BIOGRAPHY

Prof. Dr. Bertrand Loison has +25 years of experience in Management of Information Systems (MIS), mainly in the Public Sector. He is currently Vice Director-General and Head of Data Science & Statistical Methods Division at the Swiss Federal Statistical Office (SFSO), Swiss Representative to the UN Committee of Experts on Big Data and Data Science for Official Statistics, Member of the UNSC Global Data Science Leaders Network and Member of the International Advisory Committee for the UN Cloud Global Platform's Regional Hub in China. In addition, he was Member of the Singapore Department of Statistics Advisory Panel between 2020 and 2023 as well as Vice-Chair of the National Planning Committee eGovernment Switzerland between 2016 and 2021.

Currently, he heads the Data Science Competence Center (DSCC) that supports Swiss Federal Agencies to implement evidence-based decision-making processes based on Data Science and AI. In addition, he is responsible for the Swiss Confederation's Artificial Intelligence Competence Network (CNAI). Previously he was responsible for the National Registers Division (120 staff), Chief of the Corporate Data Management Section, and Chief Information Officer (CIO) after spending many years in the private sector as an Engineer. He also served as Reserve Officer for 30 years in the Swiss Army. He is now retired from the Army with the grade of Lt-Colonel.

Since September 2018, Bertrand has been an Honorary Professor of Management Information Systems at the University of Applied Sciences and Arts Western Switzerland (HES-SO), School of Management Arc, Institute for the Digitalization of Organisations (IDO). He is also Visiting Professor at the University of Navarra (ES), School of Economics and Business. His research interests are in Data Science for Public Policy.

Bertrand Loison earned his Bachelor's Degree in Engineering and a Post Graduate Diploma in Management from the University of Applied Science and Arts Western Switzerland. His MSc and Ph.D. in Management Sciences are from the University of Sorbonne Paris I (F). He also earned a Master of Public Administration (MPA) from the University of Lausanne (CH), a Post Graduate Diploma in Information Technology from the University of Fribourg (CH), a Post Graduate Diploma in Digital Excellence from IMD (CH), and a Post Graduate Diploma in Data Science from the Purdue University (US).

He is fluent in French, German, English and has basic knowledge of Italian.

HIGH LEVEL PANEL DISCUSSION

2024
International Seminar on Data Science for the Statistics and Transport Communitie (2024), Chair: Alison Baily (ONS, United Kingdom), Panel: Osama Rahman (Director, Data Science Campus, ONS, UK), Bertrand Loison (Director, Data Science Competency Center, FSO, Switzerland), Dominik Rozkrut (President, Statistics Poland), Mohammad Hasan (Director, FCSC, UAE), Fatin Ezzati Mohd Aris (Assistant Director, DOSM, Malaysia), Ivan Murenzi (Deputy Director General, NISR, Rwanda), [Panel What are the technology and cultural challenges of introducing Data Science and AI in the transformation of information systems for policy purposes], UN Statistics Division (UNSD), Federal Competitiveness and Statistics Centre (FCSC) of UAE, and Road and Transportation Authority (RTA) of Dubai, Dubai (UAE), January 22-24, 2024

2023
4th AI Policy Summit (2023), Chair: Collin van Noordt (Tallinn University of Technology), Panel: Marcel Salathé (EPFL), Bertrand Loison (Swiss Federal Statistics Office), Tawana Petty (Social Science Research Council, US), Pierre Rossel (Inspiring Futures), Lyria Bennett Moses (UNSW, Australia), [Panel AI in Government], ETHZ & RegHorizon, Zürich, November 3-4, 2023

2022
7th World Congress of the International Society of Business Economics and Ethics (ISBEE 2022), Chair: Tae Wan Kim (Carnegie Mellon University), Ignacio Ferrero (University of Navarra) and Alejo José G. Sison (University of Navarra), Panel: Christophe Lütge (Technical University of Munich), John Hooker (Carnegie Mellon University), Bertrand Loison (Swiss Federal Statistics Office), Derek Leben (Carnegie Mellon University), Panel Artificial Intelligence (AI) in Business, University of Deusto, University of the Basque Country, International Society of Business Economics and Ethics, Bilbao, Spain, July 20-22, 2022

2019
5th International Conference on Big Data for Official Statistics (2019), Chair: Dominik Rozkrut (Statistics Poland), Panel: Tom Smith (Data Science Campus ONS), Prof. Dr. Bertrand Loison, (Data innovation strategy), (Swiss Federal Statistical Office), Eduardo Barredo-Capelot (Data innovation in Eurostat), Tom Wilkinson, (DFID), Dr. Charles Lebon Mberi Kimpolo, (Director of AIMS Industry Initiative), Ms. Ibtissam Sahir, (GOPA), Panel Data Science and Capacity Development in Official Statistics, United Nations Global Working Group on Big Data for Official Statistics, Kigali, Rwanda, 2019

2018
16th IAOS Conference - Better Statistics for Better Lives (2018): Chair: Mariana Kotzeva (Eurostat), Panel: Prof. Dr. Bertrand Loison (Swiss Federal Statistical Office), Jinwoo Park (Statistics Korea), Eric Rancourt (Statistics Canada), Michail Skaliotis (Eurostat), Innovation challenges for official statistics, International Association for Official Statistics (IAOS) and the Organisation for Economic Cooperation and Development (OECD), Paris, 2018

INTERVIEWS

2022
B. LOISON (2022), A country aims for more artificial intelligence, Binary Dreams Online Magazine, Trivadis Part of Accenture, 2022

2021
B. LOISON (2021), Open day at the FSO, Canal Alpha Television, 2021

PUBLICATIONS

2023
B. LOISON & Alias (2023), Code of practice for a human-centric and trustworthy data science, Swiss Federal Administration, 2023

B. LOISON & Alias (2023), Concrete application cases and a code of practice for human-centric and trustworthy data science, Swiss Federal Administration, 2023

2022
B. LOISON & Alias (2022), Federal data science strategy, Swiss Federal Administration, 2022

B. LOISON (2022), Data Science for public good, Blog DSCC, Swiss Federal Statistical Office, Data Science for public good | Federal Statistical Office (admin.ch), 2022

2019
D. KUONEN, B. LOISON (2019), Production processes of official statistics and analytics processes augmented by trusted smart statistics: Friends or foes?, Statistical Journal of the IAOS, vol. 35, no. 4, pp. 615-622, 2019

2018
B. LOISON, D. KUONEN (2018), Are Current Frameworks in the Official Statistical Production Appropriate for the Usage of Big Data and Trusted Smart Statistics?, European Union, Eurostat, Director General of the National Statistical Institutes (DGINS) Conference, Bucharest, Romania, 2018

B. LOISON, (2018), Swiss Federal Statistical Office - Data Innovation Strategy, United Nations Statistical Commission, Wiesbaden Group Conference, Neuchâtel, Switzerland, 2018

B. LOISON, D. KUONEN (2018), Fiabilité des Big Data du point de vue des statistiques officielles, Bulletin Académie suisse des sciences humaines et sociales, ISSN 1420-6560, Berne, Switzerland, 2018

B. LOISON, S. BRENNER (2018), Data Governance as part of a new Swiss eGovernment Strategy?, BFH-Zentrum Digital Society, Berner Fachhochschule, Bern, 2018

2017
B. LOISON, D. KUONEN (2017), Data Innovation Strategy, No OFS 1788-1700, Swiss Federal Statistical Office (FSO), Neuchâtel, 2017

B. LOISON (2017), Registers Strategy, No OFS 1678-1700-05, Swiss Federal Statistical Office (FSO), Neuchâtel, 2017

2014
C. MACCHI, B. LOISON (2014), The use of quality procedures through the example of a statistic based on registers, Session 5: Multi-Source Data Production, European Conference on Quality in Official Statistics (Q2014), Vienna, Austria, 5 June 2014

2011
B. LOISON, P. I. YANEV, J-F. FRACHEBOUD (2011), SDMX: strategic and operational challenges for a national implementation, UNO - Economic and Social Council - Conference of European Statisticians, Geneva, Switzerland, 14 June 2011

2007
B. LOISON (2007), Conceptual Architecture of the Statistical Information System at the Swiss Federal Statistical Office, Joint UNECE/EUROSTAT/OECD Work Session on Statistical Metadata, 2007

2005
G.WEGMANN, J.REGEV, B. LOISON (2005), Business and IT Alignment with SEAMAA, INTEROP, (47 partenaires de 15 pays), Paris France, 29-30 August 2005

CONFERENCES/PRESENTATIONS

2023
B. LOISON (2023), Keynote Speaker at Graduation Ceremony (BSc and MSc) of the *Computer Science Centre, University of Geneva, Geneva, December 7, 2023*

B. LOISON (2023), Opening Speaker at Objectifs de Développement Durable (ODD) en Suisse avec une focalisation sur la science des données*, Unlocking the Power of Data Initiative, Geneva, December 7, 2023*

B. LOISON (2023), Geoinformationstag 2023*, Chair: Robert Balanche, Panel: Priska Haller (Kanton Zürich), Diego Kuonen (Universität Genf), Bertrand Loison Bundesamt für Statistik), Gerhard Schrotter (BFH), Fridolin Wicki (Swisstopo), Panel:* Sind Bund und Kantone bereit für Geodata Science?*, Swiss Federal Topography Swisstopo, Berne, October 5, 2023*

B. LOISON (2023), Transform 2023, Artificial intelligence in the public sector, AI in administration: applications and challenges today and tomorrow, Transform 2023, Federal Council, Berne, Mai 3, 2023

2022
B. LOISON (2022), Keynote Speaker at 7th International Conference on Big Data and Data Science for Official Statistics, Access to Relevant Data, Yogyakarta, Indonesia, November 7 – 11, 2022

B. LOISON (2022), National Research Programme 75 "Big Data" (NRP 75) – Big Data, Summer School Program 2022, Data Science and Artificial Intelligence: The current situation in the Federal Administration, University of Basel, Hochschwarzwald, Germany, June 24, 2022

2021
B. LOISON, C. CHOIRAT (2021), Conference Swiss Digital Day 2021, Do you speak data?, 9 November 2021, Lausanne, 2021

B. LOISON (2021), University of Geneva's Data Science Day, Conference Data Science for Public Good & SDGs, September 16, 2021, Geneva, Switzerland, 2021

B. LOISON (2021), Conference (Webinar) organized by DANE & Cepei & Swiss Confederation, The use of non-traditional data sources for Official Statistics in the Latin American and Caribbean Region, June 24, 2021| 12:30h to 14:00h (GMT-5), Bogota, 2021

B. LOISON (2021), Conference (Webinar) Data Science for Official Statistics organized by United Nations & Facebook AI & Data Science Campus (UK)& Openmined, Data Science Competence Centre throughout the Swiss government, June 39, 2021 | 16:00h to 18:00h (CEST), New-York, 2021

2020
B. LOISON (2020), Keynote Speaker at 7th Swiss Conference on Data Science - SDS2020, New Paradigm for Compiling Official Statistics – Data Innovation, Online (Luzern KKL before Covid-19), Switzerland, 2020

B. LOISON (2020), Round Table E-Government Swiss Confederation, FSO's Data Science Competence Center, Bern, Switzerland, 2020

B. LOISON (2020), Keynote Speaker at 7th Swiss Conference on Data Science - SDS2020, New Paradigm for Compiling Official Statistics – Data Innovation, Online (Luzern KKL before Covid-19), Switzerland, 2020

2019
B. LOISON (2019), Symposium Data Science and Official Statistics, 62nd ISI World Statistics Congress, New Paradigm for Compiling Official Statistics – Data Innovation, Kuala Lumpur, Malaysia, 2019

B. LOISON (2019), 67th plenary session of the Conference of European Statisticians, The United Nations Economic Commission for Europe (UNECE), Chair of session Accessing new data sources, https://www.unece.org/index.php?id=48575, 26 - 28 June 2019, OECD, Paris,2019.

B. LOISON (2019), 5th International Conference on Big Data for Official Statistics - Seminar, New Paradigm For Compiling Official Statistics - Data Innovation, United Nations Global Working Group on Big Data for Official Statistics, Kigali, Rwanda, 2019

2018
B. LOISON, D. KUONEN (2018), Are Current Frameworks in the Official Statistical Production Appropriate for the Usage of Big Data and Trusted Smart Statistics?, European Union, Eurostat, Director General of the National

Statistical Institutes (DGINS) Conference, Bucharest, Romania, 2018, 10-11 October 2018

B. LOISON, (2018), Swiss Federal Statistical Office - Data Innovation Strategy, United Nations Statistical Commission, Wiesbaden Group Conference, Neuchâtel, Switzerland, 2018

B. LOISON, (2018), Les +40 ans en Suisse – point de vue de la statistique publique, FHSuisse, Fribourg, Switzerland, 2018

2017
B. LOISON (2017), « The SFSO Data Innovation Strategy », Swiss Days of Official Statistics, Frauenfeld, Switzerland, 21-22 November 2017

B. LOISON (2017), « Numérisation des administrations publiques », Brown Bag, Neuchâtel, Switzerland, 27 September 2017

2015
B. LOISON (2015), Workshop « Nationale Dateninfrastruktur », Konferenz Opendata.ch/2015, Bern, Switzerland, 20 Juli 2015

B. LOISON (2015), « La poursuite de la cyberadministration suisse dès 2016 », 4ème eGovernment Symposium Romand, Neuchâtel, Switzerland, 8 Mai 2015

2014
B. LOISON, C. MACCHI (2014), « The use of quality procedures through the example of a statistic based on registers », European Conference on Quality in Official Statistics (Q2014), Vienna, Austria, 5 June 2014

2011
B. LOISON, P. I. YANEV, J-F. FRACHEBOUD (2011), Discussion Paper « SDMX: strategic and operational challenges for a national implementation », UNO - Economic and Social Council - Conference of European Statisticians, Geneva, Switzerland, 14 June 2011

2009
B. LOISON (2009), « Why a integrated Statistical Information System ? », Joint UNECE/EUROSTAT/OECD Work Session on Statistical Metadata, 18 September 2009

2008
B. LOISON (2008), « Managing the Information Systems for Census 2010 », CEE/Eurostat, Information Technology Directors, Luxemburg, Luxemburg, 13-14 October 2008

2005
B. LOISON (2005), « Web based tools for Raw Data collection », Eurostat / IT Directors Group, Luxemburg, Luxemburg, 25 October 2005

B. LOISON (2005), « Managing the move to an outsourced environment: lessons learned », OECD/UNO/CEE/Eurostat/Meeting on the management statistical information systems (MSIS), Bratislava Slovaquie, 18-20 April 2005

BOOK REVIEWS

Modèle conceptuel de données: Volume 1 (Système d'information informatisé de l'entreprise), ISBN-13: 978-1523869558

Modèle logique de données relationnel: Volume 2 (Système d'information informatisé), ISBN-13: 978-1539323112

Modèle physique de données relationnel: Oracle, ISBN-13: 978-1729527450

Modèle physique de données relationnel: MySQL, ISBN-13: 978-1097270682

Recommended Practices for Editing and Imputation in Cross-Sectional Business Surveys, European Statistical System practices