

Consideration and Evaluation of benefits of human shaped service robots

—The report of experimental introduction to a shopping center—

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1. Background and Purpose

(human shaped) Service robots



The necessity is uncertain



We introduced the service robot into the shopping center for the purpose of clarifying the necessity of the service robot.

Cleaning robots



The necessity is clear

2. Experimental introduction to a shopping center (1)

Sacchan's body, sensors, motors, etc. are approximately similar to other service robots up till now.

(Characteristic parts)
Sacchan's face is a screen.
Sacchan has 22inches touch panel display.

Service Robot
"Sacchan"



2. Experimental introduction to a shopping center (2)

Roles of Sacchan

- ① Attract customers
- ② Performance of the hard dance
- ③ Explanation of all robot services
- ④ Offer information of the restaurant (Today's Special)
- ⑤ Offer information of the restaurant (Menu)
- ⑥ Self-introduction
- ⑦ Performance of the slow dance
- ⑧ Offer games
- ⑨ Say "Thank you"

Please look at the video.



2. Experimental introduction to a shopping center (3)

We installed Sacchan in front of the Shonan curry in the restaurant area of Aeon Shopping Mall.



※ We partially remote operated sacchan for unexpected dangerous situation or for controlling her reaction to answer customers requests.

Please look at the video.



3. Experimental Results (1)

Tendency about the attracting customers

- ① Difference of the age : Young > Old
- ② Difference of gender : No Difference
- ③ Difference of group or individual : Group > Individual
- ④ The situation of Sacchan : Move > Stop
Speak > Silent

Valuation

The attracting customers effect of Sacchan was high.
The sales of Shonan Curry restaurant **improved 20%**.

3. Experimental Results (2)



enter

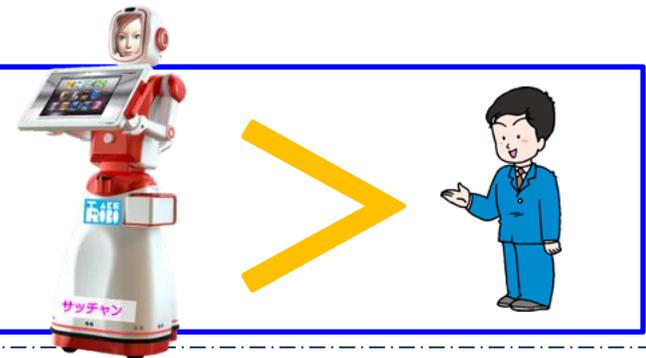


For attracting people and bringing them into the shop, Sacchan can become a better sales person than normal human being.



Valuation

In ability to attract customers, Sacchan is superior to a person.



3. Experimental Results (3)

Sacchan attracts many people.
Sacchan delights many people.

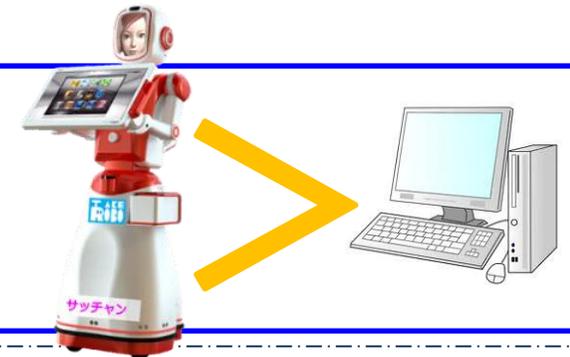


The mere machines
only provide information.



Valuation

In ability to delight people, and attract people,
Sacchan is superior to the mere machines.



4. Conclusion

The necessity of the service robot was high.



In this experiment, we found
that the presence of the robot is very important.

Thank you.