Annual Chapter/SIG Report 2020

Chapter/SIG:	Russian Chapter
Year:	2020
Officers (name/e-mail)	Natalia N. Lychkina nlychkina@hse.ru
President: Chapter/SIG-society liaison:	Yulia A. Morozova yumorozova@hse.ru
Webmaster:	
Website:	http://simulation.su/en.html
Website's last update:	
Incoming officers' contact details:	If not applicable, please leave blank.

IMPORTANT NOTE: please provide up to date contact details. They are extremely important for maintaining the communication channels working and the information flowing appropriately between the System Dynamics Society and the Chapters and SIGs.

If the leadership of the Chapter/SIG is about to change in the short-term, please indicate the contact details of the new, incoming officers. Thank you!

1. The past year

1.1 Chapter/SIG development

1.1.1 Activities

Please list the main activities organized by the Chapter/SIG as such in the table below; insert rows as needed.

Activity	Date	Estimated number of Attendees
WOSC Congress 2021, Institute of Control Sciences V.A.TrapeznikovAcademyofScienceshttps://www.wosc2020.org/program	September 16-17, 2020	100
XXII April International Academic Conference on Economic and Social Development, https://conf.hse.ru/en/2021/	April 13-30, 2021	300
Session J-20-2. Digital Transformation, Econometric Modeling, Computer Simulations Session Y-26-1. Instrumental Methods in Economic and Social Studies		
The international research and practice conference- biennale "Systems analysis in Economics", Financial University under the Government of the Russian Federation https://sae.systemeconomics.ru/	December 9-11, 2020	100
International online seminar "Artificial Societies and Information Technologies", Central Economic and	May 14, 2021	100

Activity	Date	Estimated number of Attendees
Mathematical Institute of the Russian Academy of Sciences		
Online workshop «Experience in the development and application of computer business simulations and business simulation games». Organizer and moderator N.N. Lychkina, head of the research and project group «Development of computer business simulations and simulators for teaching students of the main educational programs of the Higher School of Business» https://gsb.hse.ru/bi/news/473518479.html	May 27, 2021	90
Round table "Computer simulations in the study of macroeconomic processes", HSE, Moscow https://miem.hse.ru/fitm/announcements/473030549.html	June 10, 2021	100
AnyLogic Training Courses (worldwide)	Once a month	15-20
anyLogistix Training Courses (worldwide)	Once a quarter	20
Anylogic Company Webinars	Once in 1-2 months	120-500
Training course for professionals on simulation modeling in Anylogic at the National Research University Higher School of Economics	October, 2020	25

1.1.2 Products

Please indicate the number of DS related publications in the form of books, chapters, articles and conference proceedings made <u>on behalf of the Chapter/SIG</u> (you do not need to include products of individual members). "Type" should be coded as follows: A=article; B=book; C=chapter; P=proceeding; S=software.

Туре	Number of products	Туре	Number of products
А	77	С	2
В	3	S	5

Computer business simulations "Supply chain management", "Strategic Business Architecture" by the research and project group "Development of computer business simulations and simulators for teaching students of the main educational programs of the Higher School of Business" under the direction of N. N. Lychkina of the Higher School of Economics

Simulator "Startup: limits of growth", developer D.Yu. Katalevsky

Sergey Suslov, Dmitry Katalevsky wrote a chapter about modeling for the book "Evolving Toolbox for Complex Project Management" (Taylor&Francys, CRC Press). In 2020 we translated this chapter, now it is available in Russian language. The translated chapter helps The AnyLogic Company & local universities such as HSE to popularize SD approach within project management community. PDFs are available online (English, Russian) and being sent to AnyLogic subscribers.

N.N. Lychkina Synergistics and collaboration in supply chains: an integrated conceptual framework for simulation modeling of supply chains in "Developments in Information & Knowledge Management for Business Applications", Volume 3, Springer, 2021.

A.S. Akopov Simulation modeling, Textbook and workshop, Yurayt Publishing House (Moscow), Higher education, 2020.

A.S. Akopov Computer Modeling, Textbook and workshop, Professional Education HSE, Moscow, 2020.

Electronic scientific and educational journal «Artificial Societies» https://artsoc.jes.su/

AnyLogic AnyLogistix https://www.anylogistix.com/

iWebsim (www.iwebsim.ru). iWebsim is a web application for simulating dynamic systems. Technologies of discrete-event and agent-based modeling, system dynamics are supported. The working environment is a web browser with HTML5 support and Internet access. Developer: A.N. Balukhto, Russia.

sdCloud modeling platform (http://sdcloud.io/)

1.1.3 Relationships with other societies or institutions

Please indicate other institutions and professional or scientific societies your Chapter/SIG maintains a relationship with. Add rows as needed.

National Simulation Modeling Society http://simulation.su/ru.html

The Anylogic Company https://the.anylogic.company/

INFORMS (Institute for Operations Research and the Management Sciences)

EUROSIM Federation of European Simulation Societies

Russian Academy of Sciences

1.1.4 Finances: cash reserves

If your chapter raises a membership fee, please indicate your current financial situation here.

Cash reserves = 0

1.1.5 Membership

How has membership developed over the past year? Please explain important changes in number or composition, with special emphasis on "local" members.

1.2 Level of development of system dynamics in the Chapter/SIG's area

Variable	N.
Number of <i>universities</i> where at least one faculty member belongs to the system dynamics community: represents the coverage inside the local university system	10
Number of <i>faculty members</i> who belong to the SD field: indicates if there is quantitative growth of SD in the universities.	15
Number of <i>institutions where SD is taught</i> as part of other courses or in its own right: university training is a main driver of diffusion of SD, and it can be used as a	3

Variable	
proxy for the number of young adults who are exposed to SD.	
Number of <i>faculty</i> members who belong to the SD community and <i>who have studied under a local faculty member</i> expresses the solidification of the community.	5
Number of <i>school-level initiatives</i>	0
Number of application fields	20

National Research University Higher School of Economics (www.hse.ru), system dynamics group of the HSE Graduate School of Business. SD courses are offered in curriculums of the Graduate School of Business (N.B. Filinov, A.S. Akopov, N.N. Lychkina, G.V. Zakhodiakin, Y.A. Morozova, Z. Avdeeva) https://logistics.hse.ru/itlog/sdgroup

HSE University Educational Departments HSE Tikhonov Moscow Institute of Electronics and Mathematics (MIEM HSE), Methodological Project for the Development and Use of Computer Simulations in Science, Industry and Business, Head – Victor Popov, https://miem.hse.ru/en/fitm/

HSE Laboratory of Complex Systems Modeling and Control, Head of laboratory - Victor Popov, https://cs.hse.ru/en/big-data/csmc/

Lomonosov Moscow State University (www.msu.ru). SD courses are offered in curriculums of the Economic Faculty (V.N. Sidorenko).

Financial University under the Government of the Russian Federation (www.fa.ru) in Moscow, Department of System Analysis in Economics (G.B. Kleiner).

The Russian Presidential Academy of National Economy and Public Administration (www.ranepa.ru) D. Katalevsky teaches at the British Higher School of Design, at the Institute of Business and Business Administration of the RANEPA on Executive training where an in-house simulation "Startup: Limits of growth" is actively used in teaching.

ITMO University (www.en.itmo.ru) have launched Cloud Solutions and Modeling lab (http://cosmlab.science/). ITMO University develops partnerships with universities in Brazil and India and communicates with TU Delft in the Netherlands, MIT and WPI in the United States. The laboratory organizes open international lectures, which involve students from 17 countries, with an average of 50-70 listeners per speech.

Central Economic and Mathematical Institute of the Russian Academy of Sciences, Laboratory of Social Modeling (V.L. Makarov) <u>http://www.cemi.rssi.ru/structure/science_divisions/lab101.php</u>

1.3 Your assessment of the closing year

Please elaborate concerning any particular development that may be relevant for the Society.

Despite the pandemic, many scientific events were held online with the participation of foreign partners. Cooperation between Universities and the system-dynamic group with foreign partners is actively developing.

Management consulting with the use of simulation modeling is actively developing in Russia as well as the practice of interaction with business partners.

The center of activity in Russia is the leading economic university in Russia, the HSE, a Systemdynamic group has been established at the HSE, they actively interact with other universities and the Russian Academy of Sciences, as well as with government organizations. Business simulation games are being developed at the HSE with the participation of business representatives and foreign partners.

2 The coming year

2.1 Challenges

What are the opportunities the Chapter/SIG plans to take, or challenges you plan to approach during the coming year?

Today there is certain interest in system dynamics and simulation modeling from both business and government organizations. We are ready to respond to these challenges in cooperation with our international colleagues.

2.2 Planned activities

Which activities (like workshops, courses or seminaries) does the Chapter/SIG plan to perform during the coming year?

XXIII April International Academic Conference on Economic and Social Development, Russian Chapter System Dynamics section, April, 2022

World Organization of Systems and Cybernetics WOSC Congress 2021, Moscow, 27-30 September 2021, Institute of Control Sciences V.A. Trapeznikov Academy of Sciences https://www.wosc2020.org/a-manifesto

X All-Russian scientific and practical conference on simulation modeling and its application in science and industry "Simulation modeling. Theory and Practice" IMMOD-2021, System Dynamics Section, October 20-22, 2021 http://simulation.su/static/ru-immod-2021.html

Artificial Societies and Information Technologies Conference, including Computer modeling of socio-
economic processes section, September 28, 2021
http://abm.center/timetable/International_conference/Artificial_societies_technologies/2021/conferenc
e_program/

System economics, socio-economic cybernetics, soft dimensions in economics, Financial University under the Government of the Russian Federation, June 24, 2021 https://sesecsm.systemeconomics.ru/

2.3 Support required

What would you ask the Society to do to help the Chapter/SIG?

We welcome the members of System Dynamics Society to strengthen cooperation with the Russian Chapter and are ready to provide support from the *Higher School of Economics* and others.