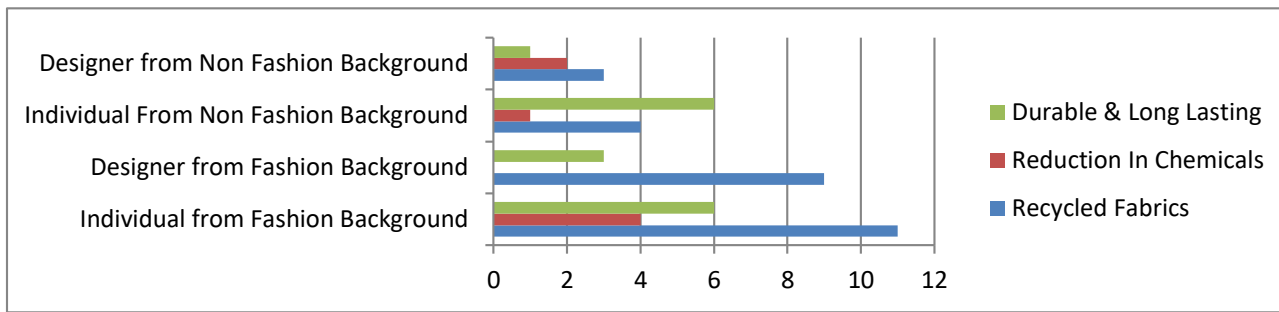
Data gathered through consumer focus groups and interviews with designers and individuals was analyzed on the basis of Awareness, Attitude towards upcycling, Purchasing habit and Adaptation of upcycling among Designers from fashion & Non fashion background and individuals of fashion & non fashion background. It is evident from the study that respondents have shown maximum participation.

1. Have you heard of the term 'Sustainable Fashion'?



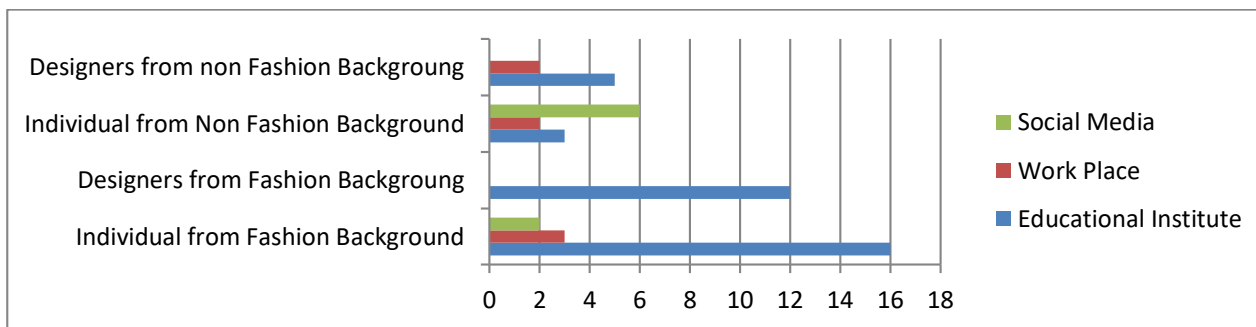
100% respondents of individual from fashion background group, 91.6% respondents of designers from fashion background where as 72.7% respondents of individual from non fashion background and 100% respondents of designers from non fashion background were aware of the term “Sustainable Fashion”.

2. What do you think 'sustainable clothing' means?



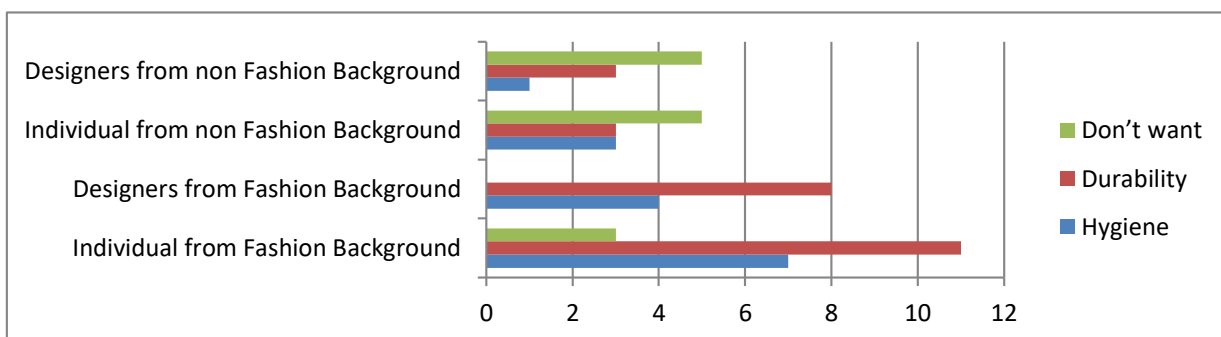
Respondents of individual from fashion background group marked sustainable clothing as – (Recycled – 52.3% , Reduction in chemicals – 19% , Durable & Long lasting – 28.5%) , respondents of designers from fashion background marked – (Recycled – 75%, Durable – 25%), where as respondents of individual from non fashion background marked - (Recycled – 36.3%, Reduction in chemicals – 9% , Durable & Long lasting – 54.5%) , and respondents of designers from non fashion background marked – (Recycle – 50%, Reduction in chemicals -16.6%, Durable & long lasting – 33.3%).

3. How did you come across this information and knew about this term?



The responses recorded of the respondents of individual from fashion background group that 76% respondents received the information and knowledge regarding sustainable fashion from educational institutions, 14.2% from workplace, 9.5% from social media and 100% respondents of designers from fashion background received the same from educational institutes, whereas 14.2% respondents of individual from non fashion background received the knowledge from educational institutes, 18% from workplace, 54.5% from social media, and 83.3% respondents of designers from non fashion background received the same from educational institutes, 16.6% from workplace.

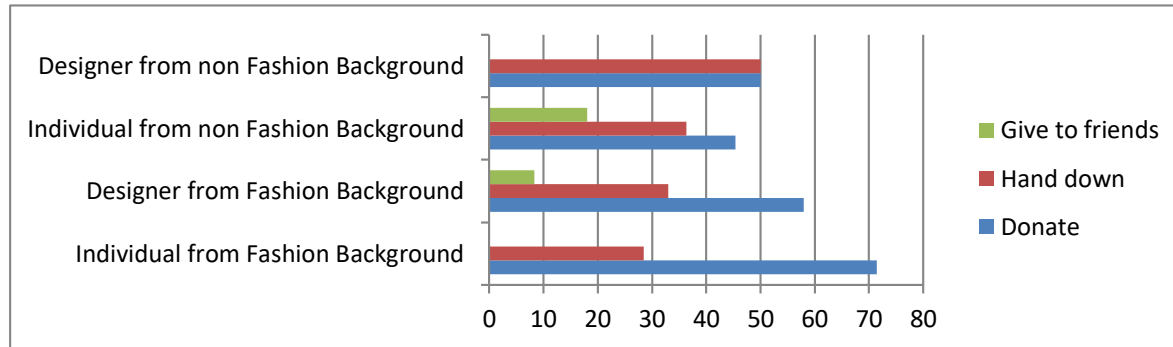
4. What drawbacks you feel about upcycled/recycled clothes?



As a result 52.3% of the respondents of individual from fashion background group considered Durability, 33.3% Hygeine & cleanliness, 14.2% respondents don't want to use it and 38 % respondents of designers from fashion background considered durability and 33.3% hygiene & cleanliness as drawback regarding

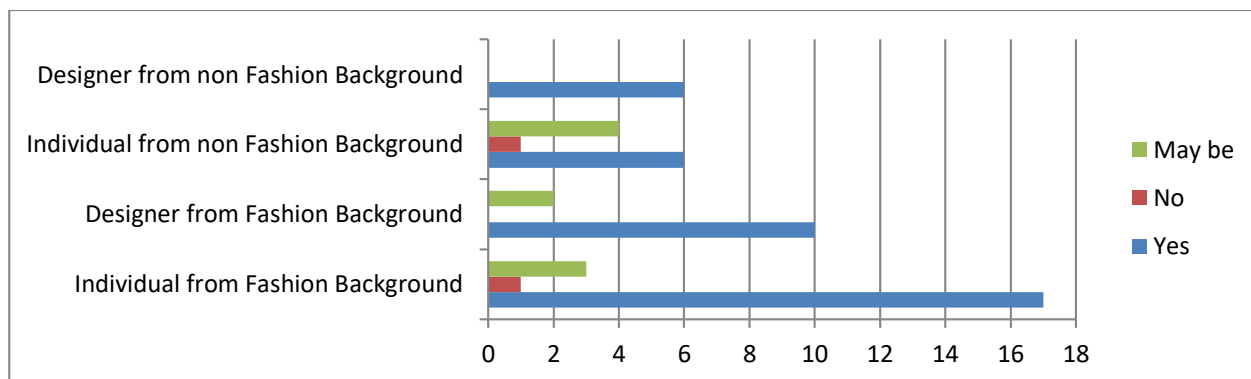
upcycled garments. Whereas 45.4% respondents of individual from non fashion background considered durability, 14.2% considered hygiene & cleanliness, 14.2% of respondents don't want it and 50% respondents of the designers from non fashion background considered durability, 16.6% considered hygiene & cleanliness as a drawback of upcycled clothes and 33.3% don't want it.

5. How do you dispose of unwanted clothes?



71.4% respondents of individual from fashion background group dispose unwanted clothes by donating them, 28.5% hand down to younger ones and 58% respondents of designers from fashion background donate, 33% hand down to younger ones, 8.3% give them to friends for disposing the unwanted clothes, where as 45.4% respondents of individual from non fashion background prefer to donate, 36.3% hands down to younger ones, 18% gives them to friends and 50% respondents of designers from non fashion background donate, 50% prefer to hands down to younger ones for disposing unwanted clothes.

6. Is Upcycling a new design principle for circular fashion?



The responses recorded of the respondents of individual from fashion background group that 80.9% respondents and 83.3% respondents of designers from fashion background admits that upcycling is a new design principle for circular fashion, Whereas 54.5% respondents of the individual from non fashion background and 100% respondents of designers from non fashion background considered that upcycling is a new design principle for circular fashion.

Conclusion –

The research of this paper was conducted via goggle form interviews, where the measuring of upcycling interest amongst individuals and designers from fashion background & individual and designer from non fashion background were the main focused group. The aim of this paper was to find the main factors which drive individuals and designers from fashion as well as non fashion background to adopt upcycling measures. Furthermore, this research aimed to find out what specific upcycling means to all the groups, and

whether they view upcycling as a viable step as futuristic approach towards circular fashion. All results and insights gathered from the conducted interviews can be used both by individuals as well as designers from fashion & non fashion background interested in upcycling adoption and by researchers who wish to further study this field.

An extra benefit of this study is that it may give consumers inspiration for upcycling their own garments, thus reducing the need for new production. This discussion is presented according to each main research question. The perception of sustainability amongst consumers has been evolving rapidly in the past 5 years. Individuals who previously might not even have considered where, -how, -or with what materials their clothing was produced, have now started demanding fair and ecological products on a substantially larger scale. Designers & individuals who may not previously have put much consideration into these practises have had to make sweeping changes to their production line and create new sustainability goals, individuals & designers who started up with these questions in mind have been able to continue unhindered by the need for change.

Recommendations for further research

Given the nature of upcycling in its current form; that being mostly theoretical or in the testing phase, further research of both the theoretical and practical kind would be beneficial. Based upon the small sample size used in this paper, the findings are inconclusive at best, and as such, it is my opinion that further large-scale research should be conducted into opinions within the fashion industry, and whether upcycling is a viable solution to reducing pollution from textile production, or whether better alternatives exist.

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