

Environmental Footprints and Eco-design of Products and Processes

Series editor

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Remanufactured Fashion

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ISSN 2345-7651 ISSN 2345-766X (electronic)
Environmental Footprints and Eco-design of Products and Processes
ISBN 978-981-10-0295-3 ISBN 978-981-10-0297-7 (eBook)
DOI 10.1007/978-981-10-0297-7

Library of Congress Control Number: 2015958548

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Printed on acid-free paper

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Preface

This book is developed from our research backgrounds and experiences. Sinha's background in fashion design process and her research experiences within the Tanzanian fashion and textiles design community initiated in 2007 led to her sustained interest in issues regarding managing the rising volumes of second-hand and discarded fashion and textiles with particular interest on West Africa; subsequent funding facilitated a Ph.D. studentship to examine sustainable fashion design strategies conducted by Dissanayake. Dissanayake's background and expertise in factory production and garment manufacture were fully utilized to examine the processes at several upcycled fashion design studios, waste textile collection companies and a mass-market retailer, forming the basis of her Ph.D. Through discussions with Muthu, an expert in textiles and clothing sustainability and life cycle assessment, we realized that there was much more to explore about the remanufacture concept for the fashion industry, and so we three authors set out to write this handbook; any errors, oversights or omissions are our own.

This book considers the impacts on and implications for the fashion system, if the mass market were to adopt remanufactured fashion as a design and manufacture strategy. Managing textile waste is a major sustainability issue for any country. Following the waste hierarchy, conversion of waste to a useful product is regarded as one of the more sensible options to tackle this issue as energy and resources used in the product's manufacture are retained and useful life is prolonged. Remanufacturing retrieves a product's inherent value when the product no longer fulfils the user's desired needs. Using discarded clothes in a remanufacturing process contributes to resource conservation by reducing the percentage of clothing discarded as waste, which is still either dumped at landfill, or incinerated, posing many environmental issues.

Remanufactured fashion, a sustainable waste management strategy, deals with discarded garments by amending and converting them into useful products for retail at mass-market prices. The focus on the mass market is to engage large volumes of consumers in this approach. There are arguments to be made about the proliferation of many small studios achieving the same volume (through several niche markets), but our reservations are (i) remanufactured fashion would remain

an “alternative” approach and not considered as part of mass-marketing retailer’s closed loop approach to fashion design and (ii) the (often detrimental) impacts of market competition on small design studios. There has been scant research investigating what is actually involved in the fashion remanufacturing process and how the process could be upscaled to the mass market in order to achieve greater environmental gains than that which is currently achieved. This book aims to fill this literature gap and will examine all aspects pertaining to the concept and applications of remanufactured fashion through six chapters:

Chapter 1—the term “remanufacture” within the literature is examined, and a definition for the remanufactured fashion arena is presented.

Chapter 2—the concepts of closed loop production, reverse supply chains and logistics are examined and placed into the contexts of the fashion industry.

Chapter 3—current business models and strategies adopted by sustainable fashion are examined and compared with the remanufactured fashion process in order to identify the implications for design, manufacture and retail.

Chapter 4—case studies are presented for fashion design and retailing companies to examine the extent to which the remanufacture process is practiced.

Chapter 5—a conceptual system for remanufactured fashion is presented and examined for drivers and obstacles with the implications on new technologies, marketing opportunities and business strategy.

Chapter 6—sustainability implications are examined for retailing and certification.

The authors are indebted to the Sustainable Consumption Institute, University of Manchester, Tesco and the Dorothy Hodgkin Postgraduate Award for the funding that enabled the Ph.D. study and also to the fashion designers and the textile waste collection companies who gave such generous access to their studios and time to talk about their processes.

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