

RESEARCH INTERESTS

IN

COMPUTER SCIENCE, BUSINESS INTELLIGENCE AND KNOWLEDGE ORGANIZATION

PHILIP BABACK ALIPOUR

INTRODUCTION

I am a knowledgeable, creative researcher in Business Intelligence Studies and more conversant in Computer Science when both disciplines are combined into specific areas of research in practice. The aim is to excel the previous Intelligence findings in form of a functioning *business models set*, into a *focused surveillance model*, manifesting the near-future global events. This opens up issues related to the current human overpopulation state relative to man’s sustainability on natural resources, as well as reflecting manmade global impacts, natural impacts and other influencing factors affecting our lives on a daily basis. In particular, the ecology variables, political, economical, social, technological, etc. (PEST micro and macro forces model from Solberg Søylen [3]) is our main focus in this research. I have introduced and proven the model in my latest publication, “Semantics, classifications and evidence in a model for Global Catastrophic Risks,” fully accepted by the ISKO journal peers, 2011 (see [1] and [2]); Authors: I and Dr. Klaus Solberg Søylen (listed as one of the recommenders/referees on p.3, in my CV [4], or see his letter of recommendation).

The current paper delivers more highly-publishable papers in the near future, which depends on *implementing the newly-proposed surveillance system “SISAM model”* (see paper’s abstract [1, 2]), via a supercomputer as specified in §§ 6 and 7 for “20.92 trillion risks computations per second” (as I estimated) representing the same *cardinality* (20.92 trillion) *risk combinations* (based on my 8-by-8 risks matrix [1, 2]) for an average probability of inside influence $P > 0.4$ vs. outside influence $P > 0.28$, to warn people before an *existential catastrophic occurrence* e.g. Tsunamis as currently experienced in countries like Japan. The model surveys concurrent risks and multiple *trigger points* from “inside-to-outside influence points” as calculated by the probability P factors for each, based on global catastrophic records and the right knowledge organization (KO) terminology for the problem.

The foundation of the work is laid out in form of a software prototype using Google Earth, however, the real-time simulation for vigorous surveillance analysis requires a basic grant (quite economical) to focus all of our data and thus information gathering, their analysis (such as forecasting, comparisons with historical information etc), from relevant private and public organizations, online (in form of network domains or **www**’s), e.g. nasa.org, noa.gov, etc., to supply on time/real-time surveyed results to their systems in aim of avoiding global catastrophic risks indeed.

INTEREST PARTICULARS

The following aspects of my work aided this publication to happen which promises more publications in the same context (interest) relative to the prototypic development upon the presented idea:

1. Forecasting, simulation and scenario-based analysis: To estimate challenging events in a Business Organization, analyzing trends and available data, influential forces on micro and macro scales relative to risks.
 - a. This entails probability analysis via databases, spreadsheet charts on the past and current events (with ranks) leading to the concept of *futureology* ([1, 2, 3]) of an

organization on any scale from the bottom level operations to top management in making critically involved intelligent decisions.

2. Data mining and Artificial Intelligence (AI) using decision support systems (DSS) agents [4]: simulating components and functions mimicking scenarios (# 1) as well as visualizing data once collected and prepared for analysis (see §6 [1 or 2]). This further gives the simulator *shorter critical paths* to target specific phrases to form the *information bank* in form of a database representing Knowledge Organization [2, 3] of the surveillance model (SISAM)
 - a. DSS agents [4] play a major role for organization managers (decision makers) in performing intelligence in the SISAM system as proposed in §§ 6-7 of [1] or [2].
 - b. Probability analysis studying risks exhibited by/on a population of humans active and quite visible in the domain of PEST model, delivered a focused indexing (organization) of knowledge to reach an intelligent decision avoiding and in some cases controlling risks relative to degree of concern and visibility of (re)occurrence [1, 2].
3. My Intelligent Decision Support Systems (IDSS) project encompasses a novel technique called: 'Surface Damage Detection via a Sorting Array Triangulation Technique on Cargos' as a topic based on real-world datasets. I ran a *multi-agent simulation-based* prototype, as a hybrid simulator incorporating multiple programming languages (VB, VBScript, .Net, Java, C++), proving software development team management skills as well as programming, software architectures and quality, plus engineering. (See recommendation letter by L. E. Henesey.)

TARGETED AUDIENCE

In general, those whom their interests lie within the fields of Business Intelligence, Economics and Competitive Intelligence as well as Computer Science, Software Engineering, Integrated Human Studies, Environmental Studies, specifically, in conjunction with risk analysis, statistics, business models, competitive and market intelligence, ecology, geo-economics, geopolitics, all conveying to knowledge organization, using AI agents [4] establishing intelligent decision support systems (IDSS), or any relevant category of research in this context, shall mainly recognize the significance of these findings to a high amount of Global Business interests. Moreover, they may find the new surveillance model, relevant to all sciences concerning information gathering, analysis, organization, retrieval systems, data visualization, dissemination, etc., and thus a good candidate to amalgamate discrete surveillance techniques in gathering data known today, into a concrete and focused way of addressing and predicting existential global catastrophic risks as well as intelligent suggestions.

REFERENCES

- [1] Solberg Søylen, K. and Alipour, P. B. 2011. Semantics, classifications and evidence in a model for Global Catastrophic Risks, *ISKO journal*, **full paper (regular)**, accepted for Sept. Issue, pp. 1-18.
- [2] Solberg Søylen, K. and Alipour, P. B. 2011. Semantics, classifications and evidence in a model for Global Catastrophic Risks, *1st International Symposium on Concepts and Tools for Knowledge Management, Symposium ISKO-Maghreb, 2011*, www.isko-maghreb.org
- [3] Solberg Søylen, K. 2005. Introduction to Private and Public Intelligence. Lund: Studenlitteratur, Chapters 2-3.
- [4] Turban, E., Aronson, J. E., Liang, T-P. and Sharda, R. 2007. Decision Support and Business Intelligence Systems. New Jersey: Pearson Education, Inc., Chapters 3, 4, 14.
- [5] Alipour, P. B. (1978-2011). *Curriculum Vitae*, last update, April, 2011.