

The 2nd European Colloquia

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Behavioural Finance, Defaults & Financial Regulation

David Laibson

Harvard University Professor of Finance



Mainstream economics

Standard (or “classical”) assumptions:

- People *know* what’s in their best interest.
- And they *act* on that knowledge.

Behavioral Economics **also known as** **Psychology and Economics**

Better assumptions:

- **People sometimes get confused.**

“You never lose with an emerging markets fund.”

- **And even when we do understand what’s best, we often don’t follow through.**

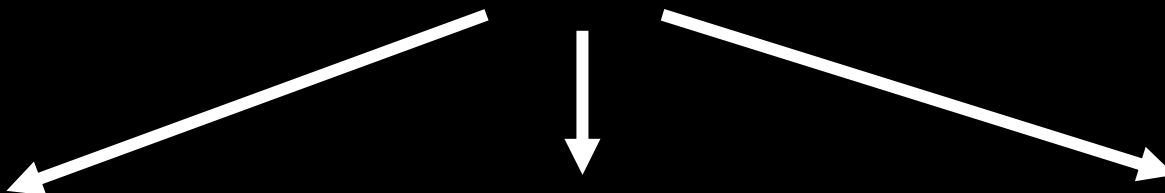
“I’ll diversify my portfolio next month.”

Psychology + Economics

- **Nobel Prize (2002) to Daniel Kahneman**

Behavioral Finance

Use psychology *and* economics to understand finance:



Asset pricing:

- Price Anomalies
- IPO underperformance
- Value Anomaly
- Sentiment
- Equity premium
- PEA drift
- Momentum
- Bubbles

Corporate finance:

- IPO timing
- Winner's curse
- Cash-flow sensitivity
- Overconfidence
- Superstar CEO's

Personal finance:

- *Passivity*
- *Procrastination*
- *Defaults*
- Financial illiteracy
- Emotional choice
- Loss aversion
- Narrow Framing
- Return chasing
- Home bias
- Overconfidence
- Wishful thinking

Passivity and Procrastination

Would you like to have

A) 15 minute massage **now**

or

B) 20 minute massage **in an hour**

Would you like to have

C) 15 minute massage **in a week**

or

D) 20 minute massage **in a week and an hour**

Choosing fruit vs. chocolate

Read and van Leeuwen (1998)

Choosing Today

Eating Next Week

Time

If you were
deciding **today**,
would you choose
fruit or chocolate
for **next week**?



Patient choices for the future:

Choosing Today

Eating Next Week

Time

Today, subjects typically choose fruit for **next week**.

74%
choose
fruit



Impatient choices for today:

Choosing and
Eating

Simultaneously

Time

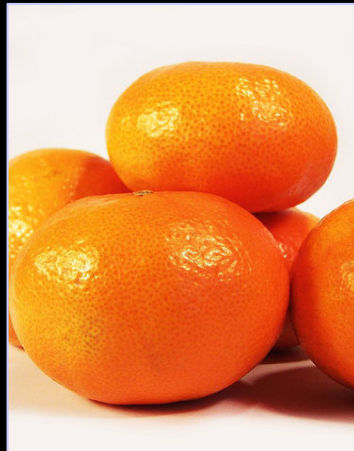
If you were
deciding **today**,
would you choose
fruit or chocolate
for **today**?



Time Inconsistent Preferences:

Choosing and
Eating

Simultaneously



70%
choose
chocolate



A psychological theory: Quasi-hyperbolic discounting (Laibson 1997)

massages

All ~~future events~~ get a psychological weight of only $\frac{1}{2}$

Choice 1:

- 15 min now = 15 min now
- 20 min in 1 hour = 10 min now

Choice 2:

- 15 min in 1 week = 7.5 min now
- 20 min in 1 week and 1 hour = 10 min now

Procrastination

Akerlof (1991), O'Donoghue and Rabin (1999)

- Suppose you can exercise (effort cost 6) to gain delayed benefits (health value 8).
- When will you exercise?
- Exercise Today: $-6 + \frac{1}{2} [8] = -2$
- Exercise Tomorrow: $0 + \frac{1}{2} [-6 + 8] = 1$
- Happy to make plans today to exercise tomorrow.
- But likely to fail to follow through.

Joining a Gym

Della Vigna and Malmendier (2004)

- **Average cost of gym membership: \$75 per month**
- **Average number of visits: 4**
- **Average cost per visit: \$19**
- **Cost of “pay per visit”: \$10**

Procrastination in retirement savings

Choi, Laibson, Madrian, Metrick (2002)

- **Survey**
 - Mailed to a random sample of employees
 - Matched to administrative data on actual savings behavior
- **Consider a typical population of 100 employees**
 - 68 report saving too little
 - 24 of 68 plan to raise 401(k) contribution in next **2 months**
 - Only 3 of 24 actually do so in the next **4 months**

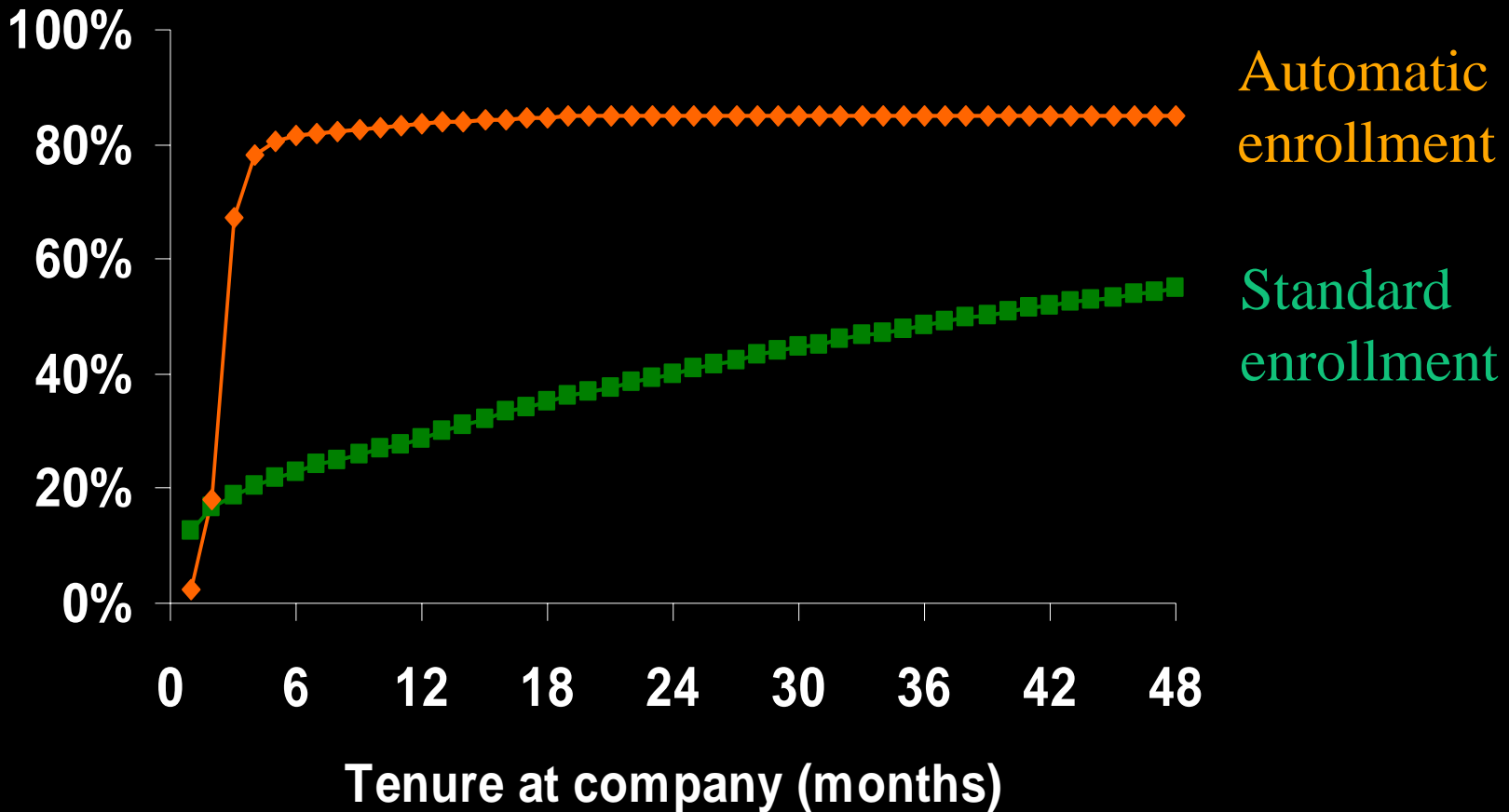
Defaults

Automatic enrollment

- **An example: Welcome to the company**
- **If you don't do anything**
 - You are automatically enrolled in the 401(k)
 - You save 2% of your pay
 - Your contributions go into a money market fund
- **Call this phone number to opt out of enrollment or change your investment allocations**

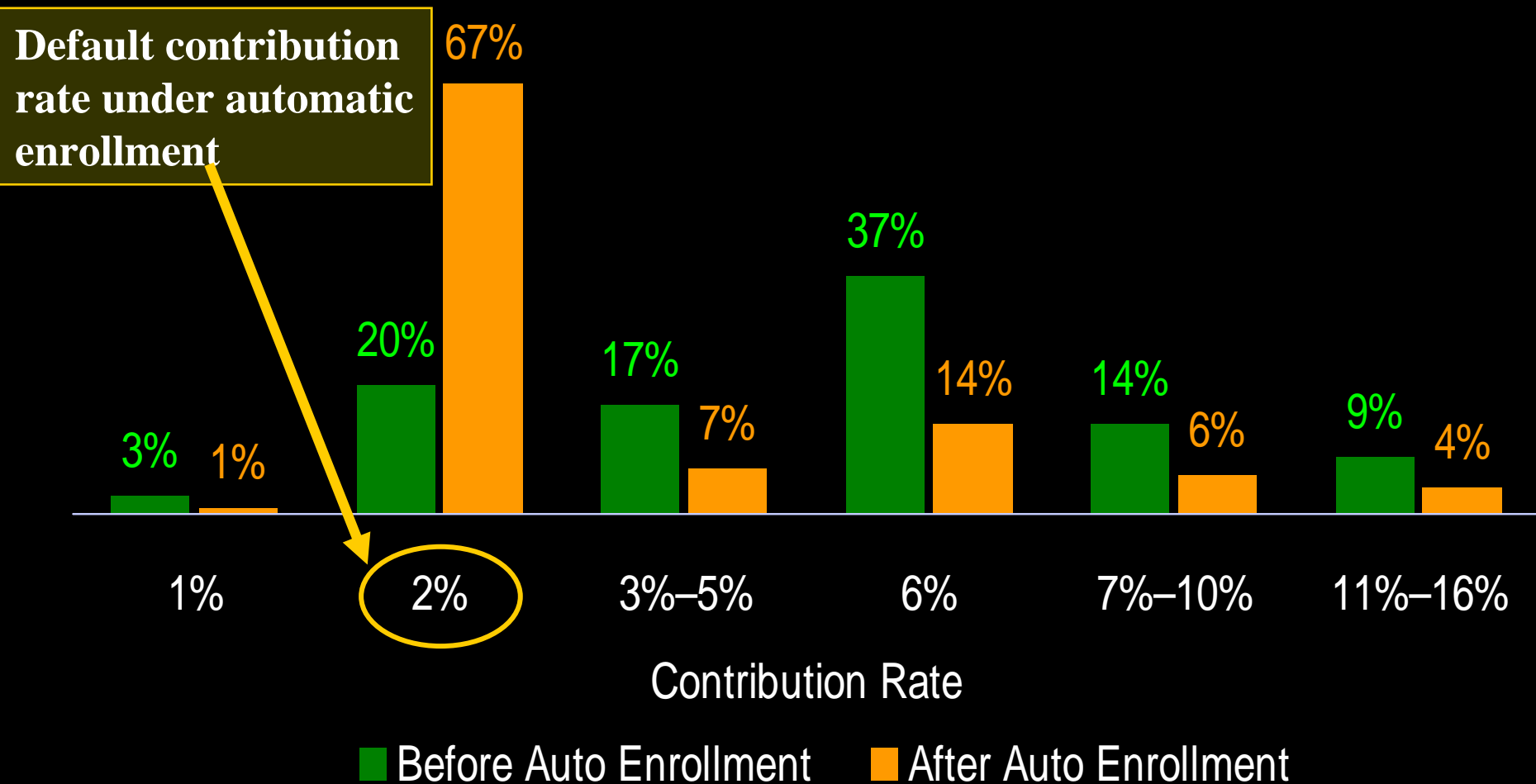
Madrian and Shea (2001)
Choi, Laibson, Madrian, Metrick (2004)

401(k) participation by tenure at firm



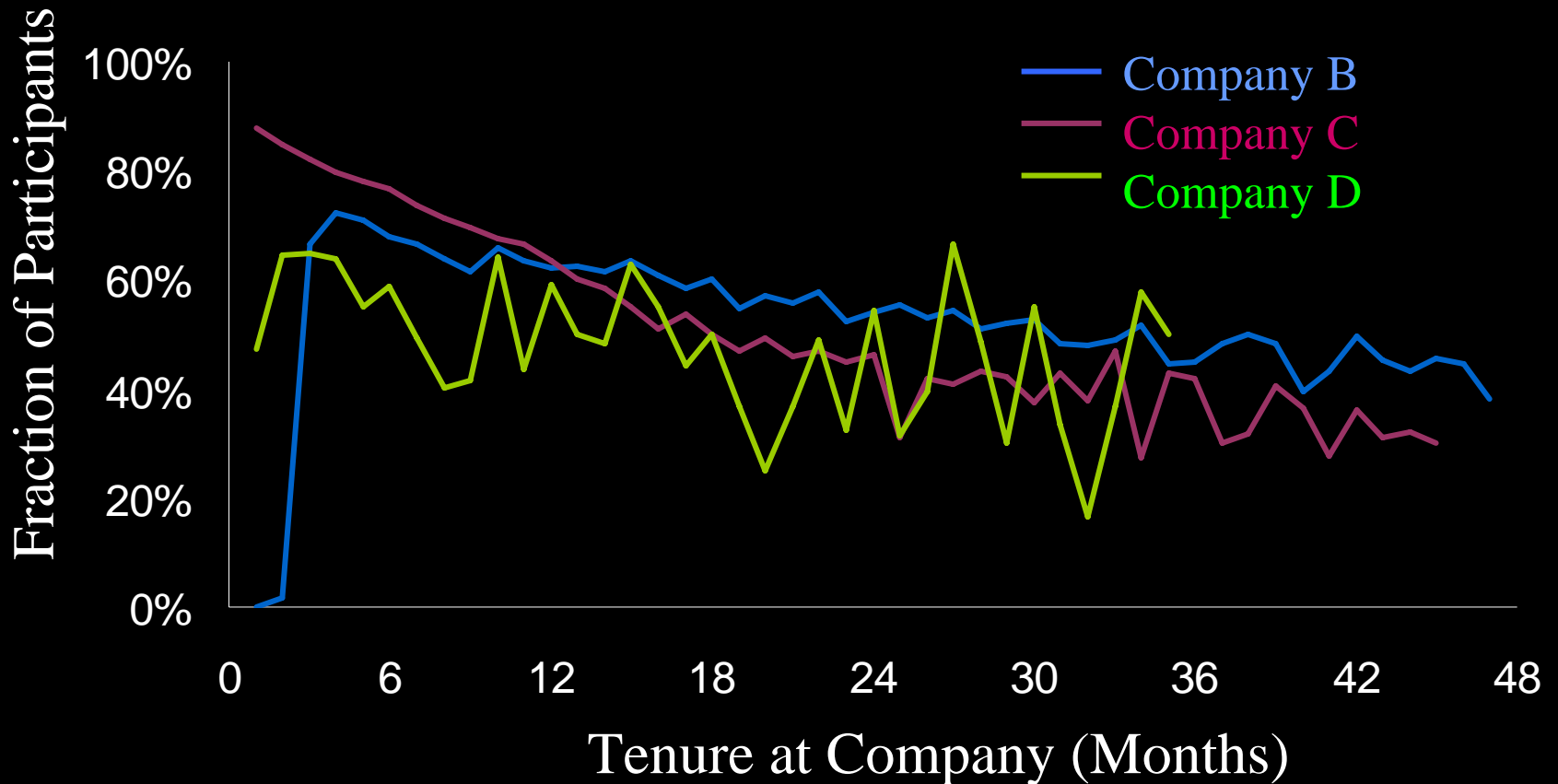
Employees enrolled under automatic enrollment cluster at default contribution rate.

Fraction of Participants at different contribution rates:



Participants stay at the automatic enrollment defaults for a long time.

Fraction of Participants Hired Under Automatic Enrollment who are still at both Default Contribution Rate and Asset Allocation



The power of deadlines: Active decisions

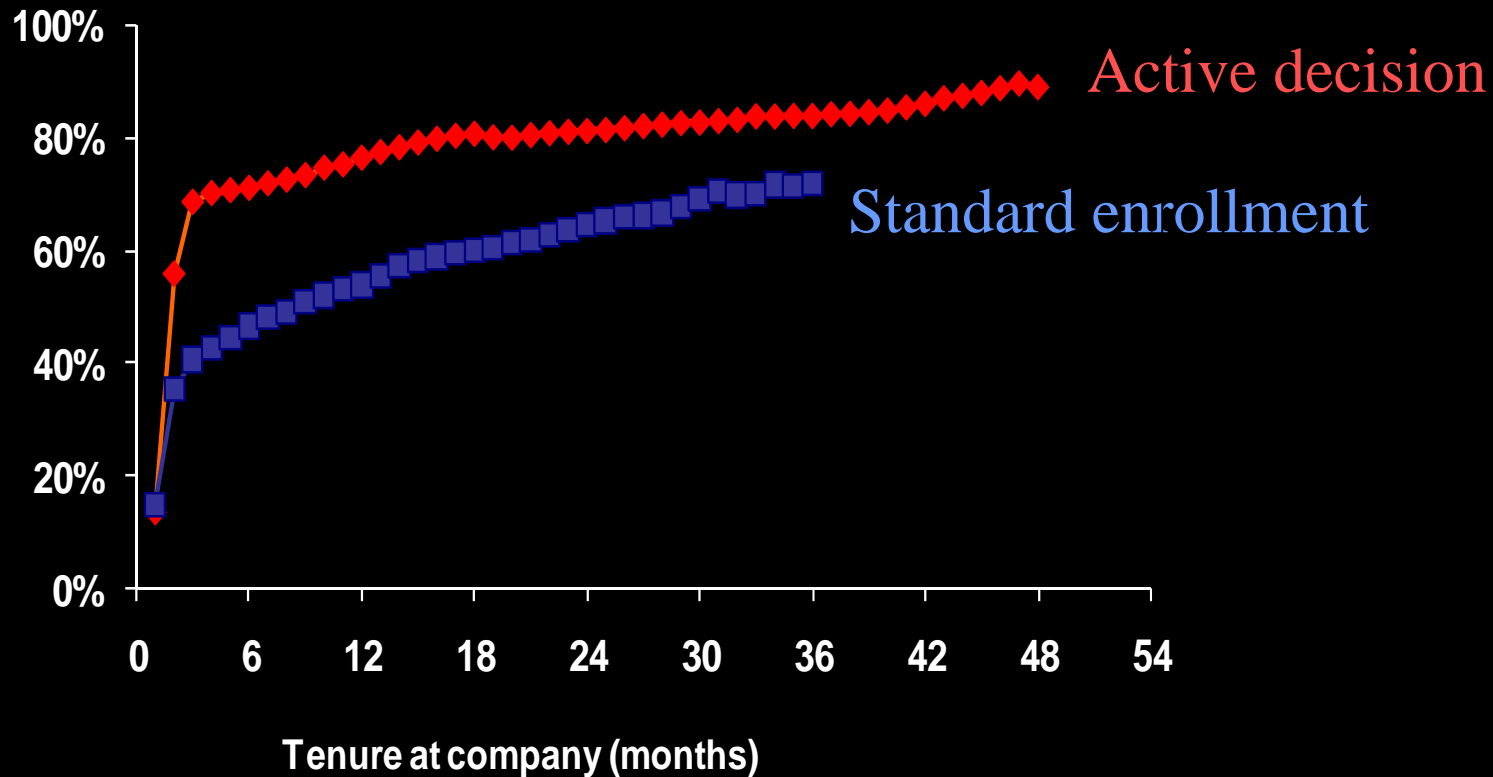
Choi, Laibson, Madrian, Metrick (2004)

Active decision mechanisms require employees to make an active choice about 401(k) participation.

- Welcome to the company
- You are *required* to submit this form within 30 days of hire, *regardless* of your 401(k) participation choice
- If you don't want to participate, indicate that decision
- If you want to participate, indicate your contribution rate and asset allocation
- Being passive is *not* an option

401(k) participation increases under active decisions

401(k) participation by tenure



Regulation and Plan Designers

Use Defaults to...

- **Make constructive outcomes automatic or easy**
 - Enrollment
 - High savings rates and escalation of savings
 - Diversification/rebalancing (lifecycle funds)
 - Individualized savings plans (age-based)
 - Annuitization?
- **Make destructive outcomes hard**
 - Non-enrollment
 - Non-diversification
 - Dissaving before retirement

The background is a technical map, likely a nautical chart, featuring contour lines, a grid, and various navigational symbols. A large, semi-transparent blue triangle is positioned in the lower right corner. The text is overlaid on the upper left portion of the map.

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