

Nicolas PRAT

Associate Professor

Department: Information Systems, Decision Sciences and Statistics
ESSEC Business School
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Country of origin: France

RESEARCH INTERESTS

Management of Information Systems

EDUCATION

- | | |
|------|---|
| 2012 | Accreditation to supervise research, Paris-Dauphine, PSL University, France |
| 1999 | PhD in Information Systems, Paris-Dauphine, PSL University, France |
| 1991 | Specialized Master in Information Systems, ESSEC Business School, France |
| 1990 | MSc in Management, ESSEC Business School, France |

EMPLOYMENT

Full-time academic positions

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|----------------|--|
| 2006 - Present | Associate Professor, ESSEC Business School, France |
| 1999 - 2006 | Assistant Professor, ESSEC Business School, France |

Other affiliations and appointments

- | | |
|----------------|--|
| 2020 - 2022 | Academic director / Pedagogical Head, ESSEC Business School, France |
| 2017 - 2019 | Pedagogical head of the information systems track, programme "Management & gestion des organisations" (executive education), ESSEC Business School, France |
| 2013 - 2017 | Academic director of the programme "Management of information systems" (executive education), ESSEC Business School, France |
| 2012 - Present | Head of the Information Systems Track, ESSEC Business School, France |
| 2007 - 2010 | Head of the department of Information systems and decision sciences, ESSEC Business School, France |
| 2005 - 2013 | Professor in charge at ESSEC of the Master in Research SID (Information and Decision Systems), in conjunction with University of Panthéon-Sorbonne and CNAM, ESSEC Business School, France |
| 1995 - 1999 | Lecturer, ESSEC Business School, France |
| 2015 - 2015 | Visiting researcher, University of Alicante, Spain |

2015 - 2015	Visiting researcher, MIT Sloan School of Management, United States of America
2014 - 2014	Visiting researcher, University of Alicante, Spain
2007 - 2007	Visiting researcher, MIT Sloan School of Management, United States of America
1999 - 1999	Lecturer, École Supérieure des Affaires (ESA), France

GRANTS AND HONORS

Awards and Honors

- 2013 Qualification to the function of full Professor in the French University system (Computer Science)

PUBLICATIONS

Journal Articles

- AKOKA, J., WATTIAU, I., PRAT, N. and STOREY, V.C. (2023). Knowledge contributions in design science research: Paths of knowledge types. *Decision Support Systems*, 166, pp. 113898.
- SANGUPAMBA MWILU, O., PRAT, N. and WATTIAU, I. (2023). A Taxonomy Development Method to Define the Vocabulary for Rule-Based Guidance in Complex Emerging Technologies. *Business and Information Systems Engineering*, In press.
- PRAT, N. (2019). Augmented analytics. *Business and Information Systems Engineering*, 61(3), pp. 375-380.
- SANGUPAMBA MWILU, O., WATTIAU, I. and PRAT, N. (2016). Design Science Research Contribution to Business Intelligence in the Cloud — a Systematic Literature Review. *Future Generation Computer Systems*, 63, pp. 108-122.
- PRAT, N., WATTIAU, I. and AKOKA, J. (2015). A Taxonomy of Evaluation Methods for Information Systems Artifacts. *Journal of Management Information Systems*, 32(3), pp. 229-267.
- PRAT, N., AKOKA, J. and WATTIAU, I. (2012). An MDA Approach to Knowledge Engineering. *Expert Systems with Applications*, 39(12), pp. 10420-10437.
- PRAT, N. (2012). Teaching Information Systems with Cases: An Exploratory Study. *Journal of Computer Information Systems*, 52(3), pp. 71-81.
- PRAT, N., WATTIAU, I. and AKOKA, J. (2011). Combining Objects with Rules to Represent Aggregation Knowledge in Data Warehouse and OLAP Systems. *Data and Knowledge Engineering*, 70(8), pp. 732-752.
- PRAT, N., AKOKA, J. and COMYN-WATTIAU, I. (2006). A UML-based Data Warehouse Design Method. *Decision Support Systems*, 42(3), pp. 1449-1473.
- AKOKA, J. and PRAT, N. (1997). Modélisation logique des données dans les systèmes multidimensionnels d'aide à la décision: la méthode MAP. *Journal of Decision Systems*, 6(2), pp. 95-115.

Books and book editor

- COMYN-WATTIAU, I., DU MOUZA, C. and PRAT, N. [Eds] (2016). *Ingénierie et management des systèmes d'information - Mélanges en l'honneur de Jacky Akoka*. Cépaduès Éditions, 349 pages.

Book chapters

- PRAT, N. (2016). Modeling and Preparing Data in Self-Service Business Intelligence. In: COMYN-WATTIAU I., DU MOUZA C., PRAT N. eds. *Ingénierie et management des systèmes d'information - Mélanges en l'honneur de Jacky Akoka*. 1st ed. Cépaduès Éditions, pp. 5-18.
- PRAT, N. (2014). Management des systèmes d'information. In: DUFOUR B. (ed.). *MBA. L'essentiel du management par les meilleurs professeurs*. 3 ed. Eyrolles, pp. 321 – 341.
- PRAT, N. (2011). A Hierarchical Model for Knowledge Management. In: SCHWARTZ D. (ed.). *Encyclopedia of Knowledge Management*. 2 ed. Idea Group Reference, pp. 376-388.
- PRAT, N. (2006). A Hierarchical Model for Knowledge Management. In: SCHWARTZ D. (ed.). *Encyclopedia of Knowledge Management*. 1st ed. Idea Group Reference, pp. 211-220.
- ZAMFIROIU, M. and PRAT, N. (2001). Traçabilité du processus de conception des systèmes d'information. In: CAUVET C., ROSENTHAL-SABROUX C. eds. *Ingénierie des systèmes d'information*. 1st ed. Hermès Sciences, Lavoisier, pp. 245-276.
- PRAT, N. (2000). STEP PC: A Generic Tool for Design Knowledge Capture and Reuse. In: ROY R. (ed.). *Industrial Knowledge Management: A Micro-level Approach*. 1st ed. Springer, pp. 317-334.

Conference proceedings

- AKOKA, J., WATTIAU, I., PRAT, N. and STOREY, V.C. (2023). The journey of conceptual modeling: Paths from the past to present with trajectories for the future. In: *CEUR Workshop Proceedings (CEUR-WS.org)*. CEUR-WS.org, pp. 1-21.
- PRAT, N., AKOKA, J., WATTIAU, I. and STOREY, V.C. (2022). A Granular View of Knowledge Development in Design Science Research. In: *The Transdisciplinary Reach of Design Science Research - 17th International Conference on Design Science Research in Information Systems and Technology (DESRIST 2022)*. Springer, pp. 363-375.
- PRAT, N. (2021). What Are They Talking about? Relation Extraction from News to Identify Research Directions in Emerging Technologies. In: *54th Hawaii International Conference on System Sciences (HICSS-54)*. Online: IEEE Computer Society, pp. 5449-5458.
- AKOKA, J., WATTIAU, I., DU MOUZA, C. and PRAT, N. (2021). Mapping Multidimensional Schemas to Property Graph Models. In: *Advances in Conceptual Modeling - ER 2021 Workshop Proceedings - Conceptual Modeling for NoSQL Data Stores (CoMoNoS)*. St John's: Springer, pp. 3-14.
- AKOKA, J., COMYN-WATTIAU, I., DU MOUZA, C. and PRAT, N. (2019). Design science research for the humanities – The case of prosopography. In: *14th International Conference on Design Science Research in Information Systems and Technology (DESRIST 2019)*. Worcester, MA: Springer International Publishing, pp. 239-253.
- HEVNER, A.R., PRAT, N., COMYN-WATTIAU, I. and AKOKA, J. (2018). A Pragmatic Approach for Identifying and Managing Design Science Research Goals and Evaluation Criteria. In: : AIS SIGPRAG 6th Pre-ICIS Workshop "Practice-based Design and Innovation of Digital Artifacts". San Francisco: Association for Information Systems (AIS), pp. 1-15.
- PRAT, N. (2018). Blockchain Analytics: A Descriptive Review. In: *Proceedings of the AIM Pre-ICIS 2018 "Convergence des TI"*. San Francisco: Association Information et Management (AIM), pp. 1-10.

AKOKA, J., COMYN-WATTIAU, I., PRAT, N. and STOREY, V.C. (2017). Evaluating Knowledge Types in Design Science Research: An Integrated Framework. In: *Designing the Digital Transformation. 12th International Conference on Design Science Research in Information Systems and Technology (DESRIST 2017) Proceedings*. Karlsruhe: Springer International Publishing, pp. 201-217.

AKOKA, J., COMYN-WATTIAU, I. and PRAT, N. (2017). A four V's design approach of NoSQL graph databases. In: *Advances in Conceptual Modeling - Proceedings of ER 2017 Workshops, 6th International Workshop on Modeling and Management of Big Data (MoBiD 2017)*. Valencia: Springer, pp. 58-68.

AKOKA, J., COMYN-WATTIAU, I. and PRAT, N. (2016). The Structure of DSR Knowledge as Reflected by DESRIST: A Citation Analysis. In: *11th International Conference on Design Science Research in Information Systems & Technology (DESRIST 2016)*. St. John: Springer, pp. 177-185.

SANGUPAMBA MWILU, O., PRAT, N. and COMYN-WATTIAU, I. (2015). Taxonomy Development for Complex Emerging Technologies - The Case of Business Intelligence and Analytics on the Cloud. In: *19th Pacific Asia Conference on Information Systems (PACIS 2015) Proceedings*. Singapore: Association for Information Systems (AIS), pp. 1-16.

PRAT, N., COMYN-WATTIAU, I. and AKOKA, J. (2014). Artifact evaluation in information systems design-science research - a holistic view. In: *18th Pacific Asia Conference on Information Systems (PACIS 2014)*. Chengdu: Southwestern University of Finance and Economics (SWUFE), pp. 1-17.

SANGUPAMBA MWILU, O., PRAT, N. and COMYN-WATTIAU, I. (2014). Business Intelligence and Big Data in the Cloud: Opportunities for Design-Science Researchers. In: *Advances in Conceptual Modeling - Proceedings of ER 2014 Workshops, 2nd International Workshop on Modeling and Management of Big Data (MoBiD 2014)*. Atlanta: Springer, pp. 75-84.

PRAT, N. (2013). Goal Formalisation and Classification for Requirements Engineering, Fifteen Years Later. In: *Proceedings of 7th IEEE International Conference on Research Challenges in Information Science (RCIS)*. Paris: IEEE Xplore, pp. 1-12.

PRAT, N., MEGDICHE, I. and AKOKA, J. (2012). Multidimensional Models Meet the Semantic Web: Defining and Reasoning on OWL-DL Ontologies for OLAP. In: *15th International Workshop on Data Warehousing and OLAP (DOLAP 2012)*. Maui, Hawaii: Association for Computing Machinery (ACM), pp. 17-24.

PRAT, N., AKOKA, J. and COMYN-WATTIAU, I. (2012). Transforming Multidimensional Models into OWL-DL Ontologies. In: *6th International Conference on Research Challenges in Information Science (RCIS 2012)*. Valencia: Institute of Electrical and Electronics Engineers (IEEE), pp. 1-12.

PRAT, N., AKOKA, J. and COMYN-WATTIAU, I. (2011). Mapping CommonKADS Knowledge Models into PRR. In: *Proceedings of 23rd International Conference on Software Engineering and Knowledge Engineering (SEKE 2011)*. Miami: Knowledge Systems Institute Graduate School, pp. 143-148.

PRAT, N. (2010). Evaluating the impact of different case-based teaching approaches on students' implication and learning - an empirical study in an IS/IT management course. In: *15ème Colloque de l'AIM (AIM 2010)*. La Rochelle: Association Information et Management (AIM), pp. 1-11.

PRAT, N., COMYN-WATTIAU, I. and AKOKA, J. (2010). Representation of Aggregation Knowledge in OLAP Systems. In: *18th European Conference on Information Systems (ECIS 2010)*. Pretoria: University of Pretoria, pp. 1-12.

PRAT, N. and MADNICK, S. (2008). Measuring Data Believability: A Provenance Approach. In: *Proceedings of the 41st Hawaii International Conference on System Sciences (HICSS-41)*. Waikoloa: Institute of Electrical and Electronics Engineers (IEEE), pp. 1-10.

PRAT, N. and MADNICK, S. (2007). Evaluating and Aggregating Data Believability across Quality Sub-dimensions and Data Lineage. In: *Proceedings of the 17th International Workshop on Information Technologies and Systems (WITS 2007)*. Montreal: Financial Management Association (FMA), pp. 170-176.

THIELE, O., KNAPP, H., SCHADER, M. and PRAT, N. (2007). MOBILEAUDIT - A Tool for Contextual Knowledge Management. In: *Proceedings of the Winsys 2007 Conference: International Conference on Wireless Information Networks and Systems*. Barcelona: Institute for Systems and Technologies of Information, Control and Communication (INSTICC), pp. 232-237.

THIELE, O., KNAPP, H., SCHADER, M. and PRAT, N. (2006). A Context-aware Architecture for Mobile Knowledge Management. In: *Proceedings of the International Conference on Wireless Information Networks and Systems (WINSYS 2006)*. Setúbal: Institute for Systems and Technologies of Information, Control and Communication (INSTICC).

PRAT, N. (2006). A Goal-based Approach to Semantic Web Services. In: *Proceedings of the 5th French Affiliated AIM Pre-ICIS Workshop: A Management Perspective on Web Services*. Milwaukee: UWM (University of Wisconsin at Milwaukee), pp. 26-32.

RATSIMANOHATRA, A., PRAT, N. and SCHADER, M. (2006). A Topic Maps-based Architecture for Mobile knowledge Management. In: *Proceedings of the IADIS International Conference WWW/Internet 2006*. Murcia: IADIS, pp. 266-271.

PRAT, N. and ZACKLAD, M. (2006). Analyse des dépendances entre fragments documentaires pour le management des communautés d'action médiatisées. In: *11ème Colloque de l'AIM (AIM 2006)*. Luxembourg: Association Information et Management (AIM), pp. 1-17.

PRAT, N. and ZACKLAD, M. (2006). Analysing Dependencies between Documentary Fragments for the Management of Mediated Communities of Action. In: *Proceedings of the 11th International Conference of the Association Information and Management (AIM): Information Systems and Collaboration: State of the Art and Perspectives*. GI-Edition, pp. 386-401.

DEMIGHA, S. and PRAT, N. (2004). A Cased-based Training System in Radiology-senology. In: *International Conference on Information and Communication Technologies: From Theory to Applications. ICTTA'04 Proceedings*. Damascus: Institute of Electrical and Electronics Engineers (IEEE), pp. 1-6.

SI-SAID CHERFI, S. and PRAT, N. (2003). Multidimensional Schema Quality: Assessing and Balancing Analyzability and Simplicity. In: *International Workshop on Conceptual Modeling Quality (IWCMQ 2003) in Conjunction with the 22nd International Conference on Conceptual Modeling (ER 2003): Conceptual Modeling for Novel Application Domains*. Chicago: Springer, pp. 140-151.

PRAT, N. and SI-SAID CHERFI, S. (2003). Multidimensional Schemas Quality Assessment. In: *Information Systems for a Connected Society (CAiSE'03 Workshops)*. Klagenfurt/Velden: University of Maribor Press (Slovenia), pp. 341-352.

RAMSAMY-PRAT, P. and PRAT, N. (2002). Contribution of the Theories of Individual Learning to an Integrated Knowledge Management Framework: Application to IT-supported Knowledge Management. In: *3rd European Conference on Knowledge Management (ECKM 2002)*. Dublin: MCIL, pp. 563-574.

PRAT, N. and AKOKA, J. (2002). From UML to ROLAP Multidimensional Databases Using a Pivot Model. In: *18èmes Journées Bases de Données Avancées (BDA 2002)*. Evry: INT, pp. 171-195.

PRAT, N. (2002). Management des connaissances : un cadre intégrateur pour combiner les approches systèmes d'information, management et intelligence artificielle. In: *7ème Colloque de l'AIM (AIM 2002)*. Hammamet: Association Tunisienne des Sciences de Gestion (ATSG), pp. 1-10.

PRAT, N. (2001). Automating Knowledge Indexing and Retrieval in Soft Domains. In: *Second European Conference on Knowledge Management (ECKM 2001) Proceedings*. MCIL, pp. 475-486.

AKOKA, J., COMYN-WATTIAU, I. and PRAT, N. (2001). Dimension Hierarchies Design from UML Generalizations and Aggregations. In: *20th International Conference on Conceptual Modeling (ER 2001): Conceptual Modeling-ER 2001*. Berlin: Springer, pp. 442-455.

PRAT, N. (2000). Applying Case-based Reasoning in a Design Environment: Issues and Lessons Learned. In: *Machine Learning in Design Workshop (MLinD 2000), 6th International Conference on Artificial Intelligence in Design (AID 2000)*. Worcester Polytechnic Institute, pp. 33-41.

PRAT, N. (1999). Aide au processus de BPR : Une approche fondée sur le raisonnement par cas. In: *4ème Colloque de l'AIM (AIM 1999)*. Cergy Pontoise: ESSEC Business School, pp. 211-227.

PRAT, N. (1997). Goal formalisation and classification for requirements engineering. In: *Proc. of the 3rd International Workshop on Requirements Engineering : Foundations of Software Quality (REFSQ'97)*. Barcelona: Presses universitaires Namur.

AKOKA, J., COMYN-WATTIAU, I. and PRAT, N. (1993). INFAUDITOR : An Expert System for Information Systems Auditing. In: *Artificial Intelligence Technology Applications and Management (ICC 1993)*. McGraw-Hill, pp. 402-409.

Conferences

PRAT, N. (2023). The Impact of Generative AI on Business Intelligence (présenté dans la session "TREO talks"). In: 2023 International Conference on Information Systems (ICIS). Hyderabad.

Working Papers

PRAT, N., COMYN-WATTIAU, I. and AKOKA, J. (2009). *Combining Objects with Rules to Represent Aggregation Knowledge in Data Warehouse and OLAP Systems*. DR-09014, ESSEC Business School.

AKOKA, J., COMYN-WATTIAU, I. and PRAT, N. (2001). *From UML to ROLAP Multidimensional Databases Using a Pivot Model*. DR-01021, ESSEC Business School.

PRAT, N. (1996). *Using machine learning techniques to improve information systems development methods*.

Press

PRAT, N. (2018). Fonctionnement, transactions, enjeux: tout ce qu'il faut savoir sur la blockchain, vidéo ESSEC-Challenges. *Challenges*.

PRAT, N. (2018). Intelligence artificielle : 3 raisons de vous y intéresser. *Courrier Cadres*.

PRAT, N. (2018). Aprovechar la revolución de la IA en la analítica de datos. *Mundo Empresarial*.

OTHER RESEARCH ACTIVITIES

Editorial Board Membership

Since 2013 Journal of Database Management

Organisation of a conference

2008 Local arrangements chair, 18th Workshop on Information Technologies and Systems (WITS 2008), Paris, France

PhD Supervision

2005 S. Demigha (Université Paris 1 Panthéon-Sorbonne), Thesis co-director

Other research activities

- 2005 Member of Program Committees - International Workshop on Quality of Information Systems (QoIS2005) in conjunction with the 24th International Conference on Conceptual Modeling (ER2005), Klagenfurt,, Austria
- 2004 3rd Colloquium Pre-ICIS of the AIM (Association Information et Management), Washington D.C, United States of America
- 2004 Member of Program Committees, 9th colloquium of the AIM, INT, Evry,, France
- 2003 Member of the Program Committee: Decision Systems Engineering Workshop (DSE'03) in conjunction with the 15th Conference on Advanced Information Systems Engineering (CAiSE'03), Klagenfurt/Velden, Austria
- 2002 Member of the Program Committee, 1st Colloquium Pre-ICIS de l'AIM, Barcelone, Spain

PROFESSIONAL ACTIVITIES

Consulting

- 2003 Expert for the Réseau National de recherche et d'innovation en Technologies Logicielles (RNTL), created by the Ministères de l'Industrie et de la Recherche.