



1st International Workshop on System Dynamics, Big Data and Cloud Computing

“Transformation for Sustainable Development”

12-13 JANUARY 2015, SAFARI PARK HOTEL NAIROBI, KENYA

CALL FOR WORKSHOP PAPERS

OVERVIEW

The System Dynamics Africa Chapter is organizing its inaugural Chapter Workshop to exchange novel ideas and practical experience in System Dynamics. “The 1st International Workshop on System Dynamics, Big Data and Cloud Computing” will be held at the Safari Park Hotel Nairobi in Kenya on 12-13 January 2015.

The theme of this workshop, “Transformation for Sustainable Development,” is designed for SD members and practitioners in Africa and elsewhere who are interested in emerging societal and global challenges. SD may also leverage the developments in Big Data and Cloud Computing technologies.

Participants will benefit from an international perspective and meaningful insights of leading SD experts and fellow delegates from the Africa region and the rest of the world.

PURPOSES AND NATURE

The purpose of this workshop is to create awareness of SD and its applications in solving pressing societal and global challenges across Africa.

The workshop will consist of keynote speeches and lectures by invited speakers, case studies, experience papers and theoretical papers related to System Dynamics, Big Data and emerging Cloud Computing. The outcome of the workshop will be key issues and challenges in order to chart a way forward for the future of SD in sustainable development.

TOPICS OF INTEREST

We encourage submission of workshop papers on any of the following topics:

- Global health and healthcare systems
- Education
- Agriculture and food security
- Drought and climate change
- Software systems development
- Water usage, Green energy
- Simulation data storage and cloud services
- Economic inclusion
- Human mobility (Transportation and Traffic)
- Environment conservation
- Supply chain management
- Policy management
- Policy development
- Smart Cities
- Big Data for sustainable development
- Big Data analytics in health care
- Big Data for innovation and productivity
- Dealing with large simulation data
- Community, National, and/or Regional resilience
- Policies for sustainable transition
- Migration and counter terrorism

SPONSORS

System Dynamics Society
 KCA University
 Springer
 International Journal of System Dynamics Applications (IJSDA)

KEY NOTE SPEAKERS

Kim Warren, Director: Strategy Dynamics, UK
 Kamal Bhattacharya, Vice President, IBM Research - Africa
 Bob Collymore, CEO Safaricom, Kenya
 Ignacio Martinez-Moyano, Argonne National Laboratory, USA.

TECHNICAL COMMITTEE

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 Stephen Ogunlana, Heriot-Watt University (UK)
 Ignacio Martinez-Moyano, Argonne National Laboratory (U.S.A)
 Titus Olaniyi (Nigeria)
 Peter Hovmand, University of Washington (U.S.A)
 Parsa Mirhaji, Albert Einstein College of Medicine (U.S.A)

SUBMISSION GUIDELINES

1. The **Abstract** of the paper should not be less than **150 words**.
2. The **Related work section should be added after the Introduction with more recent references**.
3. The **Discussion section** must be added to interpret the results obtained (If any). **Give this section more space**.
4. References must be up to date and **not less than 15**.
5. **References must be written alphabetically** according to the Springer format (read Springer guidelines [here](#)).
6. **Full length of the paper should not exceed 5500 words (or 12 pages using font size 11, Times New Romans, and single spaced)** including references and using Springer Templates for [word](#) or [Latex](#).
7. Read Springer guidelines carefully for [word](#) or [Latex](#) before writing your paper to help you prepare your figures, tables and references according to Springer format.

Workshop papers should be submitted as a single file to easy chair <https://easychair.org/conferences/?conf=iawsd2015>

WORKSHOP PROCEEDINGS AND PUBLICATIONS

Workshop proceedings will consist of abstracts of accepted papers. The best 10 papers will be published in a special issue in the International Journal System Dynamics Applications (IJSDA) and the next 20 papers will be published as Book Chapters with Springer.

PAPER EVALUATION CRITERIA

All submitted papers will undergo a blind review by 3 members of the technical program committee. Acceptance will be based on the overall quality of the paper and its appeal to the System Dynamics community in leveraging the benefits of data analytics and cloud services. In particular, the papers should address topics which satisfy each of the following criteria:

1. The topic should fall in the general scope of the theme of the workshop
2. There is a clear focus on a specific technology, problem or application
3. There is sufficient interest in the topic to the SD community

WORKSHOP REGISTRATION

All participants including workshop organizers and invited speakers must register and pay registration fees for the workshop before or on due dates.

PARTICIPATION

SD members and practitioners in Africa and elsewhere in the world are welcome to attend the workshop. All sessions and talks will be conducted in English; therefore, participants should have a good working knowledge of the language. PhD Students will have an opportunity to present their work in progress (at a PhD colloquium) scheduled for Sunday 11th January 2015; 11AM to 6.00 PM

LOCAL ORGANISING COMMITTEE

CHAIR

Eric Momanyi, Policy House (Kenya)

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Benedict Oyo, Tshwane University of Science and Technology (South Africa)

IMPORTANT DATES

~~15 November, 2014~~: Paper Submission Deadline
25 November, 2014: Extended Submission Deadline
5 December, 2014: Notification of Acceptance
15 December, 2014: Registration & Camera Ready
11-13 January, 2015: Workshop

WORKSHOP REGISTRATION

Students: \$ 200
Non-Students: \$300

FURTHER INFORMATION

For further information, please contact the Africa Chapter Regional Representatives at sd.africachapter@kca.ac.ke

1st International Workshop on System Dynamics, Big Data and Cloud Computing

“Transformation for Sustainable Development”

Tentative Schedule

	8.30 -9.00	9.00 -9.30	9.30 -10.00	10.00 -10.30	10.30 -11.00	11.00 -11.30	11.30 -12.00	12.00 -12.30	12.30 -2 PM	2.00 -2.30	2.30 -3.00	3.00 -3.30	3.30- 4.30	7.00 PM			
Sun 11 th Jan					Health Break	Registration/ PhD Colloquium			Buffet Lunch	PhD Colloquium							
Mon 12 th Jan	Opening Ceremony	SD	BD	CC		Health Care and Health Systems				Modelling Session Case Studies			Official Opening Dinner				
Three key note papers/ Speech		Climate Change, Community Resilience				Food Security	Improving Model Behaviour (Modelling Session)			SD	BD	CC	Keynote /papers/ speech		High level Panel Discussion	Official Closing Dinner	
Tue 13 th Jan	Public Policy		Climate Change, Community Resilience			Food Security			Improving Model Behaviour (Modelling Session)		SD	BD	CC	Keynote /papers/ speech		High level Panel Discussion	Official Closing Dinner
Wed 14 th Jan	Safari Tour/Excursion to Nairobi National Safari Park																