

The logo features a vertical blue bar on the left and a horizontal blue bar at the top. The text "Statistical Information Service" is written in bold black font on the horizontal bar. A large, curved blue shape is in the bottom right corner.

Statistical Information Service

A. KOSTAT IT Vision and Strategy Overview

1) KOSTAT IT Vision 2010

The IT Vision of KOSTAT is “to lead the world’s best statistical information services”. To achieve this vision, the Statistical Information Service Bureau created 「Informatization Vision 2010」 and established three detailed objectives.

The first objective is to improve statistical services and public relations. KOSTAT has built a statistical Microdata Data Warehouse and developed statistical products to create customer value after analyzing the needs of statistical users.

The second objective is to streamline the statistical production processes. By managing sampled establishments and households effectively, KOSTAT is striving to reduce respondent’s burden.

The third objective is to strengthen the role of the central statistical organization. KOSTAT is currently developing a Statistical Production Support System that will serve statistical coordination work among the government and statistical agencies.

2) IT Infrastructure

In 1967, KOSTAT employed the IBM-1401 computer to perform data processing and the tabulation of statistics. Since then, through continuous upgrades in the computer system and development of application programs with advanced IT(Information Technology), KOSTAT has operated based on these computer systems for all levels of statistical work: data collection, processing, tabulation, analysis and dissemination.

Currently, KOSTAT's IT(Information Technology) infrastructure adopts a multi-platform approach with application systems implemented on various platforms, ranging from several high-end Unix Servers(IBM p5-595) and several middle-end Unix Computers (IBM p5-570) to thousands of PCs and standalone workstations.

3) Enterprise Architecture(EA)

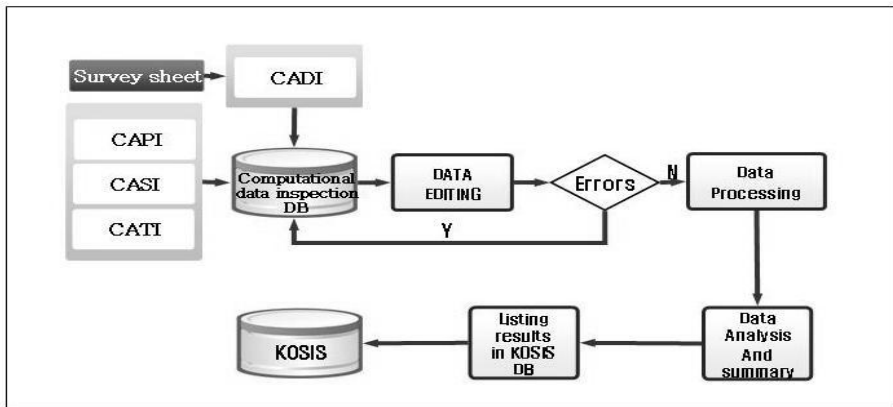
Enterprise Architecture is referred to as the Big Picture for institutional modernization and evolution that consists of a model describing how an entity operates today and how it intends to operate in the future, along with a plan for how it intends to transition to this future state. Such architecture provides essential tools whose effective development and use are recognized as hallmarks of successful organizations.

KOSTAT has been building the EA Framework since 2008. The CEO-level EA focuses on assignments of roles and responsibilities, and establishment of plans for developing the EA product. Reference models of 5 areas have been established in terms of performance, business, application, data and technique respectively.

B. S/W Development, Data Processing and Tabulation

KOSTAT utilizes computer and computational technologies and supports computational processing in statistical surveys. In the past, a major role of the program was to computerize and tabulate statistical data. Now, data must be collected in real time requiring a powerful user

interface and fast tabulation. As computer technologies like S/W, H/W and network are developed, the computational processing method of statistical data has been continually improved and developed in interface and performance. Now, it is possible to operate and develop a survey system which can provide computational support.



<Data processing flow>

The process of the statistical computational processing system is composed of input, internal inspection and tally system. Input is a process directly related to the interviewee or enumerator while the internal inspection and tally system are closely related to the enumerator (department conducting the survey).

As the statistical survey environment is deteriorating, KOSTAT has devised several options for gathering and inputting survey data such as CAPI(Computer Assisted Personal Interviewing), CASI(Computer Assisted Self Interviewing), CATI(Computer Assisted Telephone Interviewing) in addition to the traditional CADI(Computer Assisted Data Input) system.

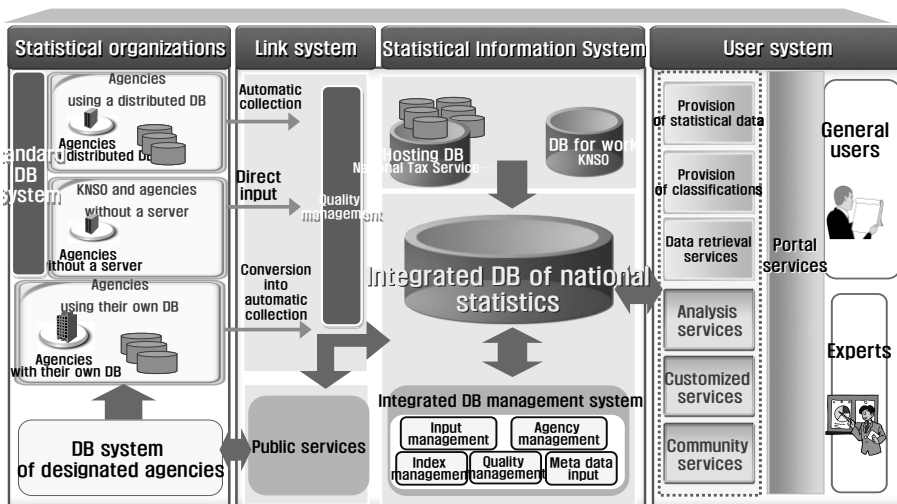
C. Integrated National Statistics DB System

KOSTAT built the Integrated National Statistics DB as a one-stop service to integrate 950 kinds of national statistics produced by KOSTAT and the other statistical organizations. The main objective of the system is to provide national statistics on a Web portal by integrating all national statistics into a DB for statistical users to utilize data more conveniently.

KOSTAT has integrated 455 kinds of national statistics compiled by 111 organizations as of 2008. It plans to integrate 77 additional kinds of national statistics compiled by 7 organizations in 2009.

In order to integrate different statistical information, KOSTAT supplied a standard statistical DB system to 85 statistical organizations so that each organization might directly transmit and manage statistical data. The Integrated National Statistics DB(www.kosis.kr) has been available since July 2007.

System Flow



D. Internet Home Page Service

The web site of KOSTAT (<http://www.nso.go.kr/eng2006>) has been in service since November of 1996. This home page has been up-graded several times and the number of users are increasing constantly. We strive to continually provide up-to-date data for our home page.

Home page content is not only limited to basic statistics closely related to our everyday life such as unemployment rate, consumer price index and composite indexes of business indicators, but also includes domestic statistics such as major economic indicators and bulletins of major economic statistics.

E. Statistical Publication Services

Nine composite Statistics are published including the 「Monthly Statistics of Korea」 and 「Korea Statistical Yearbook」. They contain various kinds of data and figures such as composite indexes of business indicators announced monthly by KOSTAT, current trends of industry & price, statistical data of labor and wage & household income.

Sixteen publications related to population and employment areas are produced such as the 「Population and Housing Census Report」,

「Annual Report on the Vital Statistics」, 「Monthly Report on the Economically Active Population Survey」.

Statistics concerning price, household and social area such as the 「Monthly Report on the Consumer Price Survey」, 「Annual Report on the Household Income and Expenditure Survey」, 「Report on the Social Survey」 are made for the public through 10 publications.

Eighteen publications related to agriculture, forest and fishery are prepared such as the 「Census of Agriculture」, 「Farm Household Economy Survey Report」, 「Fishery Household Economy Survey」.

Seventeen statistical books related to business and industrial areas are published such as the 「Composite Indexes of Business Indicators」, 「Annual Report on Monthly Industrial Production Statistics」, 「Report of E-Commerce and Cyber Shopping Survey」, 「Report on Mining and Manufacturing Survey」.

Two publications related to comparative international statistics are produced such as the 「Monthly Bulletin of International Statistics」 and 「International Statistics Yearbook」. All of the data from domestic and international statistical institutions are also compiled.

Finally, new publications containing the country's "non-financial assets" and "consumer durables" are published such as the 「National Wealth Statistics」, 「Development of Korea Statistics」, and 「The World viewed through Statistics」.

Examples of General Publications



**Statistical
Yearbook of Korea**



**International
Statistical Yearbook**



**Monthly Statistics
of Korea**



**Monthly
International
Statistics**



Fun Stories in Statistics



**Teacher, Change my Partner
Please**



Explore Korea through Statistics

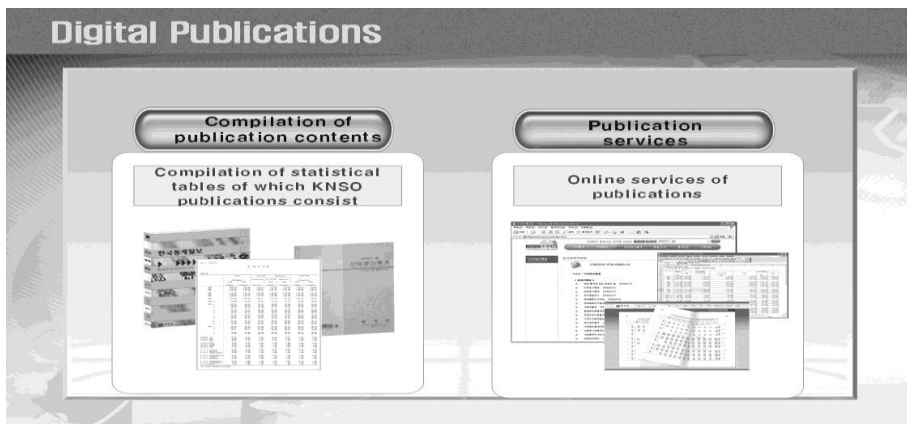
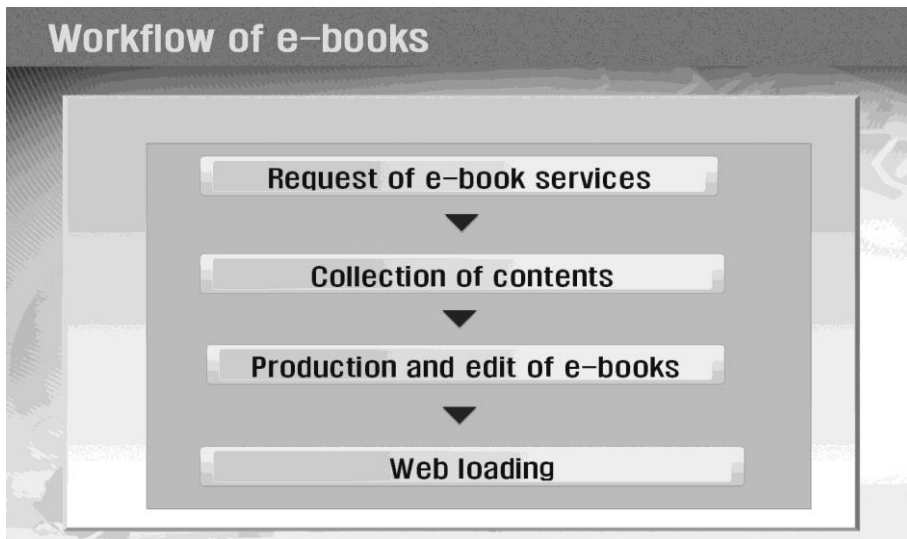
F. E-Book and Online Publication Services

The statistical data that KOSTAT produces is also available in the form of electronic book and online publication. E-books and online publications can be found on the website of KOSTAT.

Users can view the identical statistical tables as those of the printed books on the website as well. Twenty eight kinds of statistical books are serviced on the website.

In addition, KOSIS provides 41 online publications containing statistical tables. Users can download statistical tables and analyze data according to individual need.

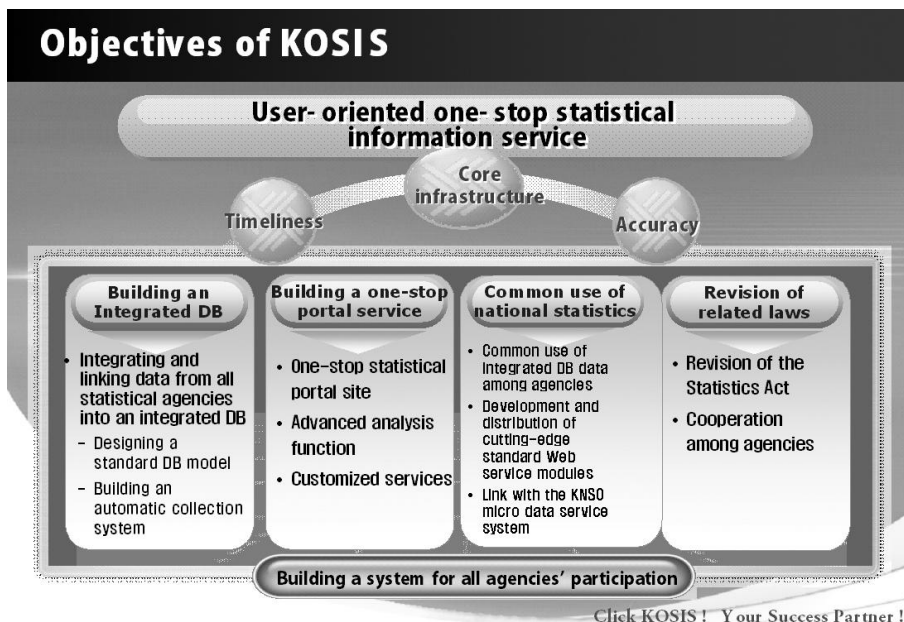
Following the general trends in the digital publication industry, KOSTAT will endeavor to expand the scope of its service for digital format publications while reducing the printed format.



G. KOSIS(Korea Statistical Information Service)

KOSIS provides 30 years of time-series statistical data from KOSTAT and other domestic, foreign and international agencies, making it the world's largest statistical database. It is a user-friendly, high quality national statistical information service that anyone may use in creating new knowledge.

KOSTAT opened KOSIS in July 2007 after establishing a statistical information database and building an integrated service system. System development started under the national information strategy scheme in 2005. With consistent improvement in its contents contents and services, KOSIS currently provides 343 types of statistics produced by 87 organizations in Korea.



From domestic to international statistics compiled by national institutions and international organizations, statistical users can search data on this revolutionary online statistical portal. This innovative service allows reliable statistical data to be searched, analyzed and categorized at the click of a button from anywhere and at any time.

H. Statistical DW(Data Warehouse System)

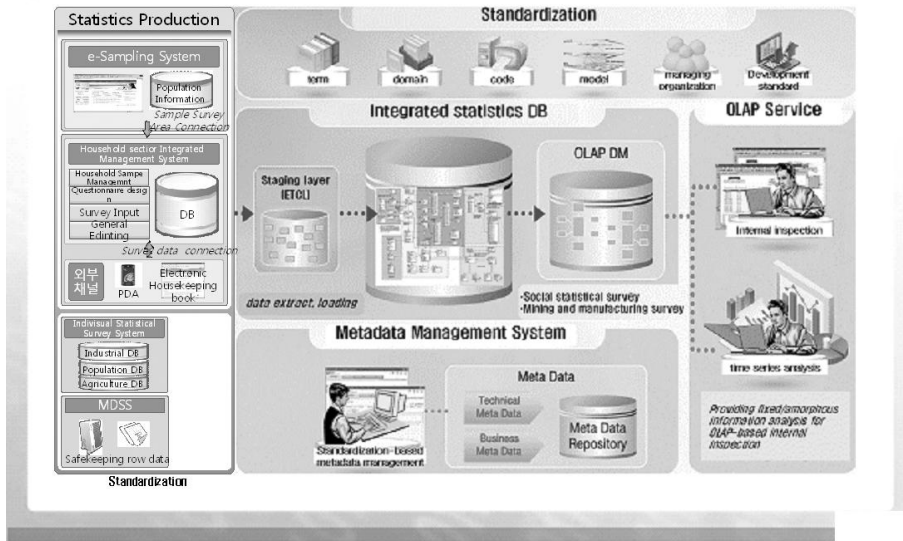
1) Background

Each survey has its own computational system and corresponding DB. Accordingly, there are limitations in statistical production and data sharing. As an example, KOSIS is a summary data-based DB, so it is hard to provide diversely detailed data. Also, it is difficult to analyze data in various ways and systematically manage raw data without the existence of a Data Warehouse(DW) for raw data. As the economic and social environment is changing rapidly, KOSTAT is building the Statistical DW so as to cope with the demand for diverse statistics.

2) Purpose

KOSTAT will lay the foundation for various and efficient data provision by standardizing and integrating raw data. Raw analytical raw data will be provided through a data mart. The raw data will be systematically managed through a unified structure.

Statistical DW



3) The Utilization of the Statistical DW

Statistical users will be able to directly obtain analytical data from the DW by using an OLAP tool. Also, multi-dimensional and time-series analysis services will be provided.

In terms of the system, the amount of the statistical personnel's work will be reduced because of the decrease in data requests. In addition, the system load will diminish owing to the decrease in unnecessary work.

Further benefits include an increase in data consistency and the fact that data will be able to be analyzed by linking it with other statistics.

4) History

KOSTAT worked out a plan for the standardization and integration of statistical data in 2005. In 2006, an integrated DB of raw data was

constructed. Data of the 'Census on Establishments' and 'Mining and Manufacturing Survey' was provided through OLAP-based pilot services. Also, a system for the standardization of statistical data and metadata management was built. In 2007, the Statistical DW was constructed providing statistical analysis services. In 2008, an integrated management system for the household sector was created. The Statistical DW was expanded by loading new data and data verification was reinforced. In 2009, the Statistical DW will include the agriculture and fisheries sector.

I. KMDSS(Korea Micro Data Service System)

Micro data from the statistical surveys conducted by KOSTAT are provided to those who need it, but micro data will only be provided by KOSTAT under a categorical restriction that privacy related to individuals and establishments must be protected. The micro data can be re-compiled as suitable data matching any requested forms of statistical tables to be provided and served to the users.

From May of 2000, raw data, especially the 'Population and Housing 2% File' and others which have a high frequency of data usage have been compiled in CD-ROMs, and the names of them are listed on the Statistical Shopping Mall.

J. Statistical Geographic Information Service

The SGIS Division, which started in July of 2005, built a regular statistical GIS service using the Population, Housing, and Business Census data. The service is aimed at constructing a national decision making support system. The division has been conducting a pilot service for 7 metropolitan cities in central Korea since 2007, and expand the service range to the entire country from August of 2009.(<http://gis.nso.go.kr>)

The Statistical GIS of KOSTAT is a type of customized service for regional analysis which is based on three critical infrastructures composed of a national standard practical numerical map, geo-database of all dwellings and business facilities, and statistical area system.

Users can easily access statistical maps, graphs, charts and diagrams in the Statistical GIS which helps users by substantially reducing search time for customized statistical needs.

K. Statistical Exhibition Center

The Statistics Exhibition Center (SEC) opened on September 9, 1998. Statistics Korea operates the Statistics Exhibition Center at the KOSTAT headquarters of the Government Complex in Daejeon.

The SEC has several objectives to carry out including collection and protection of historical materials related to statistics, improvement in the understanding of statistics by presenting statistics in an exciting and interesting way for the general public, and finally, utilization of the SEC as a study field where young students can gain a better understanding of statistics through a actual experience.

L. National Statistics Day

KOSTAT declared September 1st as National Statistics Day to build public awareness and interest in statistics and to promote citizen's cooperation with surveys. With the revision of Statistics Law taking effect on July 1, 2009, National Statistics Day will be commemorated as an official government anniversary from this year. Every year, those who have contributed to the statistical development are awarded and an array of events are held in observance of the day. These include a statistical symposium, statistics contests for elementary and middle school students, and essay contests for university students.