The System Dynamics Mailing List: An Evaluation of the Year 2000

Joerg Siede

Straussstrasse 18 16341 Zepernick Germany

Telephone: +49 – 30 – 944 25 33 joerg.siede@rz.hu-berlin.de

PD Dr. Bernd Viehweger

Institute of Information Systems Humboldt-University zu Berlin Spandauer Strasse 1 10178 Berlin Germany

Telephone: +49 – 30 – 2093 5716 bv@wiwi.hu-berlin.de

Abstract

This paper analyses the electronic mails sent to the System Dynamics mailing list in the year 2000 under different aspects. The work is addressed to potential subscribers and people who do not have enough time to study each mail they receive. It should help them to decide whether or not to subscribe. The contents and subjects of the categories (QUERY, REPLY, ANNOUNCE, ...) will be analysed. The active subscribers will be classified by their geographic origin and their fields of activity. An opinion poll will complete the work.

1 Introduction

The System Dynamics mailing list promotes discussions in the field of System Dynamics. The list is maintained by Bob Eberlein and paid for by Ventana Systems, Inc. Its homepage is www.vensim.com/sdmail. The mailing list was founded in December 1994. The number of subscribers grew steady to 1,150 at the end of 1998. The number has remained pretty steady for the last 2 years.

In the year 2000 approximately 500 emails were sent over the System Dynamics mailing list. They will be analysed for different criterions in this paper. The results will be presented in diagrams. The owner of the list stores all messages in archives. These archived postings are the data source for this examination. They can be downloaded from www.vensim.com/sdmail/archives/archives/archives.html.

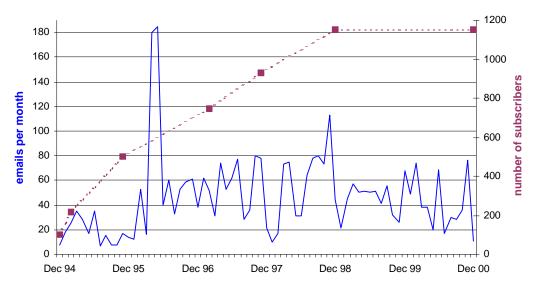


Figure 1: Emails per month and number of subscribers

2 Analysis of the categories

The subject line of the emails takes on a special form. It consists of three parts. Here are some examples:

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QUERY Demographic Profiles and Health Care (SD2570)
REPLY Demographic Profiles and Health Care (SD2571)
REPLY Demographic Profiles and Health Care (SD2572)
ANNOUNCE Prague Study Group (SD2573)
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The subject line starts with one word in upper case. This is the category. Six categories occur often: announce, periodic, query, reminder, reply and update. The second part of the messages describes the topic. Questions and answers usually have the same topic. Long discussions are divided into different topics. The last part of the emails is a consecutive number. Not all messages fit into these form because of errors. For example six numbers are missing, or three numbers occur twice.

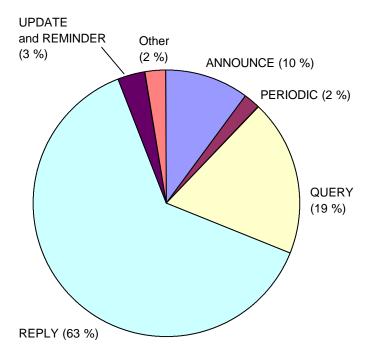


Figure 2: Distribution of the emails into categories

2.1 Category ANNOUNCE

In this category you can find announcements und hints. Job offers provide the greatest part. Qualified specialist and experts are wanted. The offers come from consulting firms, software companies and universities. Conference announcements are the second largest part of the category. For instance the System Dynamics Society invites to its annual conference. Then course announcements follow. In addition you will find introductions of new or relaunched Internet sites.

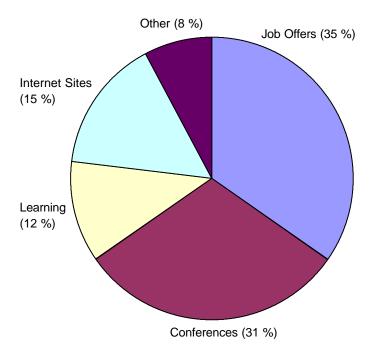


Figure 3: Category announce

2.2 Category PERIODIC

Toni Gill sent all emails appearing in this category. He provides the "European Periodic Calendar of Events, Conferences & Courses". Normally the email is composed during the first weekend of each month. Everybody can post details to Toni Gill upuntil Friday. Most of the offered courses take place in the United Kingdom.

2.3 Categories OUERY and REPLY

The categories query and reply belong together. Reply contains the answers to questions asked in query. Many questions can be described as research. The senders are looking for models, literature or applications for certain types of problems. They stand at the beginning of the modelling process.

Some people are one step further. They have already tried to design a model, but ran into difficulties. They ask how to formulate a particular type of structure. These questions are summarized in the group modelling. The part theory consists of questions that are not related to a practical problem. For example the topic soft variables is important for many models. The parts modelling and theory are not the majority of questions. Nevertheless they are very important because they are the starting point of discussions between the participants. Assigning the emails to one of the groups research, modelling or theory was difficult, because the borders between these groups are not always clear.

Contact consists of the search for organisations or persons. In other job offers and other questions are summarized.

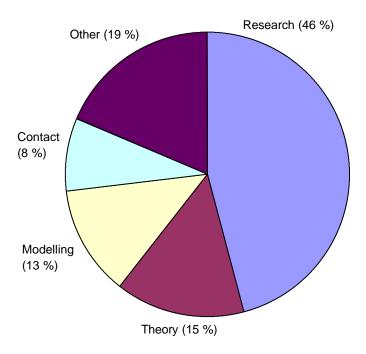


Figure 4: Category query

For 27 percent of all questions no answers can be found in the mailing list. But 13 percent of all questions are sent with the request for a direct answer. This shows that the System Dynamics mailing list causes more email traffic than visible. We carried out an opinion poll under all subscribers who asked a question in 2000. The results show that only 4 percent of all questions remain without an answer. More information about the opinion poll can be found later in this paper.

2.4 Categories UPDATE and REMINDER

Messages in these categories stand in relationship to announcements already sent in the category announce.

3 The active subscribers

In December 2000 the System Dynamics mailing list recorded 1150 subscribers. 201 of them, 17 percent, who could be described as active subscribers. This means they sent one or more messages to the list. These active subscribers will be analysed.

The examination was difficult because the analysed criterions could not be read directly in every case. First the signature of the email was analysed. Normally it consists of the name and the email address. Some subscribers also include their position, the academic degree, the complete postal address, telephone and facsimile numbers as well as the Internet address. If not enough information could be found the email and Internet address were used. A visit of the website was necessary in some cases. If all attempts to get the wanted information failed, the person was rated as unknown.

3.1 Geographic origin

The best-represented countries are the United States, United Kingdom, Canada, the Netherlands and Australia. Five or less subscribers can be assigned to other countries. The part unknown consists of subscribers who did not provide enough information in their messages. International organizations and companies can also be found there.

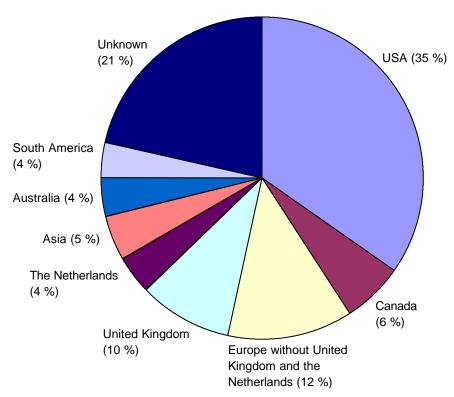


Figure 5: Geographic origin of the active subscribers

3.2 Fields of activity

The majority of the subscribers belong to universities. The other part consists of senders working in companies. The most important business segments are management consulting, software development and learning. Companies working there is common that they provide System Dynamics services for other firms. Only few use System Dynamics exclusively for internal purposes.

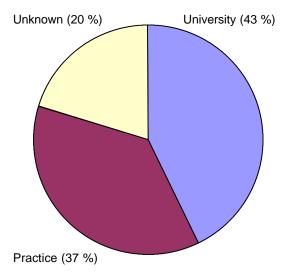


Figure 6: Fields of activity of the active subscribers

4 Opinion poll

In section 2.3 it was realized that for 27 percent of all question no answers could be found. In this examination only replies sent to the System Dynamics mailing list were taken into consideration. But some questioners requested a direct reply. This shows that the share of questions without answers must be lower. Further more the number of replies to a question is insignificant if no advantage can be derived. The profit cannot be evaluated without asking the interested persons involved.

A questionnaire was sent to all persons who posted a question in 2000 to solve the two described problems. Some participants asked more than one question. They were asked to complete the form once per question. The questionnaire is represented in Appendix A.

The opinion poll was carried out in February 2001. Some subscribers had to think about events that happened more than one year ago. This reduces the validity of the survey. Altogether 96 questionnaires were sent by email. Nine of them did not reach their goal because the email addresses were out of date. 46 of the remaining 87 questionnaires were answered. This is a quota of 53 percent.

4.1 The email traffic outside the list

The first two questions should illustrate in which ways the questioners received answers. It was distinguished between replies sent to the list and replies sent to the subscribers directly. The survey shows that many questioners received messages in both ways. There is considerable email traffic outside the list. For 32 of 46 questions one or more answers were received as direct replies. This equals a quota of 70 percent. Only two questions, 4 percent, remained without answers. This is clearly less than 27 percent as determined in section 2.3.

4.2 The profit derived from the answers

The interviewed subscribers should rate the benefit gained from the replies on a scale from one (extremely poor) until seven (extremely good). The participants judged the received answers predominantly positive. The average is 4.9.

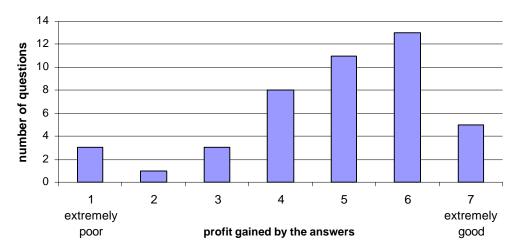


Figure 7: The profit derived from the answers

One subscriber commented on the value which the whole mailing list provides. If his question had been unanswered, he would have rated the list positively. He learnt from the discussions between other participants. Even the questions described in section 2.3 as research were valuable. They show in which areas System Dynamics approaches are used.

5 Summary

- 1. The System Dynamics Mailing List promotes the exchange of knowledge on the field of System Dynamics. There are discussions and the possibility to ask questions completed through announcements of conferences, open jobs, courses and Internet sites.
- 2. The rules made by Bob Eberlein are protected against viruses, advertising and long downloading times. The special form of the subject line makes it easy to decide which messages belong together.
- 3. Although most of the active subscribers come from the United States of America the mailing list can be called a global communication platform. It is a meeting point between research and practice.
- 4. The exchange of emails is not limited to the mailing list. There is also a lot of direct email traffic caused by the list.
- 5. Subscribers who asked questions rated the answers predominantly positive.
- 6. Today Internet access and mail programmes are a matter of course. That's why participation incures no costs. But reading the emails is time-consuming.

Appendix A – The questionnaire

Dear Sir or Madam!

I am evaluating the emails of the System Dynamics mailing list. In the year 2000 you sent one or more questions to the list. It is not possible for me to determine the number of direct emails you received or the profit you derived from the answers without asking for your assistance.

I would be glad if you could answer three* questions. Please use the reply-button of your email program or send your answers to the following address: joerg.siede@rz.hu-berlin.de

You sent the following question to the list: QUERY SD Modelling Time frame (SD2926)**

- 1. Did you receive answers over the SD mailing list? Please answer with yes/no or fill in how many emails you received. Your answer:
- 2. Did you receive answers in a different way (for instance direct emails) but as a result to your query in the list? Please answer with yes/no or fill in how many emails you received. Your answer:
- 3. How usefull did you find the answers? Please choose on a scale from 1 (extremely poor) to 7 (extremely good); 0 = no answers received.

Thank you very much!

Your answer:

Yours sincerely, Joerg Siede joerg.siede@rz.hu-berlin.de

^{*} If someone asked more than one question, the middle part of this text was inserted once per question. The number of questions was adjusted, too.

^{**} This line was adjusted for every question.