### CURRICULUM VITAE of GIANMARCO BRESSANELLI

#### 1. Personal Information

First Name and SURNAME

Gianmarco BRESSANELLI

E-mail

Gianmarco.bressanelli@gmail.com

Nationality

Italian

LINKEDIN

Date of Birth 11/04/1992 Contacts

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ORCID HTTPS://ORCID.ORG/0000-0003-2255-9983



## 2. Professional and Research Experience

Dates

November 2019 - At present

Occupation or position held Name and address of employer Research Fellow (Post Doc) & Teaching Assistant

University of Brescia

Department of Mechanical and Industrial Engineering

Via Branze, 38 – 25123 Brescia (Italy)

www.unibs.it

Main activities and responsibilities

As a Research Fellow at the RISE Laboratory of the University of Brescia, I carry out research in the field of Sustainability and Circular Economy applied to Operations and Supply Chains, combining modelling and simulation methods with empirical activities (case studies, survey) in several industries and sectors (WEEE, textile, metals, etc.). Research articles have been published in international, peer-reviewed journals (see ATTACHMENTS). According to Scopus:

- Number of publications: 22
- Number of citations: 724
- H-Index: 9

As teaching assistant to the course held at the University of Brescia, I carry out lectures, PhD courses as well as frontal exercises in classroom, offering support in students' case studies and working groups, preparing and revising students' written and oral exams. See the ATTACHMENTS for the list of lectures, PhD and universities courses supported so far.

During these years I also supervised several bachelor and master thesis students (see the ATTACHMENTS).

Dates

October 2016 - At present

Occupation or position held Name and address of employer Senior Consultant

IQ Consulting s.r.l.

Via Copernico, 38 - 20125 Milano (Italy)

www.igconsulting.it

Main activities and responsibilities

As Researcher and Advisor, I carry out consulting and transfer activities (from Academia to industrial contexts) in the field of Circular Economy, Operations, Production and Logistics, Supply Chain, Information Systems and Sustainability. See ATTACHMENTS for the projects carried out so far are.

# 3. Education and Training

Dates

November 2016 - October 2019

Title of qualification awarded

PhD in Design and Management of Integrated Logistic and Production Systems

Name and address of employer

University of Brescia

Department of Mechanical and Industrial Engineering

Via Branze, 38 – 25123 Brescia (Italy)

www.unibs.it

Main activities and responsibilities

PHD RESEARCH PROJECT:

During the three-year PhD programme at the University of Brescia I carried out research activity in the field of Circular Economy with a special focus on the durable consumer goods sector. The main objective of the research was to develop a framework and a mathematical model that can be used for static multi-scenario simulations, to assess the economic, environmental and societal benefits of a transition from a Linear to Circular Economy. The tool has been applied to the washing machine industry and supply chain; it was also tested through case studies. Thesis Title: "Assessing the Sustainability Impacts of Circular Economy Supply Chains: a new Framework and Simulation Tool for the Washing Machine industry"

## OTHER RESEARCH PROJECTS INVOLVEMENT:

Title: 3D PRINTING FOR HEALTH AND WEALTH (3DP-4H&W)

Project abstract: the project aims to obtain full customized medical devices from three-dimensional scan of individuals (paediatric age) biometric data. Devices are obtained with additive manufacturing techniques, such as 3D Printing, and they are made with a new biocompatible and anti-bacterial silicone from recycled materials (Circular Economy). The main advantages are the combination of an extreme customization of the obtained devices (thanks to the usage of 3D scanning and printing) with environmental sustainability, thanks to the use of recycled materials.

Dates

April 2019 - June 2019

Title of qualification awarded Name and address of employer PhD guest visiting student

Technical University of Denmark (DTU)

Department of Mechanical Engineering

Nils Koppels Allé, Building 404 – 2800 Lyngby (Denmark)

www.dtu.dk

Main activities and responsibilities

PhD guest visiting period of three months at DTU, where research activities connected to the PhD project were carried out. The main activities and contents covered at DTU were the finalization of the framework, which links Circular Economy benefits with a set of managerial levers (design, business models, supply chain management, etc.) and the implementation of the simulation tool to assess the main economic, environmental and social benefits related to a Circular Economy transition in the washing machine industry.

Dates

September 2014 – September 2016

Title of qualification awarded

Master's degree in management and Industrial Engineering focused on Production and Logistics – 110/110 cum laude

THESIS TITLE: "The implementation of an ERP system in a small Italian enterprise: the Fratelli Temponi Heat Treatment s.r.l. case"

Name and address of employer University of Brescia Department of Mechanical and Industrial Engineering Via Branze, 38 – 25123 Brescia (Italy) www.unibs.it September 2011 - September 2014 Dates Title of qualification awarded Bachelor's degree in management engineering – 110/110 cum laude THESIS TITLE: "The Multi Vehicle Travelling Purchaser Problem with pairwise constraints: mathematical modelling and empirical analysis" Name and address of employer University of Brescia Department of Mechanical and Industrial Engineering Via Branze, 38 – 25123 Brescia (Italy) www.unibs.it

### 4. Awards

2021	Best Presentation Award for the article "Circular Economy in the textile
	industry: evidence from the Prato district", at the 2021 International
	Conference on Resource Sustainability
2019	Top Cited Article Award to Gianmarco Bressanelli, Marco Perona & Nicola
	Saccani for their top cited article "Challenges in supply chain redesign for the
	Circular Economy:
	a literature review and a multiple case study" published in Volume 57 (2019) of
	the International Journal of Production Research
2017	Winner of the graduation award for the 29th edition of the master's thesis
	awards on company and work organization, established by Associazione
	Bresciana di Studi del Lavoro
2016	Winner of the "project excellence" study grant organized by the municipality of
	Ceto, year 2016
2015	Winner of the 3 <sup>rd</sup> edition of the scholarship "Cavaliere del Lavoro Gino
	Streparava", organized by the Rotary Club Brescia Franciacorta-Oglio
2014	Winner of the "project excellence" study grant organized by the municipality of
	Ceto, year 2016

# 5. Attachments

1.	Saccani, N., Bressanelli, G., Visintin, F., 2023. Circular supply chain
	orchestration to overcome Circular Economy challenges: An
	empirical investigation in the textile and fashion industries. Sustain.

Prod. Consum. 35, 469–482. https://doi.org/10.1016/j.spc.2022.11.020

 Bressanelli, G., Adrodegari, F., Pigosso, D.C.A., Parida, V., 2022. Towards the Smart Circular Economy Paradigm: A Definition, Conceptualization, and Research Agenda. Sustainability 14, 4960. https://doi.org/10.3390/su14094960

3. Bressanelli, G., Visintin, F., Saccani, N., 2022. Circular Economy and the evolution of industrial districts: a supply chain perspective. Int. J. Prod. Econ. 243, 108348. https://doi.org/10.1016/j.iipe.2021.108348

 Bressanelli, G., Saccani, N., Perona, M., 2022. Investigating Business Potential and Users' Acceptance of Circular Economy: A Survey and

- an Evaluation Model. Sustainability 14, 609. https://doi.org/10.3390/su14020609
- Bressanelli, G., Pigosso, D.C.A., Saccani, N., Perona, M., 2021.
   Enablers, levers and benefits of Circular Economy in the Electrical and Electronic Equipment supply chain: a literature review. J. Clean. Prod. 298, 126819. <a href="https://doi.org/10.1016/j.jclepro.2021.126819">https://doi.org/10.1016/j.jclepro.2021.126819</a>
- Bressanelli, G., Saccani, N., Perona, M., Baccanelli, I., 2020. Towards Circular Economy in the Household Appliance Industry: An Overview of Cases. Resources 9, 128. https://doi.org/10.3390/resources9110128
- Bressanelli, G., Saccani, N., Pigosso, D.C.A., Perona, M., 2020.
   Circular Economy in the WEEE industry: a systematic literature review and a research agenda. Sustain. Prod. Consum. 23, 174–188. https://doi.org/10.1016/j.spc.2020.05.007
- 8. Bressanelli, G., Perona, M., Saccani, N., 2019. Challenges in supply chain redesign for the Circular Economy: a literature review and a multiple case study. Int. J. Prod. Res. 57, 7395–7422. https://doi.org/10.1080/00207543.2018.1542176
- 9. Bressanelli, G., Perona, M., Saccani, N., 2019. Assessing the impacts of circular economy: a framework and an application to the washing machine industry. Int. J. Manag. Decis. Mak. 18, 282. https://doi.org/10.1504/IJMDM.2019.100511
- Bressanelli, G., Adrodegari, F., Perona, M., Saccani, N., 2018.
   Exploring How Usage-Focused Business Models Enable Circular Economy through Digital Technologies. Sustainability 10, 639. <a href="https://doi.org/10.3390/su10030639">https://doi.org/10.3390/su10030639</a>

### International conference proceedings:

- 11. Bressanelli, G., Saccani, N. 2022. Assessing the Circularity Score of manufacturing companies. 9th International EurOMA Sustainable Operations and Supply Chain Forum
- 12. Bressanelli, G., Saccani, N., Perona, M. 2022. Remanufacturing for the Circular Economy: A Business Model analysis. XXVII Summer School "Francesco Turco"
- Andersen, T., Bressanelli, G., Saccani, N., Franceschi, B. 2022.
   Information Systems and Circular Manufacturing Strategies: The Role of Master Data. IFIP Advances in Information and Communication Technology
- Bressanelli, G., Nesi, C., Saccani, N., Visintin, F., 2022. Circular Economy in the Textile Industry: Evidence from the Prato District, in: Sustainable Production, Life Cycle Engineering and Management. pp. 123–131. <a href="https://doi.org/10.1007/978-3-030-90217-9">https://doi.org/10.1007/978-3-030-90217-9</a> 11
- 15. Bressanelli, G., Saccani, N., Perona, M. 2021. Evaluating the Circular Economy readiness of manufacturing companies at the micro level. 2nd Symposium on Circular Economy and Sustainability
- 16. Baccanelli, I., Bressanelli, G., Saccani, N., Perona, M. 2020. Adopting Circular Economy in the Household Appliance industry: an overview of cases. Electronics Goes Green 2020
- 17. Bressanelli, G., Visintin, F., Saccani, N., Perona, M. 2020. Towards a circular supply chain for textiles: An overview of cases, in: Proceedings of the Summer School Francesco Turco.
- Bressanelli G, Perona M, and Saccani N. 2019. "Quantifying the Circular Economy Potential of Prolonging Lifetime in Energy Using Products the Washing Machine case." In 3rd PLATE Conference – 1-11. Berlin.
- 19. Bressanelli G, Perona M, and Saccani N. 2019. "Benefits and acceptance rate of Circular Economy alternatives: evidences from a user survey in the washing machine industry." In XXIV Summer

- School "Francesco Turco" Industrial Systems Engineering, 245–252. Brescia.
- Adrodegari, Federico, Bressanelli, Gianmarco, Marco Perona, and Nicola Saccani. 2019. "Digital Servitization as an Enabler of Circular Economy models." In Proceedings of the Spring Servitization Conference, 237–245. Linkoping (Sweden)
- Bressanelli G, Perona M, and Saccani N. 2018. "Towards the Circular Supply Chain: A Literature Review of Challenges." In XXIII Summer School "Francesco Turco" – Industrial Systems Engineering, 171–78. Palermo.
- Bressanelli, Gianmarco, Federico Adrodegari, Marco Perona, and Nicola Saccani. 2018. "The Role of Digital Technologies to Overcome Circular Economy Challenges in PSS Business Models: An Exploratory Case Study." Procedia CIRP 73: 216–21. <a href="https://doi.org/10.1016/j.procir.2018.03.322">https://doi.org/10.1016/j.procir.2018.03.322</a>.
- Bressanelli, Gianmarco, Marco Perona, and Nicola Saccani. 2017.
   "Reshaping the Washing Machine Industry through Circular Economy and Product-Service System Business Models." Procedia CIRP 64: 43–48. <a href="https://doi.org/10.1016/j.procir.2017.03.065">https://doi.org/10.1016/j.procir.2017.03.065</a>.
- 24. Bressanelli, Gianmarco, Marco Perona, and Nicola Saccani. 2017. "A New Framework for Assessing Circular Economy Scenarios in the Washing Machine Industry." In Proceedings of the Summer School Francesco Turco, 177–83. Palermo: AIDI - Italian Association of Industrial Operations Professors

Reviewer Activity

- Journal of Cleaner Production
- International Journal of Production Research
- Resource, Conservation and Recycling
- Business Strategy and the Environment
- Journal of Manufacturing Technology Management
- Computers & Industrial Engineering
- Journal of Industrial Ecology

**Editorial Activity** 

- 2022 Editor of the Special Issue "Circular Economy in the Digital Age" Sustainability <a href="https://doi.org/10.3390/su14095565">https://doi.org/10.3390/su14095565</a>
- 2022 Scientific Committee of the 2<sup>nd</sup> Symposium on Circular Economy and Sustainability
- 2022 Chair and Organizer of the International Research Workshop on Circular Economy in the Era of Digitalization - Brescia, Italy
- 2023 Scientific Committee of the 2<sup>nd</sup> International Symposium on Industrial Engineering and Automation ISIEA Bolzano (Italy)
- 2023 Scientific Committee of the 3<sup>rd</sup> Symposium on Circular Economy and Sustainability

Teaching and training

### Lectures and invited speech

- 2022: Ecodesign the Future: batteries edition Circular Economy and Service Design EconomiaCircolare.com Academy
- 2022: DiCE Lab Webinar "the Internet of Things for the Circular Economy"
- 2021: Assessing the sustainability impacts of Circular Economy Supply Chains: a new framework and a simulation tool for the washing machine industry – University of Sheffield for the ReTraCE Network

- 2021: FRUSH "Innovating the Circular Economy" 2021 Edition Finland
- 2021: Ecodesign the Future: packaging edition Circular Economy and Service Design EconomiaCircolare.com Academy

#### PhD Courses held at the Università degli Studi di Brescia

- 2021: Circular Economy: Principles and applications (9 hours, 1.5 CFU) dedicated to DRIMI PhD students
- 2022: Circular Economy: Principles, applications and Life Cycle Assessment (9 hours, 1.5 CFU) – dedicated to DRIMI PhD students

#### Master and Bachelor Courses held at the Università degli Studi di Brescia

- 2022-2023: GESTIONE DELLA FILIERA LOGISTICA (Supply Chain Management and Logistics) - 40 hours
- 2022-2023: SISTEMI DI PRODUZIONE (Production Systems) 20 hours
- 2022-2023: PROGETTAZIONE DI IMPIANTI (Design of Industrial Plants) – 20 hours
- 2021-2022: GESTIONE DELLA FILIERA LOGISTICA (Supply Chain Management and Logistics) - 40 hours
- 2021-2022: SISTEMI DI PRODUZIONE (Production Systems) 20 hours
- 2021-2022: PROGETTAZIONE DI IMPIANTI (Design of Industrial Plants) 20 hours
- 2020-2021: GESTIONE DELLA FILIERA LOGISTICA (Supply Chain Management and Logistics) - 40 hours
- 2020-2021: LABORATORIO DI SISTEMI PRODUTTIVI (Laboratory of Production Systems) - 20 hours
- 2019-2020: GESTIONE DELLA FILIERA LOGISTICA (Supply Chain Management and Logistics) - 40 hours
- 2019-2020: LABORATORIO DI SISTEMI PRODUTTIVI (Laboratory of Production Systems) - 20 hours
- 2018-2019: GESTIONE DELLA FILIERA LOGISTICA (Supply Chain Management and Logistics) - 40 hours
- 2017-2018: GESTIONE DELLA FILIERA LOGISTICA (Supply Chain Management and Logistics) - 40 hours

List of Bachelor and Master Thesis students supervised

# Bachelor and Master Thesis students supervised

- 2022 FRANCESCHI Benedetta: "Valutazione degli scenari di economia circolare nel settore delle lavatrici: un'analisi statistica"
- 2022 RIZZO Annalisa "Il ruolo delle tecnologie digitali per l'Economia Circolare: impatti e benefici"
- 2022 Biscaro "Verso l'economia circolare: un'analisi di 50 casi di studio"
- 2022 Greca "Strumenti per sviluppare modelli di business circolari: analisi e revisione critica"
- 2021 TONELLI Simone: "Valutazione della prontezza delle imprese all'economia circolare: un'indagine sul campo"
- 2020 CENINI Monica: "Studio di re-layout per lo snellimento dei flussi produttivi: il caso Datwyler Sealing Solution Italy"
- 2020 ARCHETTI Alessandro "Analisi e progettazione dei magazzini aziendali: il caso EG Lavorazioni Meccaniche S.r.l"
- 2020 FREDDI Sara: "Circular economy business models: a multiple case study analysis"
- 2019 ALBERTI Mattia: "Economia Circolare: valutazione di tipo

- economico ed ambientale applicata al contesto delle lavatrici
- 2019 ALLEGRI Giovanni: "Economia Circolare: analisi dei casi di studio"
- 2019 BACCANELLI Irene: "Economia circolare: analisi di casi di studio nel settore delle apparecchiature elettriche ed elettroniche"
- 2019 FORMENTI Luca: "Verso l'Economia Circolare: revisione ed analisi critica dei tools a supporto della transizione"
- 2019 LONATI Davide: "Progettazione di un sistema di costificazione in un'impresa manifatturiera: il caso Datwyler S.p.A."
- 2019 NESI Caterina: "Fattori abilitanti e sfide per l'Economia Circolare: casi di studio della filiera tessile di Prato"
- 2019 UKPE Brian: "Tecnologie 4.0 per l'economia Circolare: analisi dei casi di studio"
- 2018 MORI Adriano: "Valutazione economica ed ambientale degli scenari di Economia Circolare: applicazione al contesto delle lavatrici"

Sector publications (dissemination)

### Sector publications (dissemination)

- 1. Bressanelli G.; Saccani N.; Ioli M. 2021 "Avvicinarsi all'Economia Circolare nell'Industria Tessile: il Caso Punto Art" ESG 360 [online]
- Bressanelli G., Perona M., Saccani N. 2021 "Economia Circolare: opportunità e sfide per trasformare il business e la supply chain" Logistica & Management
- 3. Bressanelli G.; Saccani N.; Ioli M. 2021 Economia circolare e digitalizzazione: modelli di sviluppo strategico per aziende e filiere. ICIM [online]
- 4. Bressanelli G, Saccani N. 2021 "Finanza Agevolata per l'Economia Circolare: l'innovazione delle Filiere Lombarde" ESG360 [online]
- 5. Bressanelli G, Saccani N. 2021 "La Finanza Agevolata per l'Economia Circolare: bandi, opportunità e quick wins" Digital4Biz [online]
- Bressanelli G, Saccani N. 2021 "Economia circolare: rigenerare prodotti e componenti per evitare il Fine Vita" ESG360 [online]
- Bressanelli G, Saccani N, Perona M. 2021 "Rigenerare prodotti e componenti per acquisire vantaggi competitivi in un'economia circolare" Digital4Biz [online]
- 8. Bressanelli G, Saccani N, Perona M. 2021 "Economia circolare come sfida e opportunità per le supply chain" ESG360 [online]
- 9. Bressanelli G, Saccani N, Perona M 2020 "Nuovo piano d'azione UE: Economia circolare: un approccio di filiera per un'Europa più green e competitiva" Agenda Digitale [online]
- 10. Bressanelli G, Saccani N, Perona M. 2020 "Economia circolare tra bisogno di tecnologie e consapevolezza" TechEconomy 2030 [online]
- Bressanelli G, Saccani N, Adrodegari F. 2019 "Manutenzione Smart per l'Economia Circolare" Manutenzione Tecnica & Management [online]
- Bressanelli G, Perona M, and Saccani N. 2018 "Digitale e sostenibilità: come le tecnologie 4.0 abilitano l'Economia Circolare" Industry4Business [online]
- 13. Bressanelli G, Perona M, and Saccani N. 2018 "Creare valore con l'Economia Circolare: Opportunità di business e spinte verso la sostenibilità" Industry4Business [online]
- 14. Adrodegari F, and Bressanelli G. 2018. "Dall'Industria 4.0 all'impresa Smart: Pronti ad affrontare la sfida?" Industry4Business [online]
- 15. Adrodegari F, and Bressanelli G. 2018. "Competenze digitali per un'impresa smart." Logistica Management [online]

- 16. Adrodegari F, Bressanelli G, and Saccani, N. 2018. "La servitization attraverso gli smart services: sfide ed opportunità." Industry4Business [online]
- 17. Bressanelli G, Perona M, and Saccani N. 2017 "Circular Economy Regenerating finished products." HA Parts and Components 2017(10): 36-41
- 18. Bressanelli G, Perona M, and Saccani N. 2017 "Economia Circolare: è ora di agire?" Plastix 2017(10): 74-78
- 19. Bressanelli G, Perona M, Saccani N. 2017 "L'Economia Circolare e il mondo 4.0." Industrie 4.0 2017(8): 100-105
- Adrodegari F, Bressanelli G, Saccani N. 2017. "La trasformazione digitale nel service: sfide e opportunità" Macchine Utensili 2017(2): 22-27
- 21. Adrodegari F, and Bressanelli G. 2017 "Open Innovation: linee guida per le aziende" Leadership & Management [online]
- 22. Adrodegari F, Bressanelli G. 2017 "Accogliere l'Open Innovation per creare valore e competitività." Sistemi & Impresa 2017(5): 58-62

List of consulting and advisory projects

#### Consulting and advisory projects:

- 2022. FLOORS TEXTILE MANUFACTURER: Comparative Life Cycle Assessment (LCA) analysis for two company products: standard polypropylene carpet vs carpet recovered and recycled
- 2022. WARRANTY & REPAIR SERVICE PROVIDER: Carbon Footprint analysis of organization according to ISO 14064 – quantification and reporting of organization greenhouse gases emissions
- 2022. PORDENONE CHAMBER OF COMMERCE: Circularity check-up and workshop for the generation of Circular Economy projects and ideas
- 2022. BRASS RODS MANUFACTURER: support to the continuous improvement activities of the company foundry lines.
- 2022. STEEL & ROLLING MILL: change management to support the implementation of the SAP ERP system (PP and QM modules)
- 2022. PROFESSIONAL APPLIANCE MANUFACTURER:
   Strategic analysis of customer-competitor sustainability initiatives and development of corporate high-level roadmap towards sustainability
- 2021. BRASS RODS MANUFACTURER: support to the continuous improvement activities of the company production lines.
- 2021. STEEL & ROLLING MILL: change management to support the implementation of the SAP ERP system (PP and QM modules)
- 2021. FLOORS TEXTILE MANUFACTURER: design and analysis
  of circular business models in the exhibition industry, based on
  functional sales and the regeneration of end-of-life products.
- 2021. ROMAGNA CHAMBER OF COMMERCE: design and delivery of a Circular and Digital Economy pilot project for Nr. 5 companies belonging to the Forlì-Cesena Chamber of Commerce – assessment and prototyping laboratories
- 2020. BRASS RODS MANUFACTURER: analysis and design of the company production lines' continuous improvement activities.
- 2020. STEEL & ROLLING MILL: business process reengineering and change management to support the implementation of the SAP ERP system (PP and QM modules)
- 2019. CUT AND SEW FASHION BRAND: software selection and

- analysis of several alternatives for sales and operations planning solution.
- 2019. BRASS RODS MANUFACTURER: strategic and organizational support to the formulation, development and implementation of the corporate mid-long strategic plan.
- 2019. STEEL & ROLLING MILL: functional analysis, project and change management to support the business process reengineering and the implementation of the new SAP ERP system
- 2018. BRASS RODS MANUFACTURER: overall assessment of both hard and soft skills of the company first- and second-line managers.
   Subsequent development gap analysis and organisational re-design.
- 2018. CLINICAL MICROBIOLOGY LAB AUTOMATION COMPANY: managerial training on the topics of industrial logistics and operational managers.
- 2018. SELF-SERVICE LAUNDRY PROVIDER: project management activities and support for the development and implementation of new servitized and digital business models in the laundry sector.
- 2017. ELECTRONIC DEVICE MANUFACTURER: business
  processes mapping and identification of the main functional
  specifications required for the implementation of a Workflow and
  Document software, as well as development of a tool for the
  evaluation of the main stock indexes.
- 2017. BRASS RODS MANUFACTURER: redesign of the production planning process, creation of a KPI production calculation dashboard, development of industrial management control tools as well as provision of the support required for the implementation in the company ERP system.

In compliance with the Italian legislative Decree no. 196 dated 30/06/2003 and with the European Regulation GDPR (UE 2016/679), I hereby authorize you to use and process my personal details contained in this document.

Brescia, January 9th, 2023 GIANMARCO BRESSANELLI