

# Chapter 1 - Introduction: Every Market Tells a Story

By: Alec Tolentino and Maxilian Drexler



# Introduction

Economics of a Kidney Transplant

Matchmaking

Matching Markets

Market Design

Marketplaces



<https://livinglocal.triip.me/wp-content/uploads/2016/03/20130101-003635.jpg>

# Economics of a Kidney Transplant

## Scarce resources

Kidneys for transplantation

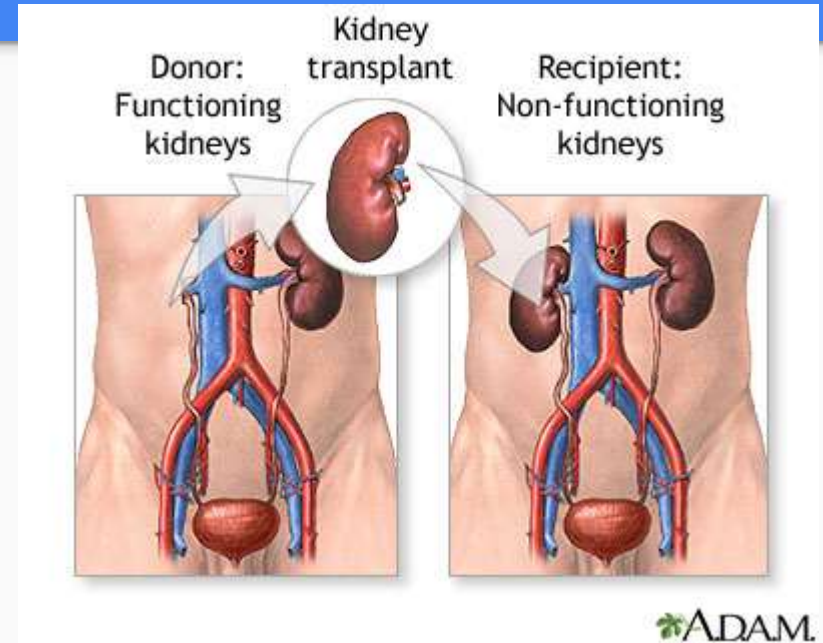
Airspace

Fuel

Passenger and pilot time

Operating room

Surgeon's careers



# Matchmaking

What we choose in life that also must choose us.

Structured matchmaking environment.

Matches are found in marketplaces.

Driven by desire

Supply and Demand



<http://1001datingthoughts.com/category/matchmaking/>

# Matching Markets

“A market involves matching whenever price isn’t the only deciding factor”

College admissions and labor markets are two-sided matching markets. Much like marriage.



<http://scottcountyclerk.com/marriage-license/>

# Market Design

“Market design brings science to matchmaking”

Helps fix problems of markets that haven't been resolved naturally

Most markets between Mao's Central Planning and Adam Smith's Invisible Hand

Markets operate according to rules

Markets are connected

National Resident Matching Program (NRMP)

# Marketplaces (1)

Purpose of marketplaces: Bringing together participants willing to transact and provide them the opportunity to find the best counterpart.



Create market thickness

- Setting up initial databases.
- Find appropriate timing (fixed and restricted periods).



Avoid congestion

- Lack of overview (too many potential transactions).
- Exception: Price driven markets
- Early exploding

# Marketplaces (2) - Congestion Example



1. Women receive too many messages
2. Respond only a few
3. Men send all the more
4. Vicious circle

→ Purpose of efficient matching is not met by the market

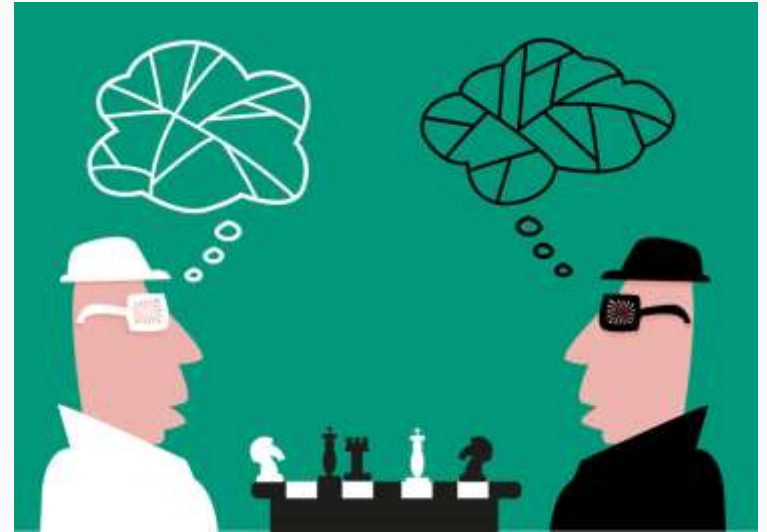


# Marketplaces (3) - Strategic decisions

Participants need to figure out their preferences.

Matching markets come along with an additional difficulty - participants need to consider how their counterparts are acting (Strategic Decisions).

One of the main topics of Game Theory (“game the system”).



<https://www.laserfiche.com/simplicity/why-you-need-to-care-about-game-theory/>

# A new way to see markets

Repugnancy often shows values of different societies (prostitution, kidney market, marriage market etc.).

Markets expose a lot of information about people's choices in life (kindergarden of the child, finding a new job or college admission).

Many parallels to the nature (green planet in desert evolution of plants)



# Conclusion

Markets need not be free-for-all to be considered.

Many choices or processes in daily life can be modelled in market.

It's all about matching scarce resources.

Although very different in nature, markets share common



Thank you for your attention!

