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Robot Ethics Charter Due Korean Robots Set to Take Over the World

With several robotic products ready to hit the domestic and international markets, Korea's robot industry looks set to become a new driving force for the economy.

Korean companies are expected to make headway into the world household robot market, which currently is comprised of just cleaning machines.

According to a 2004 report by the International Federation of Robotics, Korea ranked sixth in the world in terms of robot market scale and fifth in the number of robots in use. The government aims to grow the industry to among the world's top three by 2013 with a global market share of 15% and expects household robots to lead the way.

Korean robots have already attracted attention abroad. At the International Consumer Electronics Show (CES) in Las Vegas in January, a Microsoft researcher cited iRobi Q as the perfect platform for a robot operating system the software giant is working on. The UBOT, a self-navigating robot vacuum that follows barcodes hidden on floors, won the CES Innovations Awards for its maker, Microbot of South Korea.

Currently the world's industrial robot market is dominated by six German and Japanese companies. Korea has only a third of the research workforce of those two nations, but is catching up rapidly thanks to its first-class IT industry. For example, last year Hyundai Heavy Industries developed a robotic welding system that groups several robots together. It's important for these robots to be able to 'talk' to each other and 'sense' each other's location, so Hyundai developed a complex system to allow that.

Already well advanced in considering potential uses for robots, from the battlefield to the kitchen, the Korean Ministry of Commerce, Industry and Energy said it hoped to publish guidelines for human-robot relations by the end of the year.

In a move sure to delight science fiction fans, the "Robot Ethics Charter" is likely to be modelled on the instructions devised by the American writer Isaac Asimov in his series I, Robot.

This was a sort of Hippocratic oath for androids: they were not allowed to harm humans, or allow them to come to harm through inaction; they had to obey orders; and they had to protect themselves if that did not compromise the first two instructions.

The ministry said in a statement: "The government plans to set ethical guidelines concerning the roles and functions of robots. The move anticipates the day when robots, particularly intelligent service robots, could become a part of daily life."



2007 Electronic Parts Procurement Plan Session



On February 15, KEA held an explanatory session related to electronic products procurement plans at the Korea Testing Laboratory (KTL) in Guro-dong, Seoul. The association organized the session as part of efforts to expand cooperation between large enterprises and SMEs.

At the session joined by 140 electronic parts firms, five major electronics companies, Samsung, LG, Daewoo, Inkel and Trigem, announced their production and electronic parts procurement plans for 2007, and the Ministry of Commerce, Industry and Energy (MOCIE) also forecasted prospects for the digital industry this year and its policy support direction.

This year's purchase of parts projected by the five electronics companies totaled about 37.54 trillion won, up 3.2% compared with 2006. By sector, mobile phone parts led all others with about 16.33 trillion won, followed by

LCD/PDP panel parts at about 7.80 trillion won. The purchase of TV parts, including monitors, and HDD parts is expected to about 3.33 trillion won and 2.75 trillion won, respectively.

Compared with 2006, purchase of set-top box parts is estimated to have the highest growth rate at 66.4%, while high growth rates are also expected for HDD parts (36.9%) and for printers (23.1%).

Meanwhile, purchase of TV parts will decrease by 22.0%. Other areas likely to experience purchase declines are parts for VCRs (-15.5%), DVDP (-68.6%), audio systems (-10.0%) and cleaning equipment & microwave ovens (-7.8%). Slight growth is expected for parts for mobile phones (7.2%), air-conditioning equipment (6.0%) and PCs (1.9%).

KEA to Train Science & Tech College Graduates

To help resolve the qualitative mismatch between manpower demand from industrial fields and supply from science & technology colleges, KEA decided to implement practical industrial education and a corporate training program for unemployed college graduates.

On behalf of KEA, embedded specialist MDS Technology Co., Ltd. will handle the education and training program focusing on the embedded system field where manpower demand is currently the greatest.

The six-month program will consist of three two-month courses - group education, professional training and corporate training. Regarding the corporate training, in particular, the participants will have an opportunity to have direct work experience at industrial sites. Last year, all 50 corporate trainees found employment.

AEES Agreement Signing Ceremony Held



KEA revealed on March 6 that the association has signed an agreement with China Electronic Appliance Corp., Japan Electronics Show Association, Taiwan Electrical and Electronic Manufacturers' Association and Hong Kong Trade Development Council to jointly hold Asia Electronics Show in Shanghai (AEES).

'AEES 2007,' which marks its fourth anniversary this year, is scheduled to be held from November 14-17 (four days) at Shanghai International Convention Center (SICC). Despite its smaller scale than the U.S. CES (Consumer Electronics Show), AEES has a total exhibit area of 9,000 sqm.

In 2006, 249 companies from five countries participated in AEES, including 66 Korean firms that joined the show with 103 booths and signed export contracts in the amount of US\$135 million.

A related KEA official said: "Although Asian countries are very strong in home electronics and IT industries, in reality, there has been no world-scale electronics show in the region. Currently AEES is still at an early stage, but we plan to expand it into a world-class electronics show with steady publicity and investment."

KEA has contributed to the invigoration of the home electronics industry in the region by holding KES (Korea Electronics Show) in Korea every year. KEA is also assisting large enterprises and SMEs in exploring overseas markets through AEES.

DMC Electronics Bldg. Accepting Rental Applications



Construction of an electronics building, which has been a long-cherished project, is proceeding smoothly for completion by the end of April this year.

The 12-story, 5-basement electronics building with a total floor space of 6,000 pyong is under construction at the center of Digital Multimedia City (DMC) in Sangam-dong, Seoul, an area which Seoul City is developing into an IT hub of Northeast Asia.

When completed, various industrial associations and related organizations, including the DMB (Digital Multimedia Broadcasting) R&D center of Korea Electronics Technology Institute (KETI), as well as IT/venture firms will relocate to the DMC electronics building at the same time to form a digital electronics cluster.

Designed as a state-of-the-art building, with HVAC system by floor, minimum management expense, installation of a collective telephone office, etc., the building design considered convenience for tenants to the maximum possible extent. For inquiries regarding office rental in the new building, please contact Kim Sung-Soo, Planning & General Affairs Team, KEA (Tel: 82-2-553-0942, ext. 211, Fax: 82-2-555-6195, Email: novum@gokea.org).

Industry Landscape

Korean Electronics Exports Rise 8% in February

South Korea's digital electronics exports rose 8% in February from a year earlier, fueled by strong overseas demand for semiconductors and displays, according to a Ministry of Commerce, Industry and Energy's monthly report.

Overseas shipments of digital electronics goods reached US\$9.1 billion last month for the month, compared with US\$8.4 billion a year earlier.

Exports of DRAMs and flat panels rose 70.8% and 66.5%, respectively, leading the overall gain, the ministry said. Semiconductors are one of South Korea's top export items along with automobiles, ships and steel.

However, shipments of mobile phones

and household electronics appliances respectively fell 0.4% and 10.2%, the ministry said.

The ministry also said exports of digital electronic products to China climbed 27.6% to US\$2.1 billion. Shipments to the United States and Mexico also were up 24.6% and 23%, respectively.

VoIP Firms Expected to Take Issue with QoS



Following the imposition of network access charge on VoIP (Voice over Internet Protocol) firms, Internet phone QoS (Quality of Service) management of key telecommunication enterprises is expected to emerge as an issue this year.

According to related business circles on February 10, the conflict between VoIP firms and key telecommunication businesses over imposition of a network access charge of 1,500 won/070 termination number subscriber was resolved with the mediation of the Ministry of Information and Communication (MIC).

Under the resolution, VoIP firms, Anyuser.Net, SeromeLeaders, etc., started to pay the network access charge to key telecommunication companies, including KT. Although they decided to pay the charge, they are likely to raise complaints over communication quality newly related to profitability at the end of this year.

A related business community official said, "The situation is that payment of the charge is unavoidable." He added: "The negotiation between Hana TV and LG Powercomm about use of the network, which has been recently controversial, may be a new turning point."

'u-TradeHub' Test Operation Started

On February 6, the Ministry of Commerce, Industry and Energy (MOCIE) announced test operation of a national e-trade infrastructure 'u-TradeHub' (www.utradehub.or.kr), which enables processing of all traderelated activities ranging from marketing to payment settlement at a single window.

The ministry revealed that seven model firms, including Doosung Polymer,

Jungyong Trading and POSBANK, will utilize the service starting February 28.

This portal is equipped to provide a wide variety of functions, processing all export & import trade activities, domestic purchase & supply and e-document storage, including 'My Trade,' which shows the current status of trade procedures to trading companies. In addition, it also has a foreign exchange positioning function to suggest riskhedge methods in accordance with exchange rate fluctuations and fund prediction functions enabling trading companies to forecast cash flow.

Through its third-year e-trade projects, the ministry plans to wind up its e-trade platform establishment work this year by adding new systems, including integrated marketing information system, e-B/L, etc.