Sample number	10		
Company Name	Kondo Kagaku Co., Ltd.		
Address	4-17-7 Nippori, Arakawa-ku, Tokyo 116-0014		
Department / Section	Marketing Department	Phone Number	+81-3-3807-7751 (Key number)
URL	http://www.kondo-robot.com		
Business Description	Research and development, and production of robots and radio control equipment		

1. Robot-related information

Company name	Kondo Kagaku Co., Ltd
Robot name	KHR-1
Robot category	Two-legged robot assembly kit
Date of launch	1 June 2004
Sales volume	4,000 units (as of March 2006)
Target consumers	Males and families who are interested in robots
Distribution channel	Tsukumo
Collaboration information	Opened the “Robot School” in collaboration with RT Corporation.
Key parts	Servomotor

2. Outline of the target robot

Target robot	KHR-1 (Two-legged assembly robot)

Specifications of target robot	
Size:	340×180mm
Weight:	Approx. 1.2Kg（including batteries）
Price:	Open price (Approx. 120,000 yen)
Degree of freedom:	17 degree-of-freedom
OS:	Windows 2000, XP
Recommended CPU:	PentiumIII and above
Recommended memory:	128MB and above
Movements:	
Rises up while lying face down, and also rises up while lying face up. Stands and bends on one leg, handstands on one hand, cartwheels, etc.	
Others	
KHR-1can be easily assembled with simple tools like a screwdriver and a Windows-driven PC.	

3. Promising fields for partner robots

Our company has a history of 40 years as a radio control manufacturer, with major strength in the hobby and entertainment fields. We will continue to focus on hobby robots, benefiting from our expertise in this field.

4. Key parts of partner robots

Our company's strength lies in servomotor technology, which has been cultivated over the years. The technology, which enables smooth and rattling-free adjustments of the gear, is very difficult and requires technical skills. Therefore, the know-how of making these motors can hardly be imitated by any other competitor. This is a kind of craftsmanship. In fact, all of our products ranging from robots to parts are of Japan-origin. On the other hand, production of motors which requires human work is not very profitable, unlike actuators which can be produced in mass quantities.

5. Trends of the partner robot market

Our company entered the robot assembly market in 2004. It did not take very long to develop these robots. Unlike traditional radio control companies, we took a different sales route by selling these products through Tsukumo. Being used by a world champion, our radio controls are ranked number one for professional use. That is why most people who buy our robots become aware of

these robots through radio controls. While main consumers of radio controls are male, robot consumers are more diverse and come from all age groups.

In addition, our robots are commonly bought by vocational technical schools and manufacturers' research centers as educational material. Likewise, many individuals who are involved in related development work buy our robots for personal use.

Our robots are selling well particularly in Japan, Taiwan and Hong Kong. This may be due to the influence of anime. On the other hand, our products have not gained popularity in the U.S. although the market for radio controls exists there. This is because consumers in the US commonly prefer more aggressive robots, with a main focus on power of the machine.

6. Predictions for the future of the partner robot market

We hope that the partner robot market will expand steadily with an annual increase of around 10% without resulting in a temporary boom. As we cannot beat toy manufacturers in terms of sales volume, our goal is to attain sales of 10,000 units, taking a long-term view.

7. Other related information

Our company has often taken part in robot contests, and did well in ROBO-ONE (featured on TV). The hobby robots market is poised to grow, while the radio control market is not very big. While we have received lots of proposals, most of them require high development cost. Recently we have had increasing opportunities to meet people from academia and robot manufacturers. In future, we will develop high-tech robots so that we may not lose sales competitions against Taiwan or China from which less expensive robots are available.

Lately we were assigned to create the Kyosho's[*1] motor, the next successor of two-legged robot 'Manoi'. Furthermore, jointly with RT Corporation[*2], we were invited to offer courses at the "Robot School", which is one and only place in Japan for consumers to learn full-scale two-legged robot technologies,

[*1] Headquartered in Chiyoda-ku, Tokyo, Kyosho produces and sells radio controls, and mini cars, etc.

[*2] RT sells robot kits and runs a robot school. The Company is headquartered in Chiyoda-ku, Tokyo.

Kondo Kagaku launched 'KHR-2HV' as the successor of 'KHR-1' on 2 June 2006. Compared to

its predecessor KHR-1, KHR-2HV has 15% less number of parts, making it easier to assemble. Movement performance has also been improved with the use of high-voltage servo. Their sales target is 8000 units. Although they are sold under an open pricing scheme, the price cap is set at 90,000 yen. An anniversary event was held in June 2006 to celebrate the second anniversary of the release of ‘KHR-1’.