



PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 39th cycle

OPEN SUBJECT Research Field: BUSINESS MODELS FOR SUSTAINABILITY IN THE FASHION SUPPLY CHAIN: INNOVATIVE PATTERNS AND ECONOMIC VIABILITY

Monthly net income of PhDscholarship (max 36 months)

€ 1450.0

In case of a change of the welfare rates during the three-year period, the amount could be modified.

Context of the research activity

Motivation and objectives of the research in this field

Fashion represents an important industry for the Italian economy. Many Italian companies could achieve over the years a worldwide reputation with global operating brands in the garment and cosmetics sectors. However, during the last years, the fashion industry has been experiencing-around the globe-an unprecedented pressure due to their business models and supply chains, which are rather centered around consumption. Traditional practices in the fashion industry are based on linear business models ending with the disposal of products at the end of their lifecycles. Due to increasingly conscious customers about environmental issues, e.g. climate change, and more demanding regulations with respect to sustainability development goals, fashion companies have to adapt towards more sustainable business models. However, the transition to more sustainable business models, also called business models for sustainability (BMFS), e.g., by means of closed-loop based business models is not easy, as companies have to adjust their technologies, processes, and more importantly the current logic according to which they have been doing business. Furthermore, the new developed business models may be more sustainable but not economic. In a nutshell, companies in the fashion supply chain need support to innovate their business models toward more sustainable and circular models. In addition, they need instruments to evaluate at earlier stages, whether business models for sustainability are economically



	<p>viable. In this way, it is possible to better foster business models for sustainability in the fashion supply chain. To address the challenges of the companies in the fashion industry, this research project aims to answer the following main research questions:</p> <ol style="list-style-type: none"> 1. What are the state-of-the-art Business model patterns for sustainability along the supply chain in the fashion supply chain? 2. How do best practice companies adapt their activity systems and supply chains to integrate more sustainability elements into their business models? 3. How are new digitalization technologies leveraged in order to support new sustainable business models in the fashion supply chain? 4. How could the economic viability of business models for sustainability in the fashion supply chain be assessed?
<p>Methods and techniques that will be developed and used to carry out the research</p>	<p>To provide an answer to the research questions, the following methodologies are adequate:</p> <ul style="list-style-type: none"> - Literature Review on sustainable business models and supply chains with a specific focus on the fashion industry - Desk research in order to identify business models for sustainability in the fashion supply chain -Interview study with Italian/European companies that could accommodate successful business models for sustainability in the fashion supply chain -Conceptual development through pattern recognition and modeling of innovative sustainable patterns by means of System Dynamics (SD) and SD-based method development -Case study development/action research for method validation and simulation
<p>Educational objectives</p>	<p>The Ph.D. candidate at the end of the program will possess adequate research skills in the field of sustainable supply chain management and business models and specific knowledge in the fashion industry. In particular, the Ph.D, candidate will:</p> <ul style="list-style-type: none"> - be able to perform a structured literature review - be able to perform qualitative research methods - be able to analyse qualitative data to develop insights and methods/tools



	<ul style="list-style-type: none"> - be able to elaborate System Dynamics (SD) Models and conduct SD simulation studies - be able to present and publish her/his research results
Job opportunities	Academia, international institutions, construction companies, multinational organizations, consulting firms.
Composition of the research group	0 Full Professors 2 Associated Professors 1 Assistant Professors 1 PhD Students
Name of the research directors	Nizar Abdelkafi and Margherita Pero

Contacts	
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Additional support - Financial aid per PhD student per year (gross amount)	
Housing - Foreign Students	--
Housing - Out-of-town residents (more than 80Km out of Milano)	--

Scholarship Increase for a period abroad	
Amount monthly	725.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information	
Funding for educational activities: 5.900,00 Euros for three years. Teaching assistantship: There are various forms of financial aid for activities of support to the teaching practice. The PhD student is encouraged to take part in these activities, within the limits allowed by the regulations. Desk availability: shared use Computer availability: individual use	