CUPID - A WEB BASE CENTRALIZED ULTRASOUND PROCESSING AND IMAGE DATABASE SYSTEM FOR HANWOO IN KOREA

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OBJECTIVE
The use of real-time ultrasound to measure backfat thickness, ribeye area and percent intramuscular fat in live Hanwoo (Korean Brown cattle) has been used since 2000 in Korea. Ultrasound certification program to assess the ability of an ultrasound technician to accurately predict carcass traits was also started in 2001. However there are tremendous variations in technician proficiencies and in equipments.

The CUPID was developed for fast and effective collection of the ultrasound images taken by certified technicians, centralized image processing and result reporting via internet.

METHODS
The CUPID was designed to run on Microsoft Windows NT 4.0 or Windows 2000 server with Internet Information Services(iis) 4.0 or later and MS SQL 2000 server. The program was written simply with Microsoft Active Serve Pages. The MS Active Server Pages (ASP) is a server-side scripting environment that can be used to create interactive Web pages and build Web applications. CUPID uses only http protocol (80 port) and you can use it with the general firewall for network security.

It is programmed to handle multiple ultrasound measurements for the same animal at different ages. So you can use it to manage longitudinal ultrasound images and records.

USE
CUPID is server–side program and needs no special client program. You can use it only with your web browser such as MS Internet Explorer or Netscape and login ID and corresponding password.

The system has 3 user groups, Manager, Technician, and Guest. You can be a Manager, Technician or Guest by according to the ID you logged in. When a certified technician uploads his or her scanning images with animal identification, contemporary group information and some other data, then Manager processes the images and inputs results about image availability, backfat thickness, ribeye area, percent intramuscular fat, and comments. Guest can search the database with animal identification.

AVAILABILITY
CUPID version 1.0 source code will be distributed free or nominal fee to cover the mailing cost.
and CD-ROM. For inquiry send email to goldstar@rda.go.kr or jglee@nongmin.net.

Figure 1. Screen shot of CUPID

COMPUTING ENVIRONMENT
To install CUPID, MS Windows NT 4.0 or Windows 2000 operating system with MS SQL server 7.0 or later version is required. If MS SQL server is not available, MS Access would work, too.

REFERENCES