

Business Process Model Patterns: State-of-the art, Research Classification and Taxonomy

Appendix

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This appendix shows the literature classification conducted for the publication “Business Process Patterns: State-of-the art, Taxonomy and Research Classification”. An online version of the classification can be found at <http://bmpatterns.org/>. The following abbreviations for the taxonomy terms are used in the table below:

- Origin: Research = R, Industry = I
- Method of Creation (MoC): Informed Argument = IA, Survey = S, Case Study = CS, Manual Mining = MM
- Category (Cat)
- View: Function = Func, Information = Inf, Resource = Res, Organization = Org
- Intended User (IU): Business Analyst = BA, IT Specialist = IT, Researcher = Re
- Scope: Generic = gen, Domain-specific = dom
- Type of Article (ToA): Evaluation Research = ER, Proposal of Solution = PoS, Personal Experience = PE, Survey = S
- Template (T): None = n., Light = l., Full = f.
- Presentation (P): Textual = t, Formal = f, Graphical = g
- Notation: Existing = Exis, Extension = Ext
- Language Dependency (LD)
- Extent of Documentation (EoD): Partial = part, Complete = comp
- Instructions, Guidelines (I&G)
- Tool Support (TS)

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Character	Origin	MoC	Count	Year	Cat	View	IU	Scope	ToA	T	P	Notation	LD	EAD	IG	TS
Aghakasri & Miriam-Hosseiniabadi (2009)	R	IA	7	2009	7.1	Func, Inf	BA, IT	gen	Pos	Full	t	None	No	comp	No	No
Ahmed & Marhevicic (2014)	R	IA	20	2014	6.2	Func	BA	gen	Pos	Full	t ₁ , g	Exkt, BPMin	No	comp	Yes	No
Algebra et al. (2010)	R	IA	24	2010	8.1	Func, Res	IT	gen	Pos	Full	t ₁ , g	Exkts, polymetric views	No	comp	Yes	No
André et al. (2014)	R	IA	4	2014	1.1	Func	IT	gen	Pos	None	t ₁ , g	Exkts, UML	Yes	comp	Yes	No
Arđivo et al. (2014)	R	CS	2	2014	4.1, 4.3	Func	BA	gen	Pos	None	t ₁ , g	Exkts, BPMin	No	comp	Yes	Yes
Awad (2010)	R	IA	21	2010	6.1	Func	BA	gen	Pos	None	t ₁ , g, f	Exkt, BPMin-Q	Yes	comp	Yes	Yes
Ayora et al. (2013)	R	S	19	2013	7.1	Func	BA	gen	Pos	Full	t ₁ , g	None	No	part	Yes	No
Bar et al. (2014)	R	MM	1	2014	2.1	Res	IT	gen	Pos	Light	t	None	No	comp	No	No
Barros et al. (2005)	R	IA	415	2005	4.1	Func	IT	gen	Pos	Full	t	None	No	comp	Yes	No
Barros & Julio (2011)	R, I	IA	25	2011	9	Func	BA	gen	Pos	None	t ₁ , g	None	No	part	No	No
Bahn et al. (2006)	R	IA	47	2006	1.2	Func	IT	gen	Pos	None	t ₁ , g, f	None	No	part	Yes	No
Bouhaker et al. (2014)	R	IA	3	2014	8.3	Func, Inf	BA	gen	Pos	None	t ₁ , g	Exkts, REA, BPMin	No	comp	Yes	No
Brabe & Bordbar (2006)	R	IA	20	2006	8.3	Func	BA, IT	gen	Pos	None	t	None	No	part	Yes	Yes
Brambilla et al. (2011)	R	IA	49	2011	4.3	Org	BA	gen	Pos	Light	t ₁ , g	Exkt, BPMin	Yes	comp	Yes	Yes
Buys et al. (2012)	R	IA	0	2012	7.2	Func	BA	gen	Pos	None	t ₁ , g	Exkts, BPMin	No	comp	No	No
Comuzzi & Angellov (2015)	R	IA	0	2015	6.1	Func	BA, IT	gen	Pos	None	t ₁ , g	Exkts, CPN	No	comp	Yes	Yes
Dalman & Hübers (2015)	R	MM	0	2015	6.1	Func	BA	gen	Pos, ER	Light	t ₁ , g	New	No	part	No	No
Dietz (2003)	R	IA	33	2003	1.2	Func	BA	gen	Pos	Light	t ₁ , g	Exkts, CPN (plus spezielles GAP-Net)	No	comp	No	No
Döhring et al. (2010)	R, I	IA	19	2010	7.1	Func	BA	gen	Pos	Light	t ₁ , g	Exkts, BPMin	No	comp	No	Yes
Eigannal et al. (2014)	R, I	MM	23	2014	6.1	Func, Res	BA	gen	Pos, ER	Full	t, f	Exkts, LTL	Yes	comp	No	Yes
Erol & Neumann (2013)	R	MM	2	2013	7.1	Func	BA	gen	Pos	Light	t ₁ , g	Exkts, BPMin	No	comp	No	Yes
Falk et al. (2013)	R	S	2	2013	7.2	Func	BA	gen	Pos, ER	Full	t	None	No	part	Yes	No
Förster et al. (2006)	R	S	19	2006	5.2	Func	BA	gen	Pos	Light	t ₁ , g	Exkt, UML 2.0 Ads	No	comp	Yes	No
Förster (2006)	R	MM	29	2006	7.2	Func	BA	gen	Pos	Light	t ₁ , g	Exkts, ARIS Toolset	No	part	No	No
Ghovála & Sanyav (2013)	R	S	5	2013	7.2	Func, Inf	BA	gen	ER	Light	t ₁ , g	Exkts, BPMin	No	comp	No	No
Granel et al. (2008)	R	IA	56	2008	3	Func	BA, IT	gen	Pos	Light	t ₁ , g, f	Exkts, BPMin	No	comp	Yes	No
Gröner et al. (2012)	R	IA	35	2012	7.1	Func	BA	gen	Pos	Full	t ₁ , g, f	None	No	comp	Yes	No
Hagen & Grünh (2004)	R	MM	25	2004	5.1	Func	BA	gen	Pos	None	t ₁ , g	New	No	part	No	No
Havry (2005)	R	IA	471	2005	2.1, 4.1	Func, Inf	BA	gen	Pos	None	t ₁ , g	None	No	comp	No	No
Hicouli & Ayed (2009)	R	IA	5	2009	2.1	Res	IT	dom	Pos	Light	t ₁ , g	Exkt, UML	Yes	comp	Yes	Yes
Horita et al. (2014)	R	IA	1	2014	8.2	Func	BA	gen	Pos	None	t ₁ , g	Exkts, BPMin	Yes	part	No	No
Hsu et al. (2012)	R	IA	0	2012	5.2	Func, Org	BA	gen	Pos	Light	t ₁ , g	Exkts, BPMin	No	comp	Yes	No
Hsu & Wang (2010)	R	MM	1	2010	2.2	Org	BA	gen	Survey	Light	t	None	No	comp	No	No
Jung et al. (2004)	R	IA	50	2004	4.3	Func, Org	BA	gen	Pos	None	t ₁ , g	None	No	comp	No	Yes
Kablan (2005)	R	IA	17	2005	4.2	Func	BA	gen	Pos	Light	t ₁ , g	Exkts, BPMin	No	comp	No	No
Kang et al. (2014)	R	IA	1	2014	8.2	Func	BA	gen	Pos, ER	Light	t	None	No	comp	Yes	No
Kartseva et al. (2006)	R	IA	10	2006	6.1	Func	BA	gen	Pos	None	t ₁ , g, f	None	No	part	Yes	No
Kim et al. (2007)	R	IA	29	2007	7.1	Func	BA	gen	Pos	None	t ₁ , g, f	None	No	comp	Yes	Yes
Koschmider & Reijers (2013)	R	MM	17	2013	5.1	Func	BA	dom	Pos, ER	Full	t ₁ , g	None	No	comp	Yes	Yes
Kuhn & Karagannis (2005)	R	IA	8	2005	8.2	Func	BA, IT	gen	Pos	Full	t ₁ , g	Exkts, UML	No	comp	Yes	No
Lanz et al. (2012)	R	CS, S	58	2012	6.1	Func	BA	gen	Pos, ER	Full	t ₁ , g	None	No	comp	Yes	No
Lau & Grünh (2007)	R	IA	21	2007	1.2	Func	BA	gen	Pos	Full	t ₁ , g	Exkts, EPC	No	comp	No	No
Lee et al. (2010)	R	IA	4	2010	2.1	Func, Org	BA	gen	Pos	None	t ₁ , g, f	Exkts, condition modeling language	No	comp	Yes	No
Lerrier et al. (2010)	R	MM	85	2010	1.1	Func	IT	gen	PE	Full	t ₁ , g	Exkts, BPMin, Little-JIL, UML	No	comp	Yes	No
Lonchamp (1998)	R	IA	32	1998	4.3	Func, Inf	BA	gen	Pos	Light	t ₁ , g	New	No	comp	No	No
Makna (2009)	R	IA	0	2009	7.1	Func	BA	gen	Pos, ER	None	t	None	No	part	No	Yes
Moser et al. (2009)	R	IA	34	2009	1.2, 2.1	Func, Res	BA	gen	Pos	Full	t ₁ , g	Exkts, BPMin	No	part	No	No
Motching-Pitrik et al. (2002)	R	IA	9	2002	4.3	Func, Inf	BA	gen	Pos	Full	t ₁ , g	Exkts, UML AD	No	part	No	No
Mulyar & van der Aalst (2005)	R	IA	57	2005	1.2, 3	Func	BA	gen	Pos	Full	t ₁ , g	Exkts, CPN	Yes	comp	No	No
Murzak et al. (2006)	R	IA	17	2006	8.3	Func	BA	gen	Pos	None	t ₁ , g	None	No	comp	Yes	No
Niedermann et al. (2011)	R	IA	17	2011	7.2	Func	BA	gen	Pos	Light	t	None	No	part	No	No

Citation	Origin	MoC	Count	Year	Cat	View	IU	Scope	ToA	T	P	Notation	LD	EAD	I&G	TS
Norta & Grefen (2007)	R	IA	22	2007	4.3	Func	BA	gen	Pos	Full	t _g	Exts, Petri Net	No	comp	Yes	No
North & Marcel (2013)	R	IA	7	2013	8.1	Func	BA	gen	Pos	Full	t	None	No	comp	No	No
Nowak & Leymann (2013)	R	IA	7	2013	6.3	Func, Res	BA	gen	Pos	Full	t, g	New	No	comp	No	No
Onoda et al. (1999)	R	IA	28	1999	1.2	Func	IT	gen	Pos	None	t _g , f	New	Yes	comp	No	No
Ould (1995)	R	IA	814	1995	1.2	Func, Inf	BA	gen	Pos	Light	t, g	Exts, Role-Activity Diagrams	Yes	comp	Yes	No
Perez-Castillo et al. (2010)	R	IA	18	2010	8.2	Func	IT	gen	Pos	None	t	Exts, BPMN	Yes	comp	No	No
Ramachandran et al. (2006)	R	IA	6	2006	8.3	Func	BA	gen	Pos	None	t	None	No	comp	No	Yes
Reichert et al. (2002)	R	IA	5	2002	7.1	Func	BA	gen	Pos	None	t, g	Exts, ADDEPT	No	comp	No	Yes
Ritter (2014)	I	IA	3	2014	4.1	Func	IT	gen	Pos	None	t, g	Exts, BPMN	Yes	comp	No	Yes
Rittgen & Turowski (2002)	R	IA	1	2002	1.2	Func	BA	gen	Pos	None	t, g	Exts, EPC, UML AD	Yes	part	No	No
Russell et al. (2005a)	R	IA	269	2005	3	Inf	BA	gen	Pos	Full	t, g	None	No	comp	No	No
Russell et al. (2006a)	R	IA	629	2006	1.2	Func	BA	gen	Pos	Full	t, g	Exts, CPN	No	comp	No	No
Russell et al. (2006b)	R	IA	207	2006	1.2	Func	BA	gen	Pos	None	t, g	New	No	comp	No	No
Russell et al. (2005b)	R	IA	422	2005	2.1	Res	BA	gen	Pos	Full	t, g	None	No	comp	No	No
Sasa & Kripsper (2011)	I	MM	22	2011	5.1	Res	IT	gen	Pos	Light	t, g, f	Exts, ArchMate	No	comp	Yes	No
Schumm et al. (2011)	R	IA	32	2011	5.2	Func	BA	gen	Pos	None	t, g	Exts, BPMN	No	part	No	Yes
Schäfer et al. (2013)	R	MM	4	2013	6.1	Func	BA	gen	Pos	None	t, g, f	Exts, EPC	No	part	No	No
Schumm et al. (2010)	R	IA	42	2010	8.1	Func	BA	gen	Pos	Light	t, g, f	None	No	comp	Yes	No
Seffer et al. (2007)	R	IA	21	2007	1.2	Func	BA	gen	Pos	None	t	None	No	comp	No	No
Thom et al. (2009)	R	MM	63	2009	5.2	Func	BA	gen	Pos	Full	t, g	Exts, UML AD	No	comp	Yes	Yes
Tham et al. (2006)	R	IA	13	2006	5.1	Func, Inf	BA	gen	Pos	None	t, g	Exts, UML	No	part	Yes	No
Trcka et al. (2009)	R	IA	5	2009	1.1	Func, Inf	Re	gen	Survey	Light	t	Exts, Petri Net	No	comp	No	No
Treiken et al. (2012)	R	MM	30	2012	6.1	Func	BA	gen	Pos, ER	None	t	None	No	comp	No	No
Uronkarn & Senvongse (2015)	R	IA	0	2015	7.1	Func	BA	gen	Pos	Light	t	None	No	comp	Yes	No
van der Aalst et al. (2009)	R	IA	99	2009	4.1	Func	IT	gen	Pos	Light	t, g	Exts, Petri Net	No	comp	Yes	No
van Dijk (2003)	R	IA	30	2003	4.2	Func	BA	dom	Pos	Light	t, g	Exts, Petri Net	No	comp	Yes	No
van Dongen et al. (2006)	R	IA	76	2006	1.2	Func	BA	gen	Pos	Light	t, g, f	Exts, Petri Net, EPC	No	comp	No	Yes
Weber et al. (2008)	I	MM	454	2008	7.1	Func	BA	gen	Pos, ER	Full	t, g	Exts, BPMN	No	comp	Yes	No
Wu & Lin (2010)	R	IA	4	2010	1.2	Func	BA	gen	Pos	None	t, g	New	Yes	comp	No	Yes
Xu et al. (2011)	R	IA	1	2011	1.2	Func	BA	gen	Pos	Full	t, g	New	No	comp	No	No
Yildiz et al. (2009)	R	IA	29	2009	1.2, 3	Func, Inf	Re	dom	Pos	Full	t, g	Exts, BPMN	No	comp	No	No
Younes et al. (2012)	R	IA	4	2012	8.1	Func	BA	gen	Pos	Light	t, g	Exts, UML AD	Yes	comp	No	No
Yousfi et al. (2015)	R	IA	1	2015	7.1	Func, Org, Inf	BA	gen	Pos	Full	t, g	Exts, BPMN	No	comp	No	No
Zdravkovic & Kablan (2008)	R	IA	1	2008	6.1	Func	BA	gen	Pos	None	t	None	No	part	Yes	No
Zehlner (2013)	R	IA	11	2013	7.2	Func	BA	gen	Survey, ER	None	t, g	None	No	comp	No	No
Zhao et al. (2009)	R	IA	9	2009	8.3	Func	BA	gen	Pos	None	t, g	Exts, UML AD, BPPL	yes	comp	No	No
Zhu et al. (2014)	R	IA	10	2014	1.2	Func	BA	gen	Pos, ER	Full	t, g	Exts, BPMN	No	comp	Yes	No
Zimmermann & Döhning (2011)	I	IA	8	2011	7.1	Func	BA	gen	Pos	Full	t, g	Exts, BPMN	No	part	No	No

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