

## ABSTRACT

Sales promotion is any marketing activities other than personal selling, advertisement and publicity to stimulate the purchase of goods company. This promotion is more flexible because it can be done at any time with the available budget, short-term nature, and aims to encourage a stronger and accelerated response to the targeted market. The following tools are used in sales promotion.

But the more people who become sales promotion then the agent sales promotion did not look too appealing in the eyes of consumers therefore As the technology advances, the practice of promotion is even more interesting to use new things that Robot, because new things will show impression unique and more attractive.

make the robot can interact to humans like a sales promotion, it needs a system Human Robot Interaction (HRI) which can make the robot perform to human interaction. That requires a vision on a robot called robot vision. Where robot vision-based sensor requires vision (visual-based sensor) which is one of the important components of the robot at this time including the sales promotion robot. Therefore use a camera to sense alternative vision (eye) on the robot. Their vision-based sensor can expand the static function of a raspberry pi Camera be a representation of the senses of vision that can recognize different forms of information such as an object, movement, color, distance and others. With the vision-based sensors, limitations on non-visual sensors that existed previously insurmountable.

In terms of marketing is certainly very concerned in sensitive things like capital, profit and loss the company in marketing the product. which makes use of robots in terms of sales promotion robot is calculated in terms of manufacture and maintenance.

Therefore in this final project will be made version of the renewal of the system where the previous version only robot follow the movement of the face (object) and using a laptop, the system is now based on mini PC raspberry pi 2 and Pi Camera, and can provide an estimate of the distance interaction and angle movement of the robot so as to reduce the production budget, more concise and provide more detailed calculation of the robot it will make the robots movement looks more neat