GBMP'02 Call for Participation

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Motivation

We live in the era of globalization of economy, which means that companies and organizations are forced to compete not only locally, but in wider communities, e.g., on the EU or world level. This situation came up partly because of new regulations that allow free movement of capital, goods, and labor, partly due to new technologies, e.g., Internet. The global economy affects not only the competition when selling goods and services, but also the competition for skill labor, and investment capital. The new situation affects not only private sector, but public sector as well, e.g., local communities compete for investors.

To survive and grow in the global economy, companies and organizations need to undertake measures aimed at increasing their efficiency. One way to increase efficiency is via lowering operational costs. Operational costs may be roughly divided into two categories: production costs, and administrative costs. The latter include sales, marketing, personnel, etc. The ratio between these two types of costs is approximately fifty-fifty.

In the last 50 years, a lot of research work has been done in the mathematical system theory and theory of control. Introduction of the results from this research in practice has drastically decreased the production costs. Most production processes are highly automated, and the use of robots in industry is growing. Usually, there are not much reserves left to lower the production costs.

For the administrative costs, the situation is quite different. Though the office workers and sales personnel have got a lot of help from the modern computers, the office and sales processes are far beyond the production process in the level of automation. The computers are used in the office mainly to help in performing various activities, e.g. to write a letter, to print an invoice, to complete a transaction, etc. The control of the office processes remains, to a large extent, manual. There is a lot to gain if the control over administrative processes could be automated, at least partially. Approaching the level of automation of the production processes will drastically decrease administrative costs, thus making a company or organization better equipped for competition in the global economy.

In order to automate an administrative process, otherwise called business process, we need to:

1. First, analyze and reengineer this business process. Reengineering is a mandatory step because in the current practice, business processes are so unstructured that they do not worth automation, or it is not possible to automate them at all. In many cases a process should be engineered rather than reengineered.

2. Introduce a control system that ensures that the process is driven according to the reengineered definition

The first step requires (1) formal methods of representing business processes (business process modeling), and (2) methods for extracting information from the processes' participants (to fill the formal model). The second step requires (3) formalization of methods for business process control.

Currently, business process modeling, reengineering and control is being studied in the frame of two research fields: BPR -Business Process Reengineering, and WFMS – Workflow Management Systems. A lot of valuable research and practical work has been done in both fields in the last 15 years. However, the focus in this research is mostly concentrated on ordering the flow of activities, i.e., workflow. As a result:

1. A business process is represented as sequence of activities with brunches, loops, etc., i.e., some form of a graph.
2. The main questions asked when extracting information from the process's participants are: "What do you do next?", "What happens next?", "Who gets the work next?".
3. Process control is focused at not allowing deviation from the predefined activities flow.

The focus on activities ordering has its roots in modeling production processes where each process is aimed at producing more or less the same physical product in a (relatively) large quantity. The deviation from the standard pattern in such a process often results in discarding an erroneous product. The theories, practical methods, and software tools based on the workflow view work quite well for the production-like processes. However, application of these methods and tools to the less structured processes (that does not have a standard pattern of behavior, or often deviate from the standard pattern) gives rise to the famous problem of workflow flexibility. So far, this problem has not been solved in a general way.

We believe that the solution of the flexibility problem lies in focusing on achieving the goals of business processes rather than on activities ordering. Goal-oriented approach is less common in research and practice, however, it gains more and more attention, see, for example, [1,2,3].

Topics for discussion

The objective of the workshop is to discuss the main issues of business process analysis, modeling, (re)engineering, and control from the goal-oriented point of view. The following topics are of particular interest:

- Conceptual and formal representation of goals
- How to measure were we are (how long is to the goal?)
- How to track the movement to the goal
- Goal-oriented business process patterns – abstraction of goals rather than of sequences of activities/events
- What questions to ask when doing business process-analysis
- Goal-oriented scenario techniques
- How to steer a business process to its goal
- How to deal with deviations due to unpredictable events or errors in measurements of current position

However any other topics connected to the goal-oriented business process modeling are also of interest.

In this workshop we do not focus on any particular method or technology. All possible approaches (be it object-oriented, agent-oriented, based on Petri nets, etc.) to exploitation of goal-oriented view on business processes are very welcome.

Note: Some useful definitions that concern business process modeling can be found in the materials for discussions for our previous workshop on Practical Business Process Modeling: http://www.ibissoft.se/pbpm/Concepts.htm

Submissions

Prospective workshop participants are invited to submit a position paper related to one (or more) of the main topics. The submitted papers will be reviewed by the program committee. The selection will consider relevance to the main topics as well as potential to generate relevant discussions.

We would very much like to see among the attendees not only technicians but also professionals in business processes analysis and development. Both researches and practitioners are welcome.

Two kinds of position papers would be accepted. The first kind is a submission for making a presentation. Such submission should be devoted to a practical or theoretical topic that reveals some type of connection between the notion of goal and the notion of business process. The second kind is a submission for participating in the discussions. Such submission should describe the relevant experience of the participant, and it should explain in what topics the submitter is interested in and why.

Submissions (no more than 5 pages, please, make it short) should be sent by e-mail to **ilia@ibissoft.se** in any of the following formats: HTML, PDF, ASCII, MSWord (please mention version and platform). HTML and PDF submissions are preferred. Position papers for making presentations should be received by June 21. We expect to receive position papers with experience description by June 30. Papers that arrive after that will be considered based on the room available.

Form

The aim of the workshop is discussions, rather than presentations. A position paper does not necessarily need to include the answers to the problems of business process analysis, reengineering, or control. A position paper that raises the relevant questions, describes successful or unsuccessful practice, or experience will be welcome as well.
All position papers will be published on our website before the workshop, so that everybody can get some knowledge about the problems that are important for other participants.
To facilitate interaction between the participants, the organizes will try to compile a list of questions that are of common interest for the group. The list will be published on our website well in advance of the workshop. Any proposals of what should be included in the list will be

appreciated. Participants who would like to answer those questions before the workshop will have the possibility to do it in writing. The written answers will be added to the workshop site.

Expected Results

Based on the discussions, a working document will be produced to summarize the results and outline the promising directions in the field.
After the workshop, the workshops materials together with a selection of the best papers will be considered for publishing in a special issue of an international journal.

Previous workshops

The current event continues the series of international workshops started in 1998:

First workshop - Workshop on Object-Oriented Business Process Modeling (OOBPM'98) at ECOOP'98, see: http://www.ibissoft.se/ooworkshop.htm. Organizes: Ilia Bider and Maxim Khomyakov.

Second workshop – Workshop on Practical Business Process Modeling (PBPM*00) at CAiSE*00, see: http://www.ibissoft.se/pbpm/pbpm00.htm. Organizes: Maxim Khomyakov and Ilia Bider

Organizers

Ilia Bider is a cofounder and Director R&D of IbisSoft (Stockholm, Sweden). He has combined experience of over twenty years of research (in the fields of computational linguistics, databases, business modeling), and practical work (business analysis, software design, coding, software sales, and marketing).

Paul Johannesson holds a position as professor at the Royal Institute of Technology, where he works in the area of information systems. Johannesson has published work on federated information systems, translation between data models, languages for conceptual modeling, schema integration, the use of linguistic instruments in information systems, and analysis patterns in systems design.

Program Committee

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Paul Johannesson, Royal Institute of Technology, Sweden
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Peter Kueng, University of Fribourg, Switzerland
Colette Rolland, Univeristé de Paris I Panthéon Sorbonne, France
Michael Rosemann, Queensland University of Technology, Australia

References

1. Kueng, P., and Kawalek, P. "Goal-Based Business Process Models: Creation and Evaluation", Business Process Management Journal, 1997, Vol. 3, No.1, pp.17-38.

2. Mylopoulos, J., Castro, J., "Tropos: A Framework for Requirements-Driven Software Development", in Brinkkemper, S. et. al. (Eds), *Information Systems Engineering*, pp. 261-274, Springer, 2000.

3. Khomyakov M., and Bider I. Achieving Workflow Flexibility through Taming the Chaos. *OOIS 2000 - 6th international conference on object oriented information systems*. Springer, 2001. Reprinted in the Journal of Conceptual Modeling, August 2001: http://www.inconcept.com/JCM/August2001/bider.html