In this article, we present the results of a five-year ongoing research project, with multiple companies in the luxury fashion industry. We uncover the new strategic dimensions driving these companies: innovation, exclusivity, and consciousness and provide a radar for capturing sustainability practices along the dimensions of strategy, production stage and capability. In order to help senior managers who want to embed sustainability into their strategy and translate this into the right practices for their company, we also provide a sustainability practice decision-making matrix.

INTRODUCTION
Fashion is more than just clothes. It is one of the world’s most influential industries, inspiring trends, capturing imaginations and blending art and production in creative and innovative ways. If the fashion industry is a trend-setter and innovation leader, then luxury fashion is the engine of the fashion industry. Luxury fashion is at the forefront of innovation with their catwalk designs and campaigns copied and emulated by the rest of the fashion industry. Individuals, regardless of their social status, are wealthier than at any other time in history, which has led to the growth of the luxury market to an estimated €1.2 trillion globally in 2018 and the personal luxury goods industry: apparel, textiles and footwear, alone, reached €260 billion in 2018, representing 6% growth.

However, while luxury fashion items are made to last due to high-quality and durable materials, luxury fashion brands promote an insatiable appetite for consumers to buy new clothes with capsule items, cruise collections and celebrity-endorsed limited-edition ranges. Consequently, the global luxury fashion industry’s environmental and social costs, highlighted by NGOs and consumer groups, are a huge burden on society.

Examples include luxury fashion brands burning excess stock, polluting the environment with hazardous chemicals, excessive water usage, paying less than a living wage and producing elsewhere whilst at the same time labelling items ‘Made in Italy’. These costs along with the

Luxury fashion offers innovation and excellence based on rare and high-quality materials. However, raw material production and processing stages generate substantial environmental and social impacts.
increase in automation and new norms in terms of ownership and transparency, have unsettled luxury fashion industry managers and left them seeking answers to difficult questions. Our research finds that some companies are leading the way in sustainability with sustainability-embedded corporate strategies and strategically-derived environmental and social best practices that fit with their values and goals. We call this new wave of companies: responsible luxury. These companies are the focus of this article in order to bring a unique sense of style and invention to the world of sustainable supply chains. We provide the results of our ongoing research with more than 15 luxury fashion companies (around 40 brands) and their suppliers, creating a network constituting hundreds of managers. We conducted in-depth case analyses of these companies including a detailed content analysis of their communications and sustainability reports. We also gathered insights from our annual responsible luxury workshop and workshop focus groups, which attracts an average of 300 participants from the world’s luxury fashion companies. With these findings, we highlight the sustainability-embedded strategies and practices used by luxury fashion companies that senior managers from other industries can learn from and apply in their own industries.

In this article, we pinpoint three key strategies driving sustainability in luxury fashion and a decision matrix that can be used by other industry leaders to shape their sustainability strategies by focusing on developing the right practices for their specific needs.

STRATEGIC DIMENSIONS FOR LUXURY FASHION

Luxury is meant to last and be timeless. Products must be guilt-free as luxury means consumers want the comfort of knowing there is no environmental harm or questionable social or ethical issues in the supply chain of their favourite luxury brands. Responsible luxury companies understand that today’s actions will be part of their brand’s heritage for the next fifty years. Therefore, brand heritage must embed environmental and social responsibility in strategy, design, production and supply chain processes. Our research finds that there are three key strategic dimensions of sustainability that luxury fashion companies focus on: Innovation, Exclusivity and Consciousness.

Innovation

Luxury fashion offers innovation and excellence based on rare and high-quality materials. However, raw material production and processing stages generate substantial environmental and social impacts. Most raw materials are acquired from nature, which is affected by climate change hazards such as drought, biodiversity degradation and water scarcity. To illustrate, cotton, one of the most widely used raw materials, is incredibly water intensive and cotton’s growing conditions are heavily affected by temperature and soil moisture. Cashmere is also dependent upon water availability and constant temperatures and the quality of cashmere fiber is expected to decline due to water scarcity and global warming. Furthermore, responsible luxury does not rely on one creative designer but uses the whole supply chain to innovate and experiment with social and environmental innovations.

Exclusivity

In luxury fashion, inherent scarcity and exclusivity of prestigious goods satisfies the need for uniqueness. However, the democratization of luxury has reduced the exclusivity of features and their esthetic distinctions. Responsible luxury companies know that to secure the best materials into the future they must move away from arms-length and dictatorial to collaborative relationships throughout their supply chains. Responsible luxury companies are working closely with their suppliers and their subcontractors to create compatible policies and shared value. Unfortunately, many companies still do not know who or what is in their networks, meaning that actual supply chain risks are almost completely unknown. Supply chain integration and communication are therefore imperative in ensuring exclusivity and enabling a comprehensive picture of what and who is in your supply chain.

Consciousness

Consciousness is now emerging as a crucial driver of sustainability in luxury fashion supply chains. Generation
Y (Millennials) and Generation Z (Centennials) will represent 45% of the global personal luxury goods market by 2025⁵; however, the characteristics and values of these groups conflict with the business models of many traditional luxury brands. Luxury products have long attempted to encapsulate quality traits such as exclusivity and premium features, and innovative characteristics focused on uniqueness and emotional appeal, e.g., investing in retail operations that provide exquisite customer experiences, including delivering products in packaging that is much bigger than necessary. Responsible luxury companies have now realized that the purchasing habits of younger customers are shaped by other, more intangible, values, such as legitimacy and transparency. Luxury fashion companies operate in complex supply chains with a range of stakeholders demanding information on their environmental and ethical actions. Supply chain visibility is a key concern and managers need tools to understand practices that will maintain or build their sustainability credentials and bring competitive advantage through cost savings and new product and market development.

**THE RESPONSIBLE LUXURY RADAR**

We designed the Responsible Luxury Radar, through interactions with responsible luxury companies and their senior management. The radar and the practices are determined by the strategic outcomes the companies are trying to achieve: innovation, exclusivity or consciousness; the production stage that the companies focus on: end product or production processes; and the companies’ key capability: technology or people. When these are taken together, the radar is founded on four essential pillars: Materials Innovation, Clean Production, Ethical Leadership and Supply Chain Transparency.

**Platform 1** Material Innovation: Creating environmentally and socially innovative materials, which go directly into the end product and design with the lowest impact.

**Platform 2** Clean Production: Creating a system to better manage product stewardship, water and energy efficiency and to combat resource scarcity.

**Platform 3** Ethical Leadership: Creating products that are free from social harm and that actively create social good and future talent.

**Platform 4** Supply Chain Transparency: Visualizing supply chains and production processes in more holistic and inclusive ways.

Using the Responsible Luxury Radar, companies can not only examine their current practices but can also look for future sustainability and advantage opportunities.

**Material Innovation**

Material innovation refers to environmentally and socially innovative materials, which go directly into the end product. In this dimension, responsible luxury companies use their technological expertise to develop eco-friendly materials, responsible packaging and less harmful chemicals. Raw material quality is the essential component of the luxury fashion business model. From natural fibers like cotton and animal fibers, such as silk, to leather, exotic skins and precious metals and stones, luxury fashion is dependent on materials. The responsible luxury sector provides examples of innovations that reduce impact without compromising product quality.

**Clean Production**

Luxury fashion companies create brand value through timeless products. However, their production processes create long-term environmental and social harm. The fashion sector is one of the most polluting industries because
The fashion industry also understands the need for radical transparency and to re-establish trust with consumers and other stakeholders; therefore, depicting honest, transparent and relatable stories can be vital in strengthening brand value.

not only has clothing production more than doubled since 2000 but, in 2015, it generated over a million tons of CO2, accounting for over 5% of global carbon emissions\(^6\). Waste, water and energy are growing challenges with 20% of global freshwater pollution coming from textile treatment and dyeing. In 2016, fashion waste was estimated to be over 800,000 tons with 440,000 tons occurring during the preparation of fibers when creating yarns and garments\(^7\). Responsible luxury, however, is focusing on supply chain processes and technological developments in clean production such as using luxury waste as a resource, guaranteeing future water supplies and mitigating energy throughout the supply chain.

**Ethical Leadership**

Responsible luxury companies need to look fundamentally good in the eyes of their discerning customers, therefore their products must be free from social harm and be actively creating social good not only for ethical reasons but to ensure their luxurious image supports their reputation. Responsible luxury companies that focus on the end product and use their people-oriented capabilities, do this through the development of unique talent generation programs, efforts to ensure skills and resources and community development projects.

**Supply Chain Transparency**

Supply chain transparency and visibility of the luxury production process is of growing concern. Many luxury brands act as coordinators for independent networks where various functions are outsourced to suppliers. Responsible luxury companies are visualizing their supply chains and production processes in more holistic and inclusive ways and are using their supply chain focus and people-oriented capabilities to ensure sustainability and competitive advantage. Blockchain, the distributed ledger technology, which transfers material data across the supply chain, appears to be growing in use across the industry to improve traceability. To illustrate, De Beers who created Tracr, an inclusive mine-to-customer traceability solution for the diamond industry. In 2015, Everledger began to track and trace the authenticated source of diamonds, by closely working with manufacturers and retailers, it has now encrypted the source of more than 2 million diamonds.

**LESSONS LEARNED: HOW TO UNLOCK SUSTAINABILITY ACROSS SUPPLY CHAINS**

Responsible luxury companies, like many other companies, are dealing with a range of emerging issues in sustainability. Many of the exemplar firms in our research have shown how to navigate through difficult circumstances using their strategic direction, focus and capabilities. The fashion industry also understands the need for radical transparency and to re-establish trust with consumers and other stakeholders\(^8\); therefore, depicting honest, transparent and relatable stories can be vital in strengthening brand value. By using the lessons of the responsible luxury companies, managers from other companies can use the insights from this paper to cope with rapidly changing business pressures while at the same time advancing supply chain sustainability.

Environmental and social responsibility is a system of sustainability practice identification and exploitation. Following the example of responsible luxury, companies should consider a number of factors:

1. Does your differentiation or critical focus depend on innovation, exclusivity or consumer consciousness?
2. Is it more important for you to focus on the product itself or the process for creating the product?

---

**Table 1. Consumer Consciousness Driving Decision-Making**

<table>
<thead>
<tr>
<th>Driver: Consumer Consciousness</th>
<th>Level: Product</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aspect</strong></td>
<td><strong>Action</strong></td>
</tr>
<tr>
<td>Unique Materials</td>
<td>Develop innovative and exclusive materials</td>
</tr>
<tr>
<td>Talent Generation</td>
<td>Create a culture by empowering, guiding, inspiring and generating future talent</td>
</tr>
</tbody>
</table>
Table 2. Exclusivity Without Exploitation Driving Decision-Making

<table>
<thead>
<tr>
<th>Level: Product</th>
<th>Level: Process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aspect</strong></td>
<td><strong>Action</strong></td>
</tr>
<tr>
<td>Sustainable Packaging</td>
<td>Reimagine packaging without jeopardizing brand identity</td>
</tr>
<tr>
<td>Biodiversity Protection</td>
<td>Preserve scarce resources</td>
</tr>
</tbody>
</table>

Table 3. Sustainability Innovation Driving Decision-Making

<table>
<thead>
<tr>
<th>Level: Product</th>
<th>Level: Process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aspect</strong></td>
<td><strong>Action</strong></td>
</tr>
<tr>
<td>Natural Chemicals</td>
<td>Utilize natural chemicals to lower hazardous impact generated by chemical components</td>
</tr>
<tr>
<td>Societal Benefits</td>
<td>Develop own talent and resources but also go beyond to help society</td>
</tr>
</tbody>
</table>

3. Are your capabilities technological or relational?

For example, companies can start with a product focus, and concentrate on the Material Innovation and Ethical Leadership categories. If companies are more production-oriented, they should emphasize Clean Production and Supply Chain Transparency. While Materials Innovation and Clean Production are for technology-oriented companies and challenges and Ethical Leadership and Supply Chain Transparency are more related to those with relational capabilities.

The strategic outcomes cut across the production stage and capability dimensions. For companies where innovation is the key strategic outcome, Natural Chemicals, Societal Benefits, Energy Mitigation and Community Involvement are key aspects. Where exclusivity is the focus, Sustainable Packaging, Biodiversity Protection, Water Guarantee and Origin Guarantee play a significant role. If companies are looking to support their brand image, reputation and legitimacy due to the emerging consciousness of their customers, they should focus on Unique Materials, Talent Generation, Waste Use and Total Ownership initiatives.

The decisions above are important for companies starting their sustainability journey, however, responsible luxury companies show us that used together these four pillars underpin and support each other. Materials Innovation and Clean Production tend to reinforce each other. Materials Innovation is the heart of new product development while Clean Production ensures the processes used to make these new products are as effective and sustainable as possible. Ethical Leadership and Supply Chain Transparency can supercharge the societal actions needed to not only do less harm but also do more ‘good for communities and people in the supply chain’. Without technical capabilities, companies would focus more on social problems while ignoring environmental actions; without relational capabilities, the technical innovations would only reach superficially into the supply chain without systemic or meaningful change.

For senior managers to apply the radar to their own companies and supply chains they must understand the key variables for sustainability and competitive advantage. For many, that is now a balance of production stage, technical and relational capacities and strategic focus. There are huge opportunities, as illustrated by the responsible luxury sector, in terms of costs savings and developing new products and markets, however, that window of opportunity is closing with increased regulation and demands for information and ethical behavior from investors, customers and other stakeholders. If companies act now, they can not only reap the financial rewards that sustainable advantage can bring but also know that they are helping both people and the planet.

Responsible luxury tells us that no one size fits all, either in the way they focus on different elements of the radar at different times, or that elements suddenly become more important or give opportunities that had not been thought of before.
suddenly become more important or give opportunities that had not been thought of before. It is a dynamic process of awareness, choice and management. One thing is clear, they do not cherry pick among the practices but are aware of and are managing each one. Other managers using the responsible luxury radar should see the elements as a system with distinct parts that can align with their strategy but will be most powerful when used holistically. Our advice is to be like the responsible luxury industry, find sustainable fashion trends in your market that suit your strategic outcomes and use them to your advantage.

References

For senior managers to apply the radar to their own companies and supply chains they must understand the key variables for sustainability and competitive advantage.

About the Authors

Hakan Karaosman is an academic researcher focusing on environmental and social justice in fashion supply chains. He has published a number of academic papers, teaching cases and industrial reports and has several collaborations about sustainability, circular fashion, climate change and transparency with organisations including the UN, NGOs, fashion companies and media platforms. In February 2020, European Commission Research Executive Agency awarded Hakan with the prestigious Marie Skłodowska-Curie Individual Fellowship award for his project, FReSCH (Fashion’s Responsible Supply Chain Hub) that he conducts with Prof. Donna Marshall.

Donna Marshall is Professor of Supply Chain Management, Head of Research, Innovation and Impact, Director of the Centre for Business and Society (CeBaS) at College of Business University College Dublin, and President of the International Purchasing and Supply Education and Research Association (IPSERA). She publishes regularly in high impact publications such as Sloan Management Review, Journal of Business Ethics, and Journal of Supply Chain Management and advises organisations such as the UN, governments, companies, NGOs, and the media on supply chain management, sustainability and transparency issues.

Alessandro Brun, PhD, is Associate Professor at Politecnico di Milano, and Director of Masters in Luxury Management at MIP Graduate School of Management. He authored 200+ scientific papers, including seminal papers on Luxury Supply Chain Management. He is the founder of “Sustainable Luxury Academy”, a cultural initiative involving companies active on the challenges of Sustainability in Fashion-Luxury.