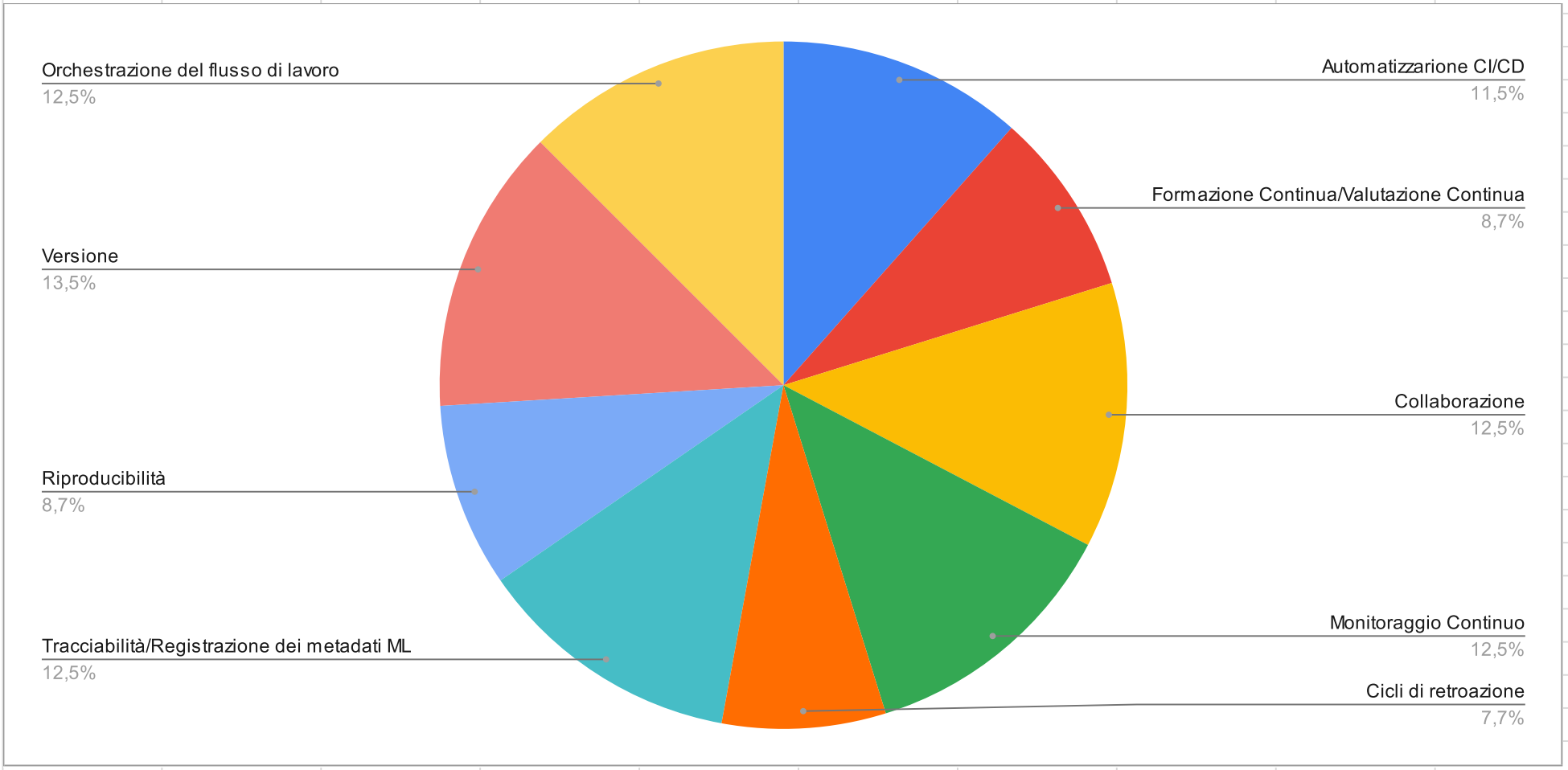
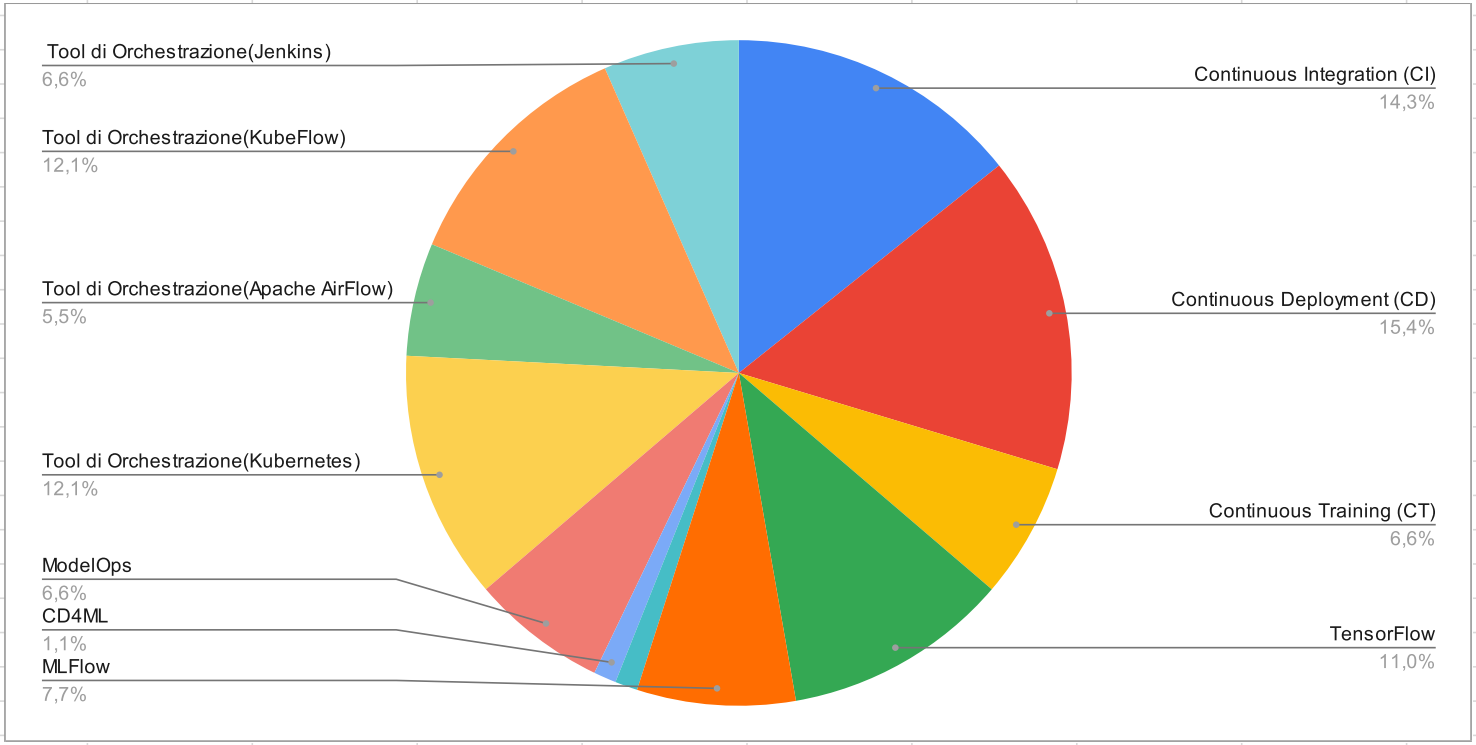
Numero del Articolo sul documento	Nome Articolo	Anno di Publicazione	URL	(RQ1) Proprietà: Automatizzarione CI/CD	(RQ1) Proprietà: Formazione Continua/Valutazione Continua sul ML	(RQ1) Proprietà: Collaborazione	(RQ1) Proprietà: Monitoraggio Continuo	(RQ1) Proprietà: Cicli di retroazione	(RQ1) Proprietà: Tracciabilità/Registrazione dei metadati ML	(RQ1) Proprietà: Riproducibilità	(RQ1) Proprietà: Versione	(RQ1) Proprietà: Orchestrazione del flusso di lavoro
P1	Towards MLOps: A Case Study of ML Pipeline Platform	2021	https://ieeexplore.ieee.org/abstract/document/9361315	☑	☑	☐	☐	☑	☑	☑	☑	☑
P2	On Continuous Integration / Continuous Delivery for Automated Deploy ment of Machine Learning Models using MLOps	2022	https://ieeexplore.ieee.org/abstract/document/9723793	☑	☐	☑	☑	☐	☑	☐	☐	☑
P3	The machine learning life cycle and the cloud: implications for drug discover	2021	https://www.tandfonline.com/doi/full/10.1080/17460441.2021.1932812	☐	☐	☐	☑	☐	☑	☑	☑	☐
P4	MLOps for evolvable AI intensive software systems	2022	https://ieeexplore.ieee.org/abstract/document/9825776	☑	☐	☐	☑	☐	☐	☐	☐	☐
P5	Machine Learning Operations (MLOps): Overview, Definition, and Architecture	2022	https://arxiv.org/abs/2205.02302	☑	☑	☑	☑	☑	☑	☑	☑	☑
P6	Jenkins Pipelines: A Novel Approach to Machine Learning Operations (MLOps)	2022	https://ieeexplore.ieee.org/abstract/document/9936252	☑	☐	☑	☐	☐	☐	☐	☑	☑
P7	Accelerating the Machine Learning Lifecycle with MLflow	2018	https://www-cs.stanford. edu/people/matei/papers/2018/ieee_mlflow.pdf	☐	☐	☑	☐	☐	☑	☑	☑	☑
P8	A Multivocal Literature Review of MLOps Tools and Features.	2022	https://www.researchgate.net/publication/361588111	☑	☑	☑	☐	☐	☑	☑	☑	☑
P9	Sustainable MLOps: Trends and Challenges	2021	https://ieeexplore.ieee.org/abstract/document/9356947	☐	☑	☐	☐	☐	☑	☐	☐	☑
P10	Who Needs MLOps: What Data Scientists Seek to Accomplish and How Can MLOps Help?	2021	https://ieeexplore.ieee.org/abstract/document/9474355	☐	☑	☑	☑	☑	☐	☐	☑	☐
P11	Trustworthy AI: From Principles to Practices	2021	https://arxiv.org/abs/2110.01167	☐	☐	☑	☑	☑	☑	☑	☐	☑
P12	MLOps: A Guide to its Adoption in the Context of Responsible AI	2022	https://ieeexplore.ieee.org/abstract/document/9808770	☑	☐	☐	☑	☐	☑	☐	☑	☐
P13	AN INTELLIGENT DEVOPS PLATFORM RESEARCH AND DESIGN BASED ON MACHINE LEARNING	2019	https://ieeexplore.ieee.org/abstract/document/9406861	☑	☐	☑	☑	☐	☑	☑	☑	☑
P14	Towards MLOps: A Framework and Maturity Model	2021	https://ieeexplore.ieee.org/abstract/document/9582569	☑	☑	☑	☑	☑	☑	☐	☑	☑
P15	From DevOps to MLOps: Overview and Application to Electricity Market Forecasting	2022	https://www.mdpi.com/2076-3417/12/19/9851	☑	☑	☑	☑	☑	☑	☑	☑	☑
P16	MLOps Challenges in Multi-Organization Setup: Experiences from Two Real-World Cases	2021	https://ieeexplore.ieee.org/abstract/document/9474388	☐	☑	☑	☑	☑	☐	☐	☑	☐
P17	MLOps - Standardizing the Machine Learning Workflow	2021	https://amslaurea.unibo.it/23645/1/tesi_enrico_salvucci.pdf	☑	☑	☑	☑	☐	☑	☐	☑	☑
P18	ModelOps: Cloud-Based Lifecycle Management for Reliable and Trusted AI	2019	https://ieeexplore.ieee.org/abstract/document/8790192	☑	☐	☑	☑	☑	☐	☑	☑	☑
			Documenti: P1, P2, P4, P5, P6, P8, P11, P12, P13, P14, P15, P17, P18 (RQ3) la pratica "Continuous Integration (CI)" soddisfa tali proprietà:	☑	☑	☐	☐	☐	☐	☐	☐	☐
			Documenti: P1, P2, P4, P5, P6, P8, P10, P11, P12, P13, P14, P15, P17, P18 (RQ3) la pratica "Continuous Deployment (CD)" soddisfa tali proprietà:	☑	☑	☐	☐	☐	☐	☐	☐	☐
			P8, P12, P13, P14, P15 (RQ3) la pratica "Continuous Training (CT)" soddisfa tali proprietà:	☐	☑	☐	☐	☐	☐	☐	☐	☐
			P5, P7,P8, P11, P12, P17, P18 (RQ3) la pratica "TensorFlow" soddisfa tali proprietà:	☐	☐	☐	☐	☐	☐	☐	☑	☐
			enti: P2, P5, P7, P8, P12, P15, P17 (RQ3) la pratica "MLFlow" soddisfa tali proprietà:	☐	☐	☐	☑	☐	☑	☑	☐	☑
			Documenti: P16 (RQ3) la pratica "Integration Patterns" soddisfa tali proprietà:	☑	☐	☐	☐	☐	☐	☐	☐	☐
			Documenti: P16 (RQ3) la pratica "CD4ML" soddisfa tali proprietà:	☐	☑	☐	☐	☐	☐	☑	☐	☐
			enti: P1, P6, P8, P11, P17, P18 (RQ3) la pratica "ModelOps" soddisfa tali proprietà:	☐	☑	☑	☑	☐	☐	☐	☐	☑
			Documenti: P1, P2, P3, P5, P6, P8, P12, P14, P15, P17, P18 (RQ3) la pratica "Tool di Orchestrazione(Kubernetes)" soddisfa tali proprietà:	☐	☑	☐	☑	☑	☐	☐	☐	☑
			nenti: P3, P5, P8, P9, P17 (RQ3) la pratica "Tool di Orchestrazione(Apache AirFlow)" soddisfa tali proprietà:	☐	☑	☐	☐	☐	☐	☑	☐	☑
			Documenti: P1, P2, P3, P5, P6, P8, P9, P11, P12, P17, 18 (RQ3) la pratica "Tool di Orchestrazione(KubeFlow)" soddisfa tali proprietà:	☐	☑	☐	☑	☑	☑	☑	☑	☑
			, P8, P15, P17, P18 (RQ3) la pratica "Tool di Orchestrazione(Jenkins)" soddisfa tali proprietà:	☑	☑	☑	☐	☑	☐	☐	☐	☑

Numero del Articolo sul documento	(RQ2) Pratiche: Continuous Integration (CI)	(RQ2) Pratiche: Continuous Deployment (CD)	(RQ2) Pratiche: Continuous Training (CT)	(RQ2) Pratiche: TensorFlow	(RQ2) Pratiche: MLFlow	(RQ2) Pratiche: Integration Patterns	(RQ2) Pratiche: CD4ML	(RQ2) Pratiche: ModelOps	(RQ2) Pratiche: Tool di Orchestrazione (Kubernetes)	(RQ2) Pratiche: Tool di Orchestrazione (Apache AirFlow)	(RQ2) Pratiche: Tool di Orchestrazione (KubeFlow)	(RQ2) Pratiche: Tool di Orchestrazione (Jenkins)	D1	D2	D3	D4
P1	☑	☑	☑	☑	☐	☐	☐	☑	☑	☐	☑	☐	0.5	1	0.5	1
P2	☑	☑	☐	☑	☑	☐	☐	☐	☑	☐	☑	☐	0.5	1	0	0.5
P3	☐	☐	☐	☑	☐	☐	☐	☐	☑	☑	☑	☐	0.5	0.5	0.5	0.5
P4	☑	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0.5	1	0	0
P5	☑	☑	☐	☑	☑	☐	☐	☐	☑	☑	☑	☑	1	0.5	0.5	1
P6	☑	☑	☐	☐	☐	☐	☐	☑	☑	☐	☑	☑	0.5	1	0.5	1
P7	☐	☐	☐	☑	☑	☐	☐	☐	☐	☐	☐	☐	0.5	0.5	1	0.5
P8	☑	☑	☑	☑	☑	☐	☐	☑	☑	☑	☑	☑	1	0.5	0.5	0.5
P9	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	☑	☐	0.5	0	0	0.5
P10	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	0.5	1	0.5	1
P11	☑	☑	☐	☑	☐	☐	☐	☑	☐	☐	☑	☐	1	0.5	0.5	1
P12	☑	☑	☑	☑	☑	☐	☐	☐	☑	☐	☑	☐	0.5	1	0.5	0.5
P13	☑	☑	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	1	1	0.5	0.5
P14	☑	☑	☑	☐	☐	☐	☐	☐	☑	☐	☐	☐	1	1	1	1
P15	☑	☑	☐	☐	☑	☐	☐	☐	☑	☐	☐	☑	1	0.5	0.5	0.5
P16	☐	☐	☐	☐	☐	☑	☑	☐	☐	☐	☐	☐	0.5	1	0.5	0.5
P17	☑	☑	☑	☑	☑	☐	☐	☑	☑	☑	☑	☑	0.5	0.5	1	1
P18	☑	☑	☐	☑	☐	☐	☐	☑	☑	☐	☑	☑	0.5	0	0.5	1

Automatizzarione CI/CD	Formazione Continua/Valutazione Continua sul ML	Collaborazione	Monitoraggio Continuo	Cicli di retroazione	Tracciabilità/Registrazione dei metadati ML	Riproducibilità	Versione	Orchestrazione del flusso di lavoro
12	9	13	13	8	13	9	14	13



Continuous Integration (CI)	Continuous Deployment (CD)	Continuous Training (CT)	TensorFlow	MLFlow	Integration Patterns	CD4ML	ModelOps	Tool di Orchestrazione (Kubernetes)	Tool di Orchestrazione (Apache AirFlow)	Tool di Orchestrazione (KubeFlow)	Tool di Orchestrazione (Jenkins)
13	14	6	10	7	1	1	6	11	5	11	6



Continuous Integration (CI)	Continuous Deployment (CD)	Continuous Training (CT)	TensorFlow	MLFlow	Integration Patterns	CD4ML	ModelOps	Tool di Orchestrazione (Kubernetes)	Tool di Orchestrazione (Apache AirFlow)	Tool di Orchestrazione (KubeFlow)	Tool di Orchestrazione (Jenkins)
2	2	1	1	4	1	2	4	4	3	7	5