CURRICULUM VITAE (CVA)

Part A. PERSONAL INFORMATION

	CV date	January 2023

First name	Adela		
Family name	del Río Ortega		

(*) Mandatory

A.1. Current Position

Position	Prof. Titular de Universidad		
Initial date	27/05/2021		
Institution	Universidad de Sevilla		
Departament/Center	Lenguajes y Sistemas Informáticos. ETS. Ing. Informática		
Country	Spain		
Key words	Business Process Management, Information Systems Engineering		

A.2. Previous Positions (including research activity interruptions)

Period	Position/Institution/Country/Interruption cause
2019-2021	Prof. Contratado Doctor/ Univ. Sevilla / Spain
05/2018-12/2018	Prof. Ayudante Doctor/ Univ. Sevilla / Spain/ **Childbirth**
2016-2019	Prof. Ayudante Doctor/ Univ. Sevilla / Spain
2015-2016	Prof. Sustituto Interino/ Univ. Sevilla / Spain
12/2013-05/2014	Prof. Sustituto Interino Asimilado a asociado/ Univ. Sevilla / Spain / **Childbirth**
2013-2015	Prof. Sustituto Interino Asimilado a asociado/ Univ. Sevilla / Spain
03/2013-10/2013	Becaria Postdoctoral Excelencia/ Univ. Sevilla / Spain
03/2011-09/2011	Becaria Personal Investigador en Formación/ Univ. Sevilla / Spain/ **Childbirth**
2008-2012	Becaria Personal Investigador en Formación/ Univ. Sevilla / Spain

A.3. Education

Degree, PhD	University/ Country	Year
Doctor Ing. Informática	Universidad de Sevilla	2012
MSc. Ingeniería y Tecnología del Software	Universidad de Sevilla	2008
Ingeniero en Informática	Universidad de Sevilla	2007

Part B. CV SUMMARY

Adela del Río has 15 years of experience as full time researcher and lecturer (PDI) at University of Seville (US). Software Engineer in 2007 by the University of Seville with a course in the Humboldt University of Berlin, she obtained her international PhD from US in 2012. She is currently Prof. Titular de Universidad at US, a member of the Unit of Excellence "Smart Computer systems Research and Engineering" of the US, and a researcher of the "Applied Software Engineering" group. She was granted a 4-year training scholarship for research staff and a subsequent one-year postdoctoral contract.

With her PhD thesis, she opened in her group the research line of business process management (BPM), of whose flagship conference (BPM) she is an established senior program committee member and was

the PC-Chair of last year edition (2022). Her research is mainly focused on the performance perspective of business processes. During her thesis, she worked on the definition and automatic analysis of process performance indicators (PPIs). Specifically, the main contributions of her thesis were: 1) a metamodel to define PPIs; 2) 2 notations for the definition of PPIs, a textual one based on templates and linguistic patterns, and another graphic one to model PPIs together with BPMN; 3) A set of operations of automatic analysis of PPIs using descriptive logic; and 4) tools to support the definition, analysis and calculation of PPIs. These seminal works led her to become an international reference on process performance management and she is the leading author of the guest entry on Process Performance Measurement of the Encyclopedia of Big Data Technologies published by Springer. Upon completion of her PhD, she broadened her research interests to other aspects including applying natural language processing and machine learning techniques to automate the measurement of process performance, Knowledge intensive processes, decision management in BPM, effective visualization of PPIs, workstream collaboration tools, Robotic Process Automation and conversational agents to support BPM in different ways.

She has published in journals like BISE, IS, or ACM Transactions on Internet Technology and in conferences like: CAiSE, CoopIS, BPM or HICSS, being first author of +40% of her publications. According to Google Scholar she has 733 citations, an H index of 13 and an i-10 index of 19. Her seminal work on the definition of PPIs published at CoopIS has 108 citations, and its extension published in Inf. Systems has 162 citations. According to SCOPUS, between 2016 and 2021, 44,4% of her publications are international collaborations and 16,7% of her publications are in top 10% of most cited publications worlwide and her field-weighted citation impact in the last five years is 1.50. She has been recognized one research *sexenio* (2010-2016) and has the necessary merits to obtain a second one.

Her research experience has been complemented with four stays (13 months in total) with researchers of great relevance in the BPM area like Pr Mathias Weske (HPI Potsdam), Pr Hajo Reijers (VU Amsterdam), Pr Flavia Santoro (UNIRIO) anf Pr Félix García (UCLM). She has been awarded with a Visiting Professor Grant to spend one month this year in the Sapienza University of Rome with Pr A. Marella and M. Mecella. She has collaborated with more than 50 national and international researchers through joint publications, joint project proposals, research stays and event organisation. As a result of an eminently applied research, she has developed 2 registered software tools, PPINOT, for the automatic management of PPIs, and CRISTAL, for the automatic management of resource allocation in BPs. Both have been taken to the business environment, generating a value of 60k euros estimated by companies participating in R&D contracts. Noteworthy is the project successfully completed with Accenture to support the Horizontal Processes area of the Andalusian Health Service; and the collaboration with the Dutch startup company Cupenya[1] in the development of a collaborative platform for defining PPIs presented at BPM 2014.

Adela has participated in more than 10 national and international projects and is Principal Investigator of a national project. Two European projects also stand out: S-CUBE (FP-7), which gave rise to her research in PPIs; and RISE-BPM (H2020), of which she was local coordinator. She is also the contact person from University of Seville in the international network ERCIS (European Research Center for Information Systems).

Adela has supervised one PhD and is currently supervising one more student. She has been a PC member in more than 25 research events including reference international conferences like BPM or CAiSE. She was also workshop chair of BPM 2020 and is PC chair of BPM 2022, one of the leading conferences in the area of Information Systems. She was awarded the Best Reviewer Award of CAiSE 2021. She is a regular reviewer of several top-tier JCR journals like BISE, Computing, Inf. Systs., ACM ToIT, EIS or KNOSYS. She has served as an evaluator for the National Agency of Research and Innovation of Uruguay and for the National Agency of Scientific and Technological Promotion of Argentina in 2017, 2019 and 2021.

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[1] Unfortunately, Cupenya, which implemented business analytics software, was sold to another company and does not exist anymore.

Part C. RELEVANT MERITS *(sorted by typology)*
C.1. Publications in Journals

1. M. Röglinger, R. Plattfaut, V. Borghoff, […], Peter Trkman: Exogenous Shocks and Business Process Management: A Scholars' Perspective on Challenges and Opportunities. Bus. Inf. Syst. Eng. Accepted for publication (2022). [Authors sorted alphabetically after the core team. <u>Position 9/13</u>]. Collaboration of more than 10 institutions.
2. B. Estrada-Torres, <u>A. del-Río-Ortega</u>, M. Resinas, A. Ruiz-Cortés: Modeling Variability in the Performance Perspective of Business Processes. IEEE Access 9: 111683-111703 (2021).
3. D. Beverungen, J. C. A. M. Buijs, J. Becker, […], Verena Wolf: Seven Paradoxes of Business Process Management in a Hyper-Connected World. Bus. Inf. Syst. Eng. 63(2): 145-156 (2021) [Authors sorted alphabetically. <u>Position 17/24</u>]. Collaboration of more than 10 institutions.
4. J. Troya, J. A. Parejo, S. Segura, A. Gamez-Diaz, A. E. Márquez Chamorro, <u>A. del-Río-Ortega</u>: Flipping Laboratory Sessions in a Computer Science Course: An Experience Report. IEEE Trans. Educ. 64(2): 139-146 (2021).
5. A. E. Márquez Chamorro, K. Revoredo, M. Resinas, <u>A. del-Río-Ortega</u>, F. M. Santoro, A. Ruiz-Cortés: Context-Aware Process Performance Indicator Prediction. IEEE Access 8: 222050-222063 (2020)
6. <u>A. del-Río-Ortega</u>, M. Resinas, A. Durán, B. Bernárdez, A. Ruiz-Cortés, M. Toro: Visual ppinot: A Graphical Notation for Process Performance Indicators. Bus. Inf. Syst. Eng. 61(2): 137-161 (2019).
7. B. Estrada-Torres, P.H. Piccoli Richetti, <u>A. del-Río-Ortega</u>, F. Araujo Baião, M. Resinas, F.M. Santoro, A. Ruiz-Cortés: Measuring Performance in Knowledge-intensive Processes. ACM Trans. Internet Techn. 19(1): 15:1-15:26 (2019)
8. H. van der Aa, H. Leopold, <u>A. del-Río-Ortega</u>, M. Resinas, H.A. Reijers: Transforming unstructured natural language descriptions into measurable process performance indicators using Hidden Markov Models. Inf. Syst. 71: 27-39 (2017)
9. <u>A. del-Río-Ortega</u>, M. Resinas, A. Durán, and A. Ruiz-Cortés. "Using templates and linguistic patterns to define process performance indicators". Enterprise Inf. Syst. 2016. 10(2): 159-192.
10. C. Cabanillas, M. Resinas, <u>A. del-Río-Ortega</u>, A. Ruiz Cortés: Specification and automated design-time analysis of the business process human resource perspective. Inf. Syst. 52: 55-82 (2015)
11. <u>A. del-Río-Ortega</u>, M. Resinas, C. Cabanillas, A. Ruiz Cortés: On the definition and design-time analysis of process performance indicators. Inf. Syst. 38(4): 470-490 (2013)

C.2. International Conferences
1. J. Peña, A. Bravo, <u>A. del-Río-Ortega</u>, M. Resinas, A. Ruiz-Cortés: Design Patterns for Board-Based Collaborative Work Management Tools. CAiSE 2021: 177-192
2. <u>A. del-Río-Ortega</u>, J. Peña, M. Resinas, A. Ruiz-Cortés: Productivity Challenges in Digital Transformation and its Implications for Workstream Collaboration Tools. HICSS 2021: 1-10
3. Ü. Aksu, <u>A. del-Río-Ortega</u>, M. Resinas, H. A. Reijers: An Approach for the Automated Generation of Engaging Dashboards. OTM Conferences 2019: 363-384
4. B. Estrada-Torres, <u>A. del-Río-Ortega</u>, M. Resinas, A. Ruiz-Cortés: On the Relationships Between Decision Management and Performance Measurement. CAiSE 2018: 311-326
5. <u>A. del-Río-Ortega</u>, F. García, M. Resinas, E. Weber, F. Ruiz, A. Ruiz-Cortés. "Enriching Decision Making with Data-Based Thresholds of Process-Related KPIs". CAiSE 2017. 193-209.
6. H. van der Aa, <u>A.del-Río-Ortega</u>, M. Resinas, H. Leopold, A. Ruiz-Cortés, J. Mendling, H. A. Reijers: Narrowing the Business-IT Gap in Process Performance Measurement. CAiSE 2016: 543-557
7. <u>A. del-Río-Ortega</u>, A.M. Gutiérrez, A. Durán, M. Resinas, A. Ruiz-Cortés: Modelling Service Level Agreements for Business Process Outsourcing Services. CAiSE 2015: 485-500
8. <u>A. del-Río-Ortega</u>, M. Resinas, A. Durán, A. Ruiz-Cortés: Defining Process Performance Indicators by Using Templates and Patterns. BPM 2012: 223-228
9. <u>A. del-Río-Ortega</u>, M. Resinas, A. Ruiz-Cortés: Defining Process Performance Indicators: An Ontological Approach. OTM Conferences (1) 2010: 555-572

C.3. Research Projects

1. ORCHID: Digital Transformation of the Public Administration Driven by Intelligent Contracts. *Proyectos de Transición Ecológica Y Transición Digital 2021*. 01/12/2022-30/11/2024. 219.075€ PI: Manuel Resinas and Adela de Río Ortega. Part of project LOTUS.
2. MEMENTO. Herramientas software para la colaboración y toma de decisiones en procesos basados en el conocimiento (US-1381595). *Proyectos de I+D+i en el marco del Programa Operativo FEDER Andalucía 2014-2020*. 01/1/21-31/12/22. 90.000€ IP: Manuel Resinas and Amador Durán. Participation as researcher.
3. EKIPMENT+. Mejora del rendimiento de procesos basados en conocimiento: Un enfoque empírico multidisciplinar basado en personas, equipos, software y datos (P18-FR-2895). *Proyectos frontera. Conserjería de Conocimiento, Invstigación y Universidad (Junta de Andalucía)*. 01/01/20-31/12/22. 120.625€ IP: Manuel Resinas and Amador Durán. Participation as researcher.
4. OPHELIA. Optimisation of Human-based Knowledge-Intensive Services with Service-based Applications (RTI2018-101204-B-C22). *Proyectos I+D+i orientado a Retos de la sociedad*. 01/01/19-31/12/21. 147.136€ IP: Manuel Resinas and David Benavides. Part of project HAMLET. Participation as researcher.
5. RISE_BPM. Propelling Business Process Management by Research and Innovation Staff Exchange. *H2020 Marie Sklodowska-Curie Research and Innovation Staff Exchange*. 01/05/2014 – 01/05/2018. 855.000€(94.500€for Universidad de Sevilla). PI: Manuel Resinas and Antonio Ruiz. Participation as local coordinator.

C.4. Contracts, technological or transfer merits
Contracts

1. MARCOS: soporte en la investigación, desarrollo y soporte de arquitecturas MARCO orientadas a Servicios para el Servicio Andaluz de Salud. Funding organisation: ISOTROL. PIs: Sergio Segura y Pablo Fernández. 15/11/2015 - 15/05/2016 (6 months). 9,500€
2. PROSAS: Investigación y Desarrollo en el área de procesos de los Servicios Horizontales de Tecnologías de la Información y las Comunicaciones del Servicio Andaluz de Salud. Accenture. 23/02/2015 – 23/03/2016. 43.560€ PI: Manuel Resinas y Antonio Ruiz
3. BPCMS. Desarrollo e implantación de un sistema de gestión de la conformidad de procesos de negocio. ENEL ENERGY EUROPE. 15/02/2012- 30/09/2013. 60.000 € PI: Antonio Ruiz Cortés
4. Solución SaaS integral para el diagnóstico automático en lenguaje natural de problemas IT y resolución semi-automática de los mismos, en base a políticas de seguridad de cortafuegos. OPN – INNPACTO (Ministerio de Economía y Competitividad). 17/07/2012 – 31/12/2015. PI: Antonio Ruiz Cortés
5. URBANHEALTH. ICINETIC. 30/03/2011 – 15/11/2011. 8.260€ PI: Manuel Resinas

Registered tools.

Intellectual property on 2 software tools: PPINOT, for the management of PPIs and CRISTAL, for the management of human resources on business processes. They have been the core of Adela's participation in the different R&D contracts. Specifically, the cost of licensing and adaptation of these tools by 4 companies in R&D contracts amounts to more than 60,000€ PPINOT has been used to compute PPIs in service level agreements by the Andalusian Health Service. Also, it has been used with the same aim at the Consejería de Hacienda y Administraciones Públicas of la Junta de Andalucía. It is being used for teaching at the University of Tilburg (Holanda) and UNIST (Corea del Sur). CRISTAL has been the core of the solution delivered to the department of IT compliance at ENEL ENERGY EUROPE (before ENDESA) in the Project BPCMS. It has also been used in a technology transfer project performed by the WU Wien with Siemmens.

C.5 Profiles

Google Scholar: https://scholar.google.es/citations?user=Al0vo7sAAAAJ&hl=es
DBLP: http://dblp.uni-trier.de/pers/hd/d/del=R=iacute=o=Ortega:Adela
ResearchGate: https://www.researchgate.net/profile/Adela_Del-Rio-Ortega