



国家科技图书文献中心
National Science and Technology Library

The STKOS Project

Creating knowledge organization systems to improve service



中国科学院国家科学图书馆
National Science Library, Chinese Academy of Sciences

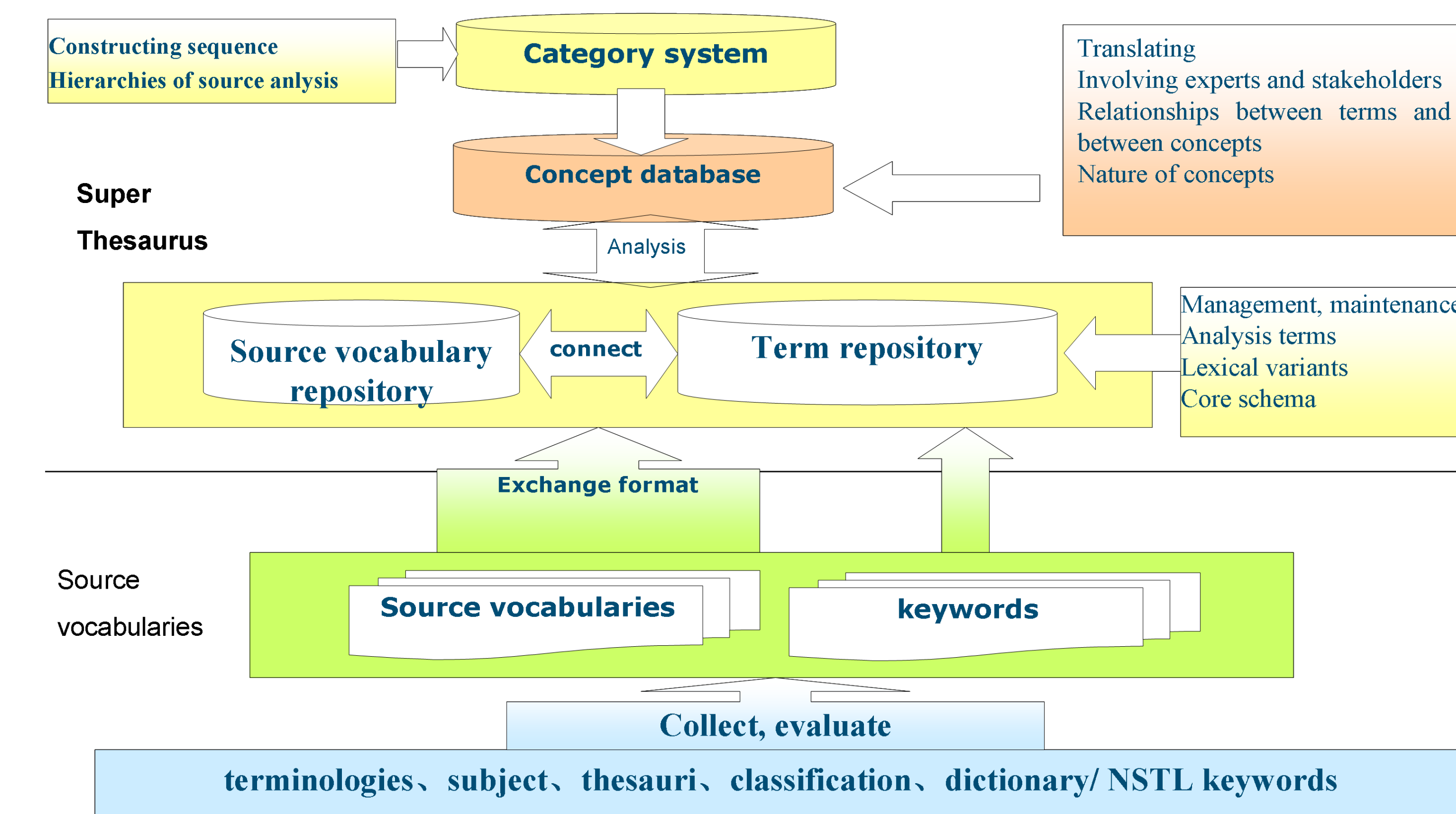
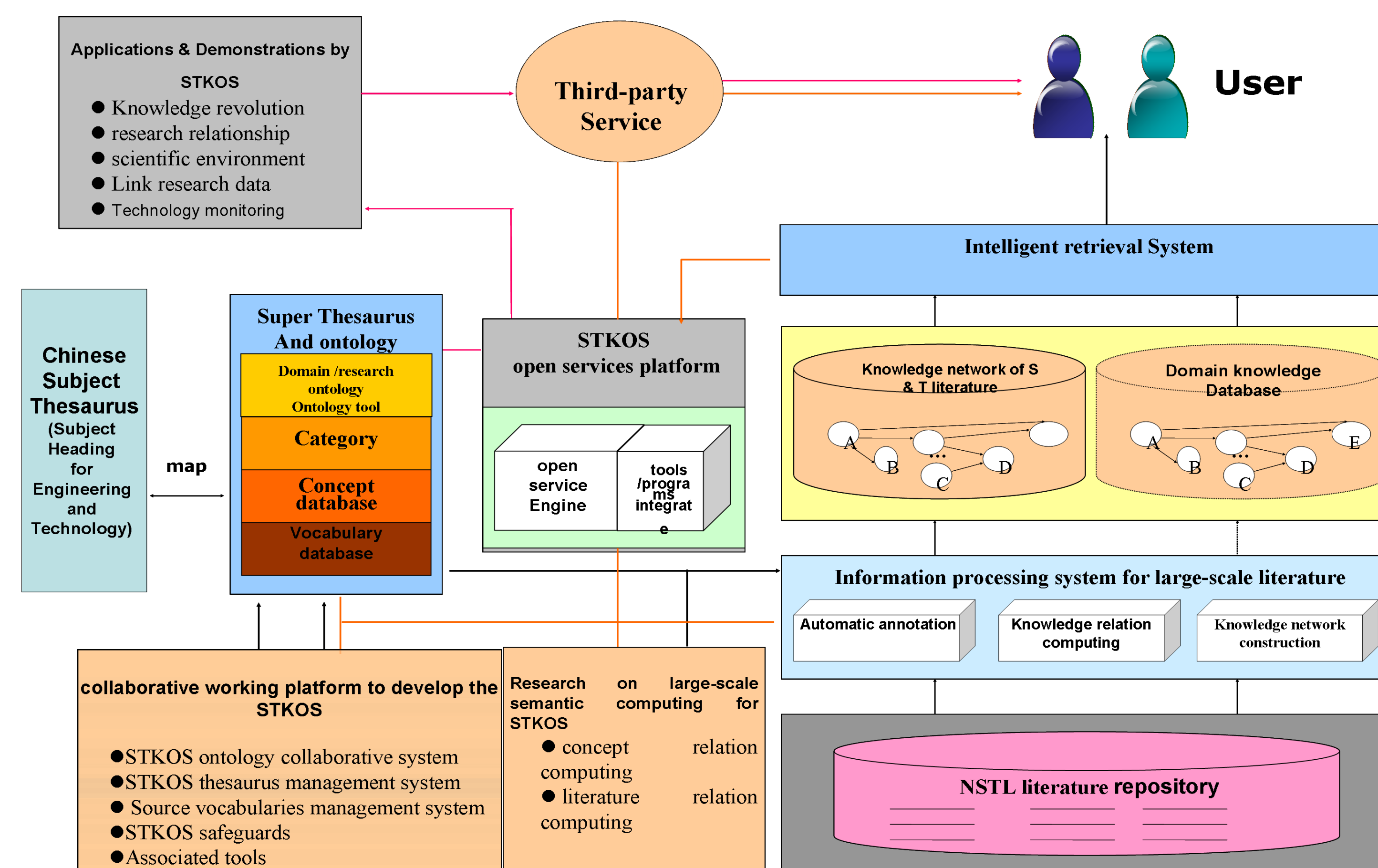
Second Annual VIVO Conference, Washington, 2011

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The project

To help user find knowledge and connection between information from vast amounts of English Scientific & Technological Literature collection, improve the capability to all kinds of services based on Literature, National Science and Technology Library (NSTL) has initiated a program to develop and apply the Knowledge Organization System for foreign scientific & technological literature'. The program is to develop a Science & Technology Knowledge Organization System (STKOS) for application in scientific & technological information services, which will facilitate the development of computer systems that behave as if they "understand" natural language in Science and Technology.

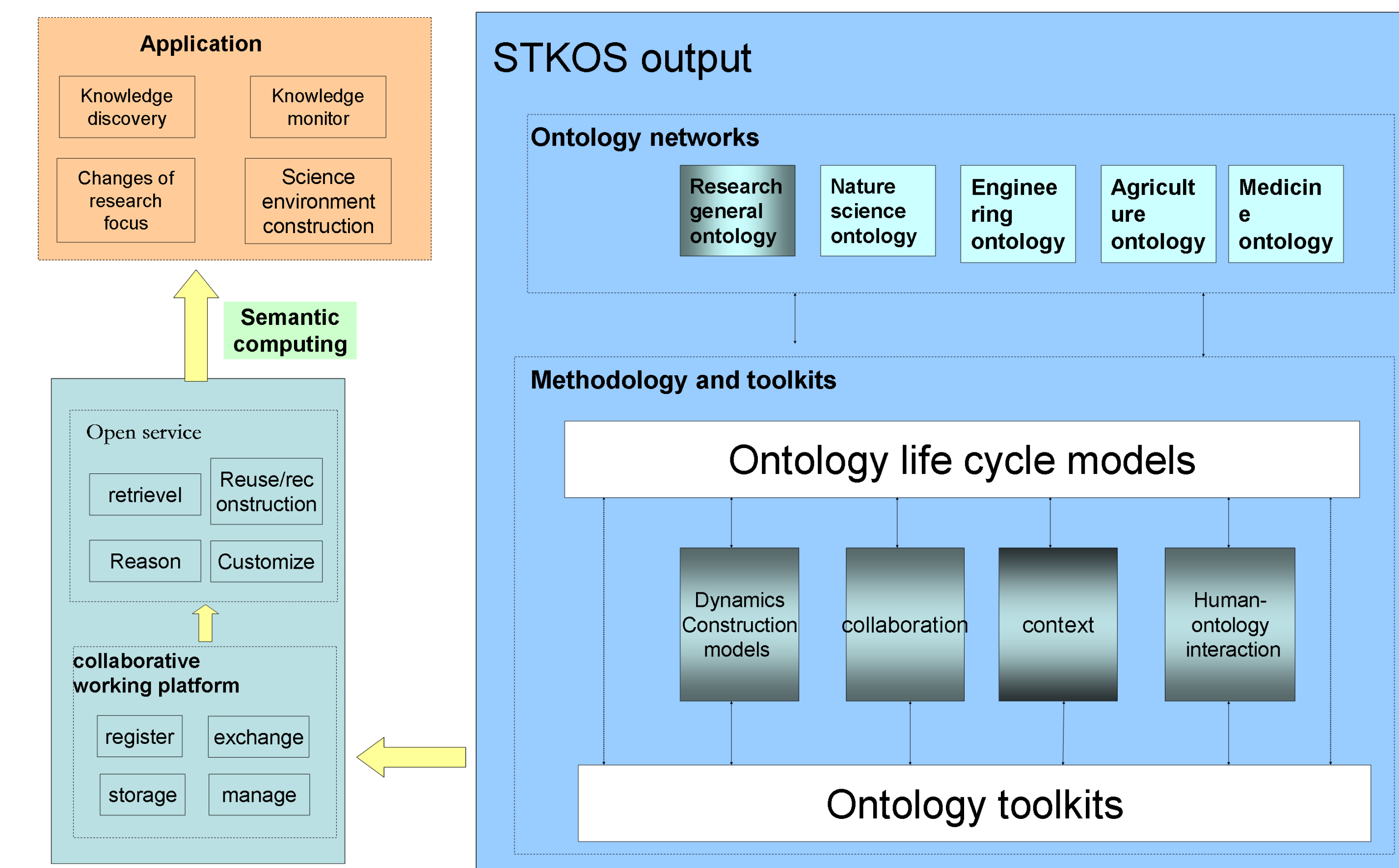


Project Framework

- STKOS program works out seven research work packages:
- Development of S & T Knowledge Organization System
 - Development of a collaborative working platform and assistant tools
 - Development of a public service platform for STKOS
 - Research on key technology of the large-scale semantic computing for STKOS
 - STKOS application for automatic processing, intelligent retrieval of information resources in NSTL
 - Application & demonstration of knowledge service based on STKOS
 - Research on the Mapping between *Chinese Subject Thesaurus* (Subject Heading for Engineering and Technology) and the super thesaurus of STKOS

The content of Science Technology Knowledge Organization System

The Science Technology Knowledge Organization System consists of following three factors: Fundamental Vocabulary database, Super Thesaurus and Ontology. Fundamental Vocabulary database is a large, multi-purpose, and bi-lingual vocabulary database that contains information about related scientific and technological concepts, their various names, and the relationships between them. It is built from various existing KOS such as thesauri, classifications, code sets, and lists of controlled terms used in S & T statistics, indexed and cataloged literatures, and the keywords submitted by the authors and users. Super Thesaurus is organized by concepts or meanings. It links alternative names and views of the same concept together to identify useful relationships between different concepts. Ontology provides guidance for all key aspects of collaborative scenario-based methodology to develop ontology networks, which based on STKOS super Thesaurus concept network.



For more

STKOS is a National Key R&D Programs involving many Libraries, institutions and granted by Ministry of Science and Technology in China's 12th Five-Year Plan. STKOS started from April 2011 and will last for 5 years. If there is something that you are interested in and like to do, please feel free to let me know and join us!
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