

SUMMARY OF MASTER'S DISSERTATION

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<p>Title</p> <p style="text-align: center;">A Closed-Loop Supply Chain Game for the Personal Computer in China</p>			
<p>Abstract</p> <p>China has a lot of problems such as health hazard, environmental pollution, waste of natural resources and CO₂ emission. In order to solve these problems, the Chinese government will enact the Home Appliance Recycling Law on January 1,2011. Authorized recycling companies are allowed to operate in China and furthermore acquire subsidiaries for improving profitability. On the other hand, unauthorized recycling companies are prohibited from operation in China any more by the law. Therefore, it is expected that the opportunities for recycling business expand and thus the number of new entrants to the business dramatically arise in the future. There is no means of appropriateness though enlightenment and the spread of the new recycling mechanism are necessary.</p> <p>In this research, the author develops a Closed-Loop Supply Chain Game so that the new entrants can deeply understand the essence of the recycling business with ease. The game helps them to understand the risk and the business opportunity in the personal computer recycling business.</p> <p>There are five participants performing the role of sales company, assembly company, part company, material company, and recycling company in this game. The proposed game is distinguished from the other existing supply chain game in three aspects; 1) closed-loop, 2) recycling fund, and 3) changeability such as shifting the cost curve.</p> <p>The game was tested by a group of students and it could provide them with the opportunity to experience the mechanism, the risk, and the potential of the recycling business of personal computers. The author believes that the game can be further improved based on their valuable comments in the future.</p>			