:: rfid scenarios ::

the promise, the problems and potential solutions

uw cse soctech group

transit systems orca, ez-pass

the promise

mei commutes to campus where she works. with her card she can hop on and off the ferry and buses without worrying about exact change or transfers.

credit cards amex, mastercard

the promise

with hank's rfid enabled credit card, he can wave his wallet in front of a store's reader for a fast payment. he doesn't need to sign or take the card out of his wallet.

key card access hid proxcard, verichip

the promise

southwind silicon can track locations of key cards and so it can reduce costs if employees spend time working instead of searching for fellow employees.

a solution

strong legislation could help protect mei's privacy.

the problem

mei's boss could obtain her orca records and see when and where she is traveling during lunch, before and after work, and on sick days.

the problem

frank carries a small reader in his bag and sits down near hank on the bus. in seconds, frank reads hank's card, extracting the credit card number and hank's full name.

the problem

over time, jamal can use the card tracker to construct a representation of where his coworkers go and with whom. he can draw upon this knowledge for office politiking.

a solution

good encryption could help secure hank's data.

a solution

access control could help prevent data mining.