

Economics of Information Networks

Homework 7

Due November 22, 2018 at 11:00am

Requirements

Submit your homework *by email to*

"Economics of Information Networks" <turnbull@sk.tsukuba.ac.jp>

The **Subject:** should be 01CN901 Homework #7 (in hankaku romaji). Use this class number, even if you are registered according to a different code. Your email must contain your *name* and *student ID number*.

Problems

In class, we discussed how the *game of pure coordination* and the *prisoners' dilemma* could be interpreted as models of technology adoption in markets with network externalities. Now let's consider the *asymmetric game battle of the sexes*, with payoffs

	New	Old
New	4, 1	0, 0
Old	0, 0	1, 4

Table 1: Battle of the sexes

1. What are the “good” and “bad” outcomes of this game?
2. How is this game similar to the *game of pure coordination*?
3. How is this game different from the *game of pure coordination*?
4. Is it useful to compare this game to the *prisoners’ dilemma*? If so, what lessons do you draw from the comparison? If not, why isn’t it useful for comparison?
5. What are the equilibria of this game?
6. “Tell a story” about how these payoffs might arise if two *end users* of the technology are playing the game.
7. “Tell a story” about how these payoffs might arise if two *providers* of the technology are playing the game.

Note: your answer to the last two questions may be “I can’t tell a sensible story.” If so, describe your difficulty.