

## Supplementary file

### 1. Post-2013 studies

Table 1 shows the 141 post-2013 articles that were used in this study. The authors in the Table were arranged according to the year of publication. For the articles published in the same year, the authors were arranged in alphabetical order.

Table 1: Lean-Green studies post-2013 (Source: Author's own creation)

No.	Author(s) and year	Title	Journal/ conference/ thesis
1.	Abdullah <i>et al.</i> (2014)	Transformation from Lean service to Green service	International symposium on research in innovation and sustainability 2014 (ISoRIS '14)
2.	Chiarini (2014)	Sustainable manufacturing-greening processes using specific Lean production tools: an empirical observation from European motorcycle component manufacturers	Journal of cleaner production
3.	Dhingra <i>et al.</i> (2014)	Does Lean mean Green?	Journal of cleaner production
4.	Galeazzo <i>et al.</i> (2014)	Lean and green in action: interdependencies and performance of pollution prevention projects	Journal of cleaner production
5.	Gandhi and Sharma (2014)	Lean manufacturing technology: a way to green business practice and sustainable environmental development	Journal of economic and social development
6.	Garza-reyes <i>et al.</i> (2014)	Lean and Green – synergies, differences, limitations, and the need for six sigma	IFIP international conference on advances in production management systems
7.	Johansson and Sundin (2014)	Lean and green product development: two sides of the same coin?	Journal of cleaner production
8.	Pampanelli <i>et al.</i> (2014)	A Lean and Green model for a production cell	Journal of cleaner production
9.	Prasad and Sharma (2014)	Lean and Green manufacturing: concept and its implementation in operations management	International Journal of advanced mechanical engineering
10.	Sabadka (2014)	Innovation Lean principles in automotive green manufacturing	Acta Logistica
11.	Wadhwa (2014)	Synergizing Lean and Green for continuous improvement	IFIP international federation for information processing 2014
12.	Engin <i>et al.</i> (2015)	Lean and Green supply chain management: a comprehensive review	Lean and Green supply chain management, international series in operations research and management science
13.	Garza-Reyes (2015)	Lean and Green – a systematic review of the state of the art literature	Journal of cleaner production

14.	Kumar <i>et al.</i> (2015)	Conceptualisation of sustainable Green Lean Six Sigma: an empirical analysis	International Journal of. business excellence
15.	Nallusamy <i>et al.</i> (2015)	Sustainable Green Lean manufacturing practices in small scale industries - a case study	International Journal of applied engineering research
16.	Pampanelli <i>et al.</i> (2015)	Sustainable manufacturing: the Lean and Green business model	Sustainable operations management
17.	Queiroz <i>et al.</i> (2015)	The use of Lean manufacturing practices in cleaner production: a systematic review	5 <sup>th</sup> international workshop advances in cleaner production
18.	Wiese <i>et al.</i> (2015)	The integration of lean, green and best practice business principles	Journal of transport and supply chain management
19.	Bharadwaj and Sundar (2016)	Analysis of significant issues in Green Lean system in small and medium scale enterprises	International Journal of research in mechanical, mechatronics and automobile engineering
20.	Bortolini <i>et al.</i> (2016)	A reference framework integrating lean and green principles within supply chain management	International Journal of social, behavioral, educational, economic, business and industrial engineering
21.	Campos and Vazquez-Brust (2016)	Lean and green practices: are they synergic?	2016 POMS annual conference
22.	David and Found (2016)	An implementation model for Lean and Green	Understanding the Lean enterprise
23.	Fercoq <i>et al.</i> (2016)	Lean/Green integration focused on waste reduction techniques	Journal of cleaner production
24.	Hallam and Contreras (2016a)	Integrating lean and green management	Management Decision
25.	Hallam and Contreras (2016b)	The interrelation of Lean and Green manufacturing practices: a case of push or pull in implementation	2016 Proceedings of PICMET '16: technology management for social innovation
26.	Lerher <i>et al.</i> (2016)	Lean and Green logistics: a theoretical framework approach	International conference on industrial icil 2016 logistics
27.	Mittal <i>et al.</i> (2016)	Two-way assessment of barriers to Lean–Green manufacturing system: insights from India	International Journal of systems assurance engineering and management
28.	Pampanelli <i>et al.</i> (2016)	The Green factory: creating Lean and sustainable manufacturing	CRC press
29.	Prasad <i>et al.</i> (2016)	An empirical study on applicability of lean and green practices in the foundry industry	Journal of manufacturing technology management
30.	Prasetyawan (2016)	Defining technology strategy for small to medium Enterprise within lean and green manufacturing framework	Proceeding of 9 <sup>th</sup> international seminar on industrial engineering and management
31.	Verrier <i>et al.</i> (2016)	Lean and Green strategy: the Lean and Green house and maturity deployment model	Journal of cleaner production

32.	Thanki and Thakkar (2016)	Value–value load diagram: a graphical tool for lean–green performance assessment	Production planning and control
33.	Thanki <i>et al.</i> (2016)	An investigation on Lean-Green implementation practices in Indian SMEs using analytical hierarchy process (AHP) approach	Journal of cleaner production
34.	Tiwari and Tiwari (2016)	Green Lean manufacturing: way to sustainable productivity improvement	International Journal of engineering research and general science
35.	Abreu <i>et al.</i> (2017)	Lean-Green models for eco-efficient and sustainable production	Energy
36.	Cherrafi, <i>et al.</i> (2017a)	A framework for the integration of Green and Lean Six Sigma for superior sustainability performance	International Journal of production research
37.	Cherrafi <i>et al.</i> (2017b)	Barriers in Green Lean implementation: a combined systematic literature review and interpretive structural modelling approach	Production planning and control
38.	Chugani <i>et al.</i> (2017)	Investigating the Green Impact of Lean, Six Sigma, and Lean Six Sigma: a systematic literature review	International Journal of Lean Six Sigma
39.	Dawood and Abdullah (2017)	Effect of manufacturing activities on Lean -Green management integration	Proceedings of the international conference on industrial engineering and operations management
40.	Haddach <i>et al.</i> (2017)	Alliance of Lean and Green in company: a literature review and future research	International Journal of engineering science invention
41.	Kuppusamy <i>et al.</i> (2017)	Evaluation and identification of Lean-Green resourced person (LGRP) for integrating and implementing lean and green practices in a manufacturing industry	Proceedings of the ASME 2016 international mechanical engineering congress and exposition
42.	Logesh <i>et al.</i> (2017)	A review on implementation of lean manufacturing techniques in manufacturing industry to deploy green manufacturing through reduction of hazardous waste	International research journal of engineering and technology (IRJET)
43.	Malhotra and Kumar (2017)	The literature review of Lean and Green manufacturing system	International Journal of theoretical and applied mechanics
44.	Rachid and Ayyad (2017)	Supply chain improvement in LARG (Lean, Agile, Resilient, Green) context: a risk management approach	2017 6th IEEE international conference on advanced logistics and transport (ICALT)
45.	Reis <i>et al.</i> (2017)	Online platform for measuring the lean/green maturity level based on the slg method	Proceedings of the international conference on industrial engineering and operations management
46.	Ruiz-Benitez <i>et al.</i> (2017)	Environmental benefits of lean, green and resilient supply chain management: the case of the aerospace sector	Journal of cleaner production

47.	Sartal <i>et al.</i> (2017)	How much does Lean Manufacturing need environmental and information technologies?	Journal of manufacturing systems
48.	Szymanska-Bralkowska and Malinowska (2017)	The improvement of the company's environmental performance through the application of Green Lean/ Lean and Green approach	Institute of economic research working papers
49.	Whyte and Bland (2017)	Application of Green and Lean production at Ricoh	International Journal of automation technology
50.	Belhadi <i>et al.</i> (2018)	Benefits of adopting lean production on green performance of SMEs: a case study	Production planning and control
51.	Cherrafi <i>et al.</i> (2018)	Lean, green practices and process innovation: a model for green supply chain performance	International journal of production economics
52.	Dawood <i>et al.</i> (2018)	Managing waste throughout Lean-Green perspective	Journal of University of Babylon, engineering sciences
53.	Duarte and Cruz-Machado (2018)	Exploring linkages between Lean and Green supply chain and the Industry 4.0	International conference of management science and engineering management
54.	Florescu and Barabaş (2018)	Integrating the Lean concept in sustainable manufacturing development	3rd China-Romania science and technology seminar (CRSTS 2018)
55.	Gandhi <i>et al.</i> (2018)	Ranking of drivers for integrated Lean-Green manufacturing for Indian manufacturing SMEs	Journal of cleaner production
56.	Ghobakhloo <i>et al.</i> (2018)	Lean-Green manufacturing: the enabling role of information technology resource	Kybernetes
57.	Hammadi and Herrou (2018)	Lean maintenance logistics management: the key to green and sustainable performance	2018 4 <sup>th</sup> International conference on logistics operations management (GOL)
58.	Harikannan <i>et al.</i> (2018)	Enablers and barriers for integrated Lean-Green-Agile manufacturing systems	International Journal of mechanical engineering and technology (IJMET)
59.	Ikatinasari <i>et al.</i> (2018)	The implementation Lean and Green manufacturing sustainable value stream mapping	International conference on design, engineering and computer sciences 2018
60.	Inman and Green (2018)	Lean and Green combine to impact environmental and operational performance	International Journal of production research
61.	Kipper <i>et al.</i> (2018)	Lean and Green indicators: an application in the coffee sector	Agriculture research and technology
62.	Leme <i>et al.</i> (2018)	Creating value with less impact: Lean, green and eco-efficiency in a metalworking industry towards a cleaner production	Journal of cleaner production
63.	Mishra (2018)	Identify critical success factors to implement integrated green and Lean Six Sigma	International Journal of Lean Six Sigma

64.	Oliveira <i>et al.</i> (2018)	Lean and Green approach: an evaluation tool for new product development focused on small and medium enterprises	International Journal of production economics
65.	Ramos <i>et al.</i> (2018)	A lean and cleaner production benchmarking method for sustainability assessment: a study of manufacturing companies in Brazil	Journal of cleaner production
66.	Sumant and Negi (2018)	Review of Lean-Green manufacturing practices in SMEs for sustainable framework	International journal of business innovation and research
67.	Thanki and Thakkar (2018a)	A quantitative framework for lean and green assessment of supply chain performance	International Journal of productivity and Performance Management
68.	Thanki and Thakkar (2018b)	Interdependence analysis of Lean-Green implementation	Journal of manufacturing technology management
69.	Abreu <i>et al.</i> (2019)	The Lean-Green BOPSE indicator to assess efficiency and sustainability	Lean engineering for global development
70.	Avancini <i>et al.</i> (2019)	Lean and Green manufacturing practices: a multiple case study about synergy	Proceedings of the international conference on industrial engineering and operations Management
71.	Bhattacharya <i>et al.</i> (2019)	Lean-green integration and its impact on sustainability performance: a critical review	Journal of cleaner production
72.	Caldera <i>et al.</i> (2019)	Transforming manufacturing to be good for planet and people, through enabling Lean and Green thinking in small and medium-sized enterprises	Sustainable earth
73.	Carvalho <i>et al.</i> (2019a)	Using Lean and Green indexes to measure companies' performance	Lean Engineering for Global Development
74.	Carvalho <i>et al.</i> (2019b)	Advanced technologies supporting the implementation of Lean/Green supply chain management practices and its influence on the performance	European Lean educator conference
75.	Cherrafi <i>et al.</i> (2019)	Green and Lean: a Gemba–Kaizen model for sustainability enhancement	Production planning and control
76.	Chiet <i>et al.</i> (2019)	The integration of Lean and Green manufacturing for Malaysian manufacturers: a literature review to explore the synergies between Lean and Green model	IOP conference series: earth and environmental science
77.	Choudhary <i>et al.</i> (2019)	An integrated lean and green approach for improving sustainability performance: a case study of a packaging manufacturing SME in the U.K.	Production planning and control

78.	Coutinho <i>et al.</i> , (2019)	A critical review on lean green product development: state of art and proposed conceptual framework	Environmental engineering and management journal
79.	Edirisuriya <i>et al.</i> (2019)	Applicability of Lean and Green concepts in logistics 4.0: a systematic review of literature	2018 International conference on production and operations management society (POMS)
80.	Dieste and Panizzolo (2019)	The effect of Lean practices on environmental performance: an empirical study	Lean engineering for global development
81.	Farias <i>et al.</i> (2019)	Criteria and practices for lean and green performance assessment: systematic review and conceptual framework	Journal of cleaner production
82.	Farias <i>et al.</i> (2019)	An ANP-based approach for lean and green performance assessment	Resources, conservation and recycling
83.	Green <i>et al.</i> (2019)	Impact of JIT, TQM and green supply chain practices on environmental sustainability	Journal of manufacturing technology management
84.	Huo <i>et al.</i> (2019)	Green or lean? A supply chain approach to sustainable performance	Journal of cleaner production
85.	Kaswan and Rathi (2019)	Analysis and modeling the enablers of Green Lean Six Sigma implementation using Interpretive structural modeling	Journal of cleaner production
86.	Leong <i>et al.</i> (2019a)	Adaptive analytical approach to lean and green operations	Journal of cleaner production
87.	Leong <i>et al.</i> (2019b)	Lean and Green manufacturing—a review on its applications and impacts	Process integration and optimization for sustainability
88.	Marco-ferreira <i>et al.</i> (2019)	Lean and Green: practices, paradigms and future prospects	Benchmarking: an international journal
89.	Moro <i>et al.</i> (2019)	Product-service systems towards eco-effective production patterns: a Lean-Green design approach from a literature review	Total quality management and business excellence
90.	Muñoz-Villamizar <i>et al.</i> (2019)	Trends and gaps for integrating Lean and Green management in the agri-food sector	British food journal
91.	Rahman and Ogunleye (2019)	A Lean, Green and Six Sigma (LG6σ) for SMEs in the leather industry in Bangladesh	International Journal of knowledge, innovation and entrepreneurship
92.	Sindhvani <i>et al.</i> (2019)	Modelling and analysis of barriers affecting the implementation of Lean Green Agile manufacturing system (LGAMS)	Benchmarking: an international Journal
93.	Singh <i>et al.</i> (2019)	Evaluation of common barriers to the combined Lean-Green-Agile manufacturing system by two-way assessment method	Advances in industrial and production engineering
94.	Siegel <i>et al.</i> (2019)	Integrated Green Lean approach and sustainability for SMEs: from literature review to a conceptual framework	Journal of cleaner production

95.	Tayyab and Sarkar (2019)	Sustainable lot size in a multistage Lean-Green manufacturing process under uncertainty	Mathematics
96.	Abualfaraa <i>et al.</i> (2020)	Lean-Green manufacturing practices and their link with sustainability: a critical review	Sustainability
97.	Ahmad <i>et al.</i> (2020)	Lean-Green performance management in Indian SMEs: a novel perspective using the best-worst method approach	Benchmarking: an international journal
98.	Basha <i>et al.</i> (2020)	Green and Lean industrial engineering practices in selected manufacturing units in Andhra Pradesh: statistical analysis	International Journal of emerging trends in engineering research
99.	Baumer-cardoso <i>et al.</i> (2020)	Simulation-based analysis of catalyzers and trade-offs in Lean and Green manufacturing	Journal of cleaner production
100.	Belhadi <i>et al.</i> (2020)	The integrated effect of big data analytics, lean six sigma, and green manufacturing on the environmental performance of manufacturing companies: the case of North Africa.	Journal of cleaner production
101.	Gaikwad and Sunnapwar (2020)	An integrated Lean, Green and Six Sigma strategies a systematic literature review and directions for future research	The TQM Journal
102.	Jbira <i>et al.</i> (2020)	Integration of Lean management for the growth of Green manufacturing	IOP conference series: materials science and engineering
103.	Kaswan and Rathi (2020)	Investigating the enablers associated with implementation of Green Lean Six Sigma in manufacturing sector using Best Worst method	Clean technologies and environmental policy
104.	Khan <i>et al.</i> (2020)	The development of a sustainability framework via Lean Green Six Sigma practices in SMEs based upon RBV theory	International Journal of innovation, creativity and change
105.	Kovilage (2020b)	Influence of lean-green practices on organizational sustainable performance	Journal of Asian business and economic studies
106.	Kumar and Rodrigues (2020)	Synergetic effect of Lean and Green on innovation: a resource-based perspective	International Journal of production economics
107.	Lartey <i>et al.</i> (2020)	Going Green, going clean: Lean-Green sustainability strategy and firm growth	Business strategy and environment
108.	Leong <i>et al.</i> (2020)	Enhancing the adaptability: Lean and Green strategy towards the Industry revolution 4.0	Journal of cleaner production
109.	Logesh and Balaji (2020)	Experimental investigations to deploy Green manufacturing through reduction of waste using lean tools in electrical components manufacturing company	International Journal of precision engineering and manufacturing-green technology

110.	Rodrigues <i>et al.</i> (2020)	The impact of Lean and Green practices on logistics performance: a structural equation modelling	Production
111.	Silva <i>et al.</i> (2020)	Lean Green—the importance of integrating environment into Lean philosophy—a case study	Proceedings of the 6th European Lean educator conference
112.	Sindhvani, <i>et al.</i> 2020	Analysis of barriers to Lean–Green manufacturing system (LGMS): a multi-criteria decision-making approach	Advances in intelligent manufacturing
113.	Singh <i>et al.</i> (2020a)	Analyzing barriers of Green Lean practices in manufacturing industries by DEMATEL approach	Journal of manufacturing technology management
114.	Singh <i>et al.</i> (2020b)	Understanding the key performance parameters of Green Lean performance in manufacturing industries	Materials today: proceedings
115.	Thanki and Thakkar (2020)	An investigation on Lean–Green performance of Indian manufacturing SMEs	International Journal of productivity and performance management
116.	Udokporo <i>et al.</i> (2020)	Impact of Lean, Agile and Green (LAG) on business competitiveness: an empirical study of fast moving consumer goods businesses	Resources, conservation and recycling
117.	Vinayagasundaram <i>et al.</i> (2020)	Implementation of business process reengineering using Lean and Green strategy in manufacturing industry	AIP conference proceedings
118.	Zhu and Zhang (2020)	Construction of lean-green coordinated development model from the perspective of personnel integration in manufacturing companies	Journal of engineering manufacture
119.	Zhu <i>et al.</i> (2020)	Application of green-modified value stream mapping to integrate and implement lean and green practices: a case study	International Journal of computer integrated manufacturing
120.	Aisyah <i>et al.</i> (2021)	identification of implementation Lean, Agile, Resilient and Green (LARG) approach in Indonesia automotive industry	Journal Européen des systèmes automatisés
121.	Amrina and Shiami (2021)	Selection of sustainable performance strategies in cosmetics SMIs using Lean and Green balance scorecards methods	International Journal of scientific advances
122.	Amrina <i>et al.</i> (2021)	Mapping challenges in developing sustainable small and medium industries: integrating Lean and Green principles	Journal of industrial engineering and management
123.	Bouhannana (2021)	Integrating Lean, Green and Agile concepts in supply chain management - a systematic literature review	Journal of Tianjin University science and technology



124.	Dahmani and Belhadi (2021)	Integrating Lean design and eco-design to improve product design: from literature review to an operational framework	Energy and Environment
125.	Dias (2021)	Combine Lean with Green paradigm as an enabler for an environmentally sustainable supply chain	Doctoral dissertation
126.	da Silva <i>et al.</i> (2021)	Improving manufacturing cycle efficiency through new multiple criteria data envelopment analysis models: an application in Green and Lean manufacturing processes	Production planning and control
127.	Farrukh <i>et al.</i> (2021)	A natural resource and institutional theory-based view of green-lean-six sigma drivers for environmental management	Business strategy and the environment
128.	Firmansyah and Maemunah (2021)	Lean management and Green supply chain management implementation on the manufacturing and logistics industry at an Indonesia	Business and entrepreneurial review
129.	Harisekar (2021)	Focusing on Lean and Green increasing sustainability performance in a SME	Production systems
130.	Hartini <i>et al.</i> (2021)	Integration Lean manufacturing and 6R to reduce wood waste in furniture company toward circular economy	IOP conference series: materials science and engineering
131.	Kurdve and Bellgran (2021)	Green Lean operationalisation of the circular economy concept on production shop floor level	Journal of cleaner production
132.	Leong <i>et al.</i> (2021)	The performance of adaptive approach in Lean and Green operations	MATEC web of conferences
133.	Rad and Azizi (2021)	History will repeat: Industry 4.0 brought Lean, Agile, Resilience and Green	Research Journal of nanoscience and engineering
134.	(Raut <i>et al.</i> , 2021)	Big data analytics as a mediator in Lean, Agile, Resilient, and Green (LARG) practices effects on sustainable supply chains	Transportation research part E
135.	Shokri <i>et al.</i> (2021)	A readiness self-assessment model for implementing Green Lean Six Sigma initiatives in manufacturing	Journal of Cleaner Production
136.	Suhardini and Hadiwidjojo (2021)	Lean and Green supply chain management in improving operational performance in sugar industry	Journal of applied management
137.	Suhendrianto <i>et al.</i> (2021)	The integrated Lean and Green manufacturing system: a case study at the peeled loaf production	IOP conference series: materials science and engineering
138.	Thorne (2021)	Towards Lean and Green production management in the pharmaceutical industry: a framework for E-VSM and	KTH royal institute of technology school of industrial engineering and management

		Kaizen event prioritization through a systematic literature review and case study at AstraZeneca	
139.	Verma (2021)	Sustainability synergy with Lean Green and Six Sigma	International Journal of research and analysis in science and engineering
140.	Viles <i>et al.</i> (2021)	Lean–Green improvement opportunities for sustainable manufacturing using water telemetry in agri-food industry	Sustainability
141.	Yadav <i>et al.</i> (2021)	Integral measures and framework for Green Lean Six Sigma implementation in manufacturing environment	International Journal of sustainable engineering

## 2. Pre-2013 studies

Table 2 shows the articles from pre-2013 articles that supported the results obtained by Dües *et al.* (2013). The authors in the Table were arranged according to the year of publication and in alphabetical order as done in Table 1.

Table 2: Lean-Green studies pre-2013 (Source: Author’s own creation)

No.	Author	Title	Journal
1.	Florida (1996)	Lean and Green: the move to environmentally conscious manufacturing	California management review
2.	King and Lenox (2001)	Lean and Green? An empirical examination of the relationship between lean production and environmental performance	Production and operations management
3.	Rothzenberget <i>al.</i> (2001)	Lean, Green, and the quest for superior environmental performance	Production and operations management
4.	Zhu and Sarkis (2004)	Relationships between operational practices and performance among early adopters of Green supply chain management practices in Chinese manufacturing enterprises	Journal of operations management
5.	Simpson and Power (2005)	Use the supply relationship to develop Lean and Green suppliers	Supply chain management: an international journal
6.	Venkat and Wakeland (2006)	Is lean necessarily green?	50th Annual Meeting of the International Society for the Systems Sciences 2006, ISSS 2006
7.	Sawhney <i>et al.</i> (2007)	En-Lean: a framework to align lean and green manufacturing in the metal cutting supply chain	International journal of enterprise network management
8.	Bergmiller and Mccright, (2009a)	Lean manufacturers’ transcendence to Green manufacturing	Proceedings of the 2009 industrial engineering research conference

9.	Bergmiller and McCright (2009b)	Are Lean and Green programs synergistic?	Proceedings of the 2009 industrial engineering research conference
10.	Hall (2009)	Compression: meeting the challenges of sustainability through vigorous learning enterprises	CRC press
11.	Johansson and Winroth (2009)	A manufacturing strategy perspective on lean and green manufacturing	Proceedings of the Swedish production symposium
12.	Winroth and Johansson (2009)	Lean vs. Green manufacturing: similarities and differences	Proceedings of the 16th international annual EurOMA conference, implementation realizing operations management knowledge
13.	Carvalho <i>et al.</i> (2010)	Supply chain performance management: Lean and Green paradigms	International Journal of business performance and supply chain modelling
14.	Mollenkopf <i>et al.</i> (2010)	Green, lean, and global supply chains	International Journal of physical distribution and logistics management
15.	Taubitz (2010)	Lean, Green and safe integrating safety into the Lean, Green and sustainability movement	Professional safety
16.	Torielli <i>et al.</i> (2010)	Using Lean methodologies for economically and environmentally sustainable foundries	China foundry
17.	Duarte (2011)	Exploring Lean and Green supply chain performance using balanced scorecard perspective	Proceedings of the 2011 international conference on industrial engineering and operations management
18.	Pampanelli <i>et al.</i> (2011)	A Lean and Green Kaizen model	2011 POMS annual conference
19.	Parveen <i>et al.</i> (2011)	Integration of Lean And Green supply chain -impact on manufacturing firms in improving environmental efficiencies	International conference on green technology and environmental conservation (GTEC-2011)
20.	Bashkite and Karaulova (2012)	Integration of Green thinking into Lean fundamentals by theory of inventive problems-solving tools	Annals of DAAAM for 2012 and proceedings of the 23rd international DAAAM symposium
21.	Cabral, <i>et al.</i> (2012)	A decision-making model for Lean, Agile, Resilient and Green supply chain management	International Journal of production research
22.	Chahal (2012)	An advance Lean production system in industry to improve flexibility and quality in manufacturing by implementation of FMS and Green manufacturing	International Journal of emerging technology and advanced engineering

### 3. Descriptive summary of review

According to Figure 1, 39% of the papers followed the case study method, while 34% are based on literature review and 27% were conducted through surveys.

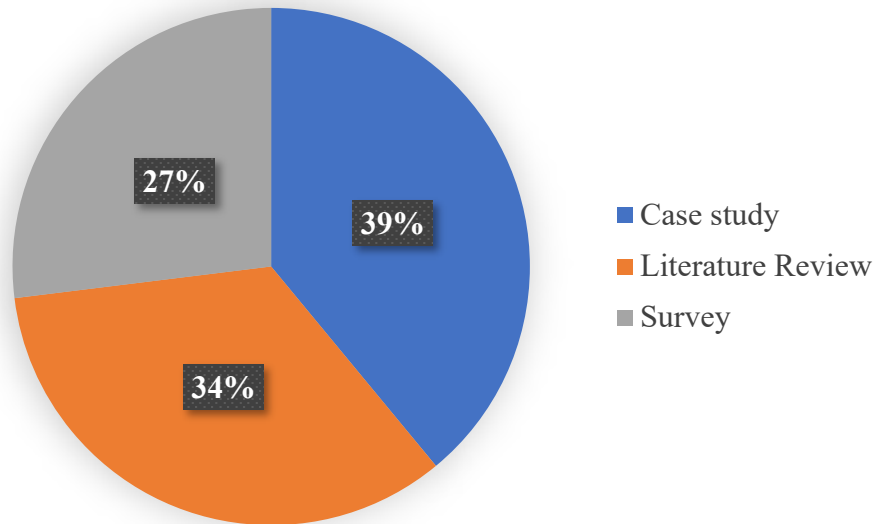


Figure 1: Type of research (Source: Author's own creation)

Figure 2 presents the size of the organisation in which the research was conducted. Most of the papers (62%) did not state the size of the organisation where their study was done. 18% of the papers were conducted in large enterprises, while 15% were conducted in SMEs.

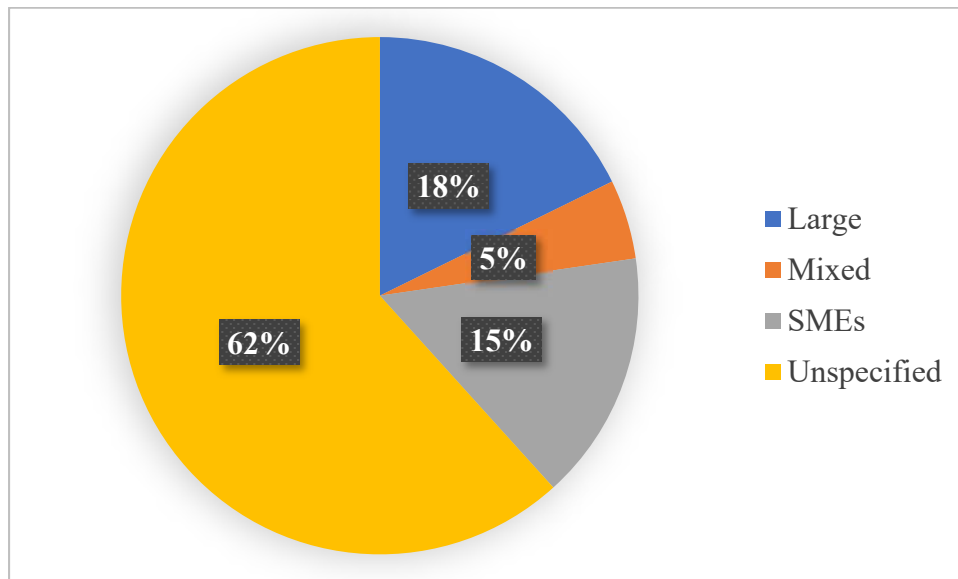


Figure 2: Size of the industry (Source: Author's own creation)

From Figure 3, it can be noted that from 2014 to 2021, there has been an increase in research on Lean-Green Manufacturing.

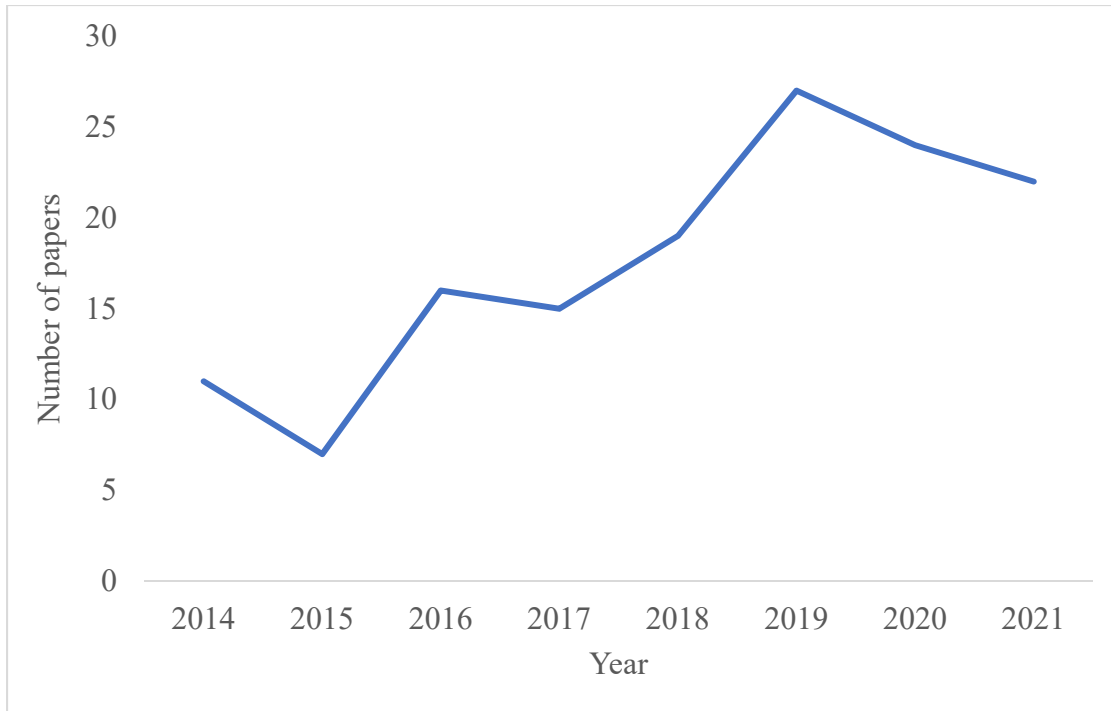


Figure 3: Number of papers and year of publication (Source: Author's own creation)

#### 4. Gioia diagram and thematic relationships

Figures 4-6 illustrate the Gioia diagram which **presents** the research themes that were identified through Atlas.ti coding.

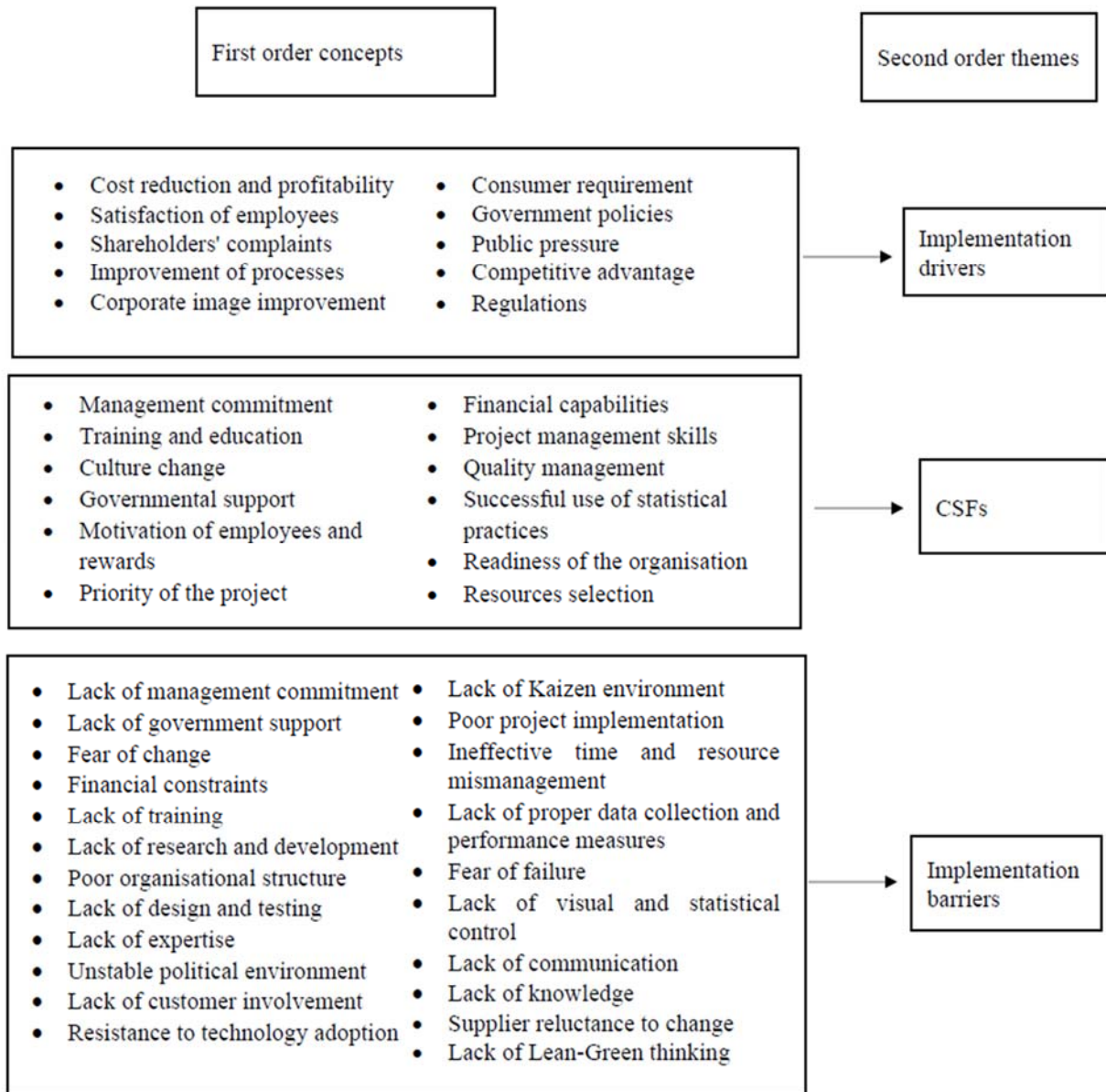


Figure 4: Gioia diagram for drivers, barriers, and CSFs (Source: Author's own creation)

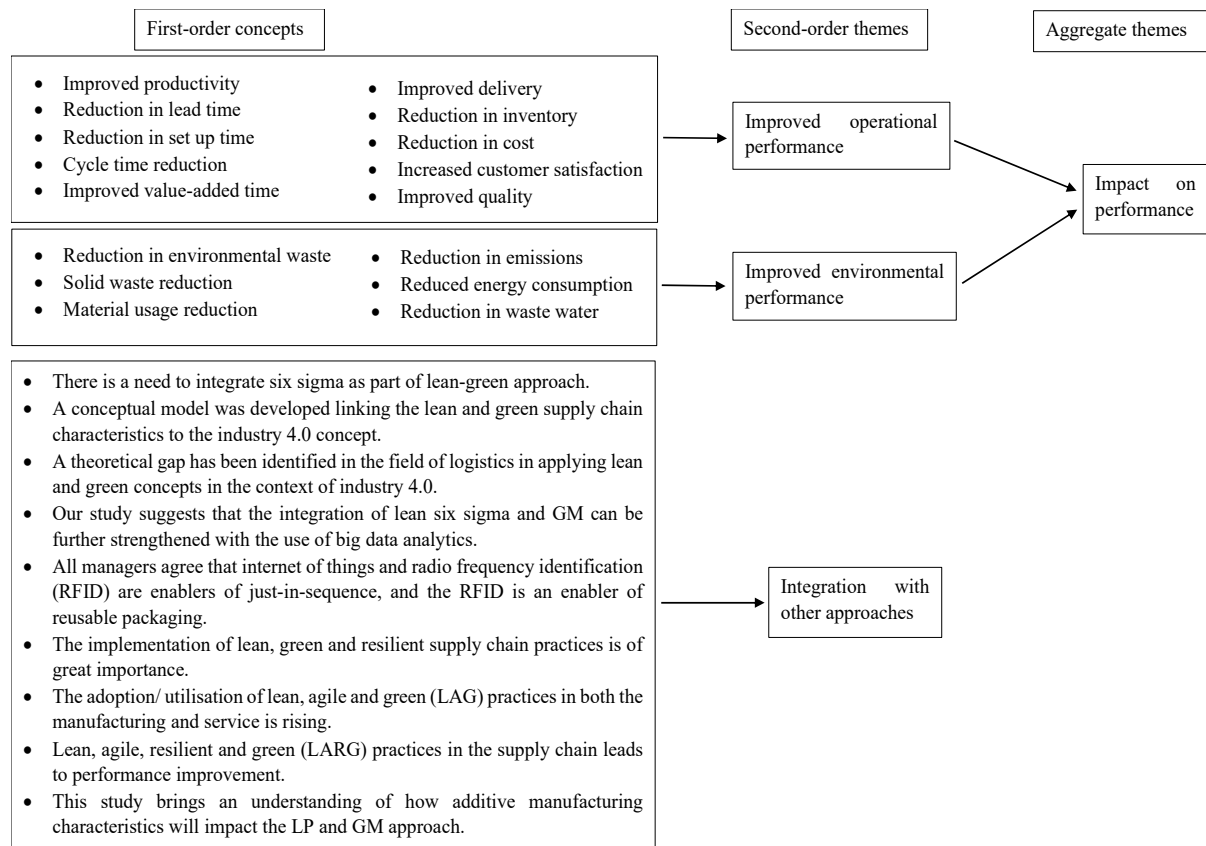


Figure 5: Gioia diagram for synergy and divergence (Source: Author's own creation)

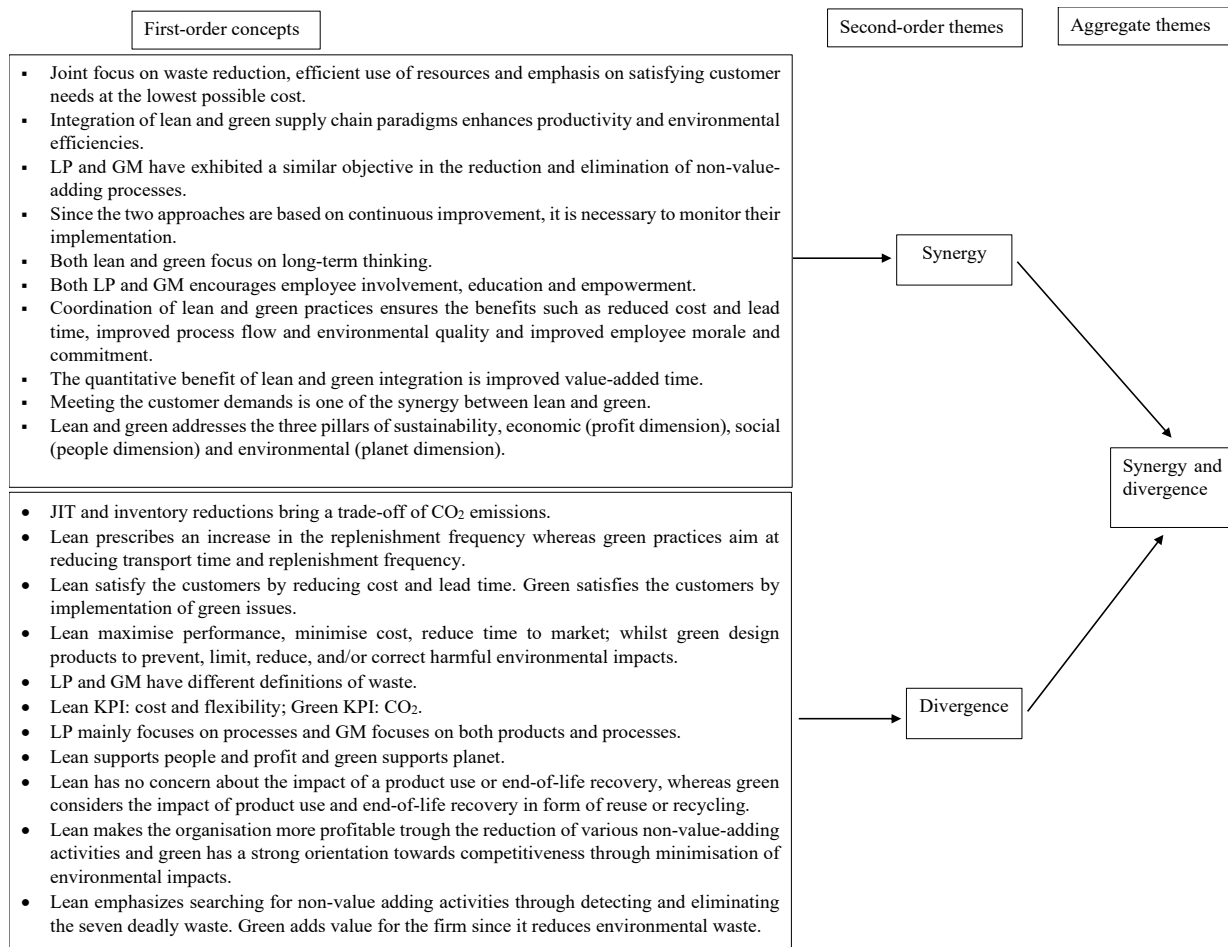


Figure 6: Gioia diagram for impact on performance and integration with other methodologies (Source: Author's own creation)

The relationships between the study themes are shown in Figure 7.



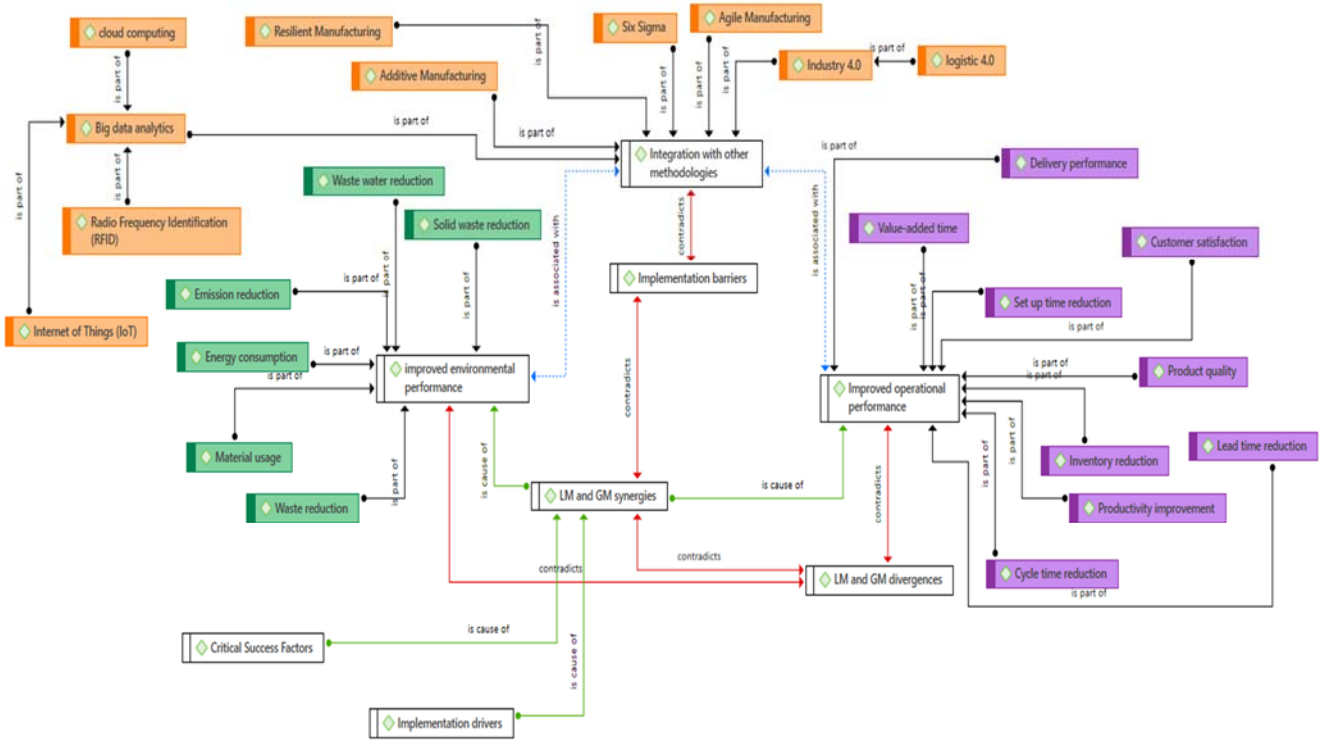


Figure 7: Relationship between study themes (Source: Author's own creation)

## References

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