

## **Part 1:**

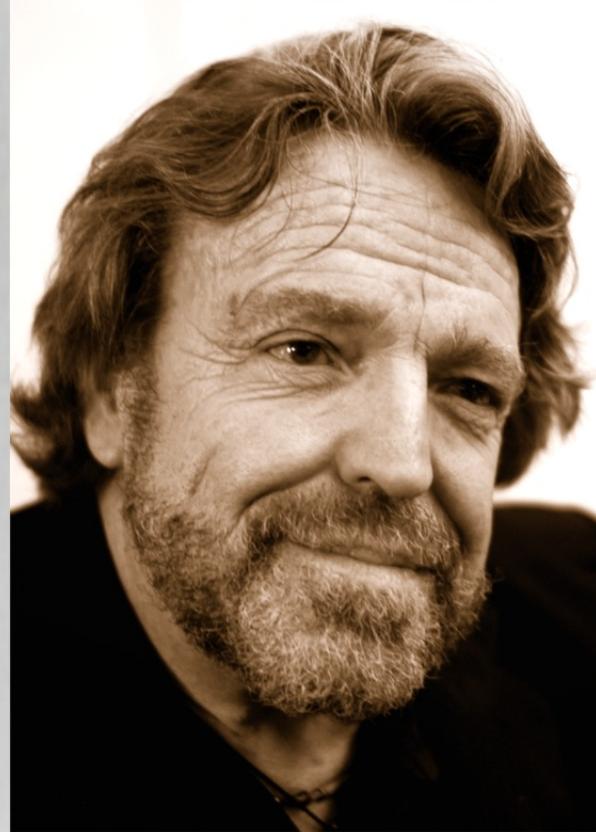
### The Simple Model of Rational Crime

What caused  
Enron's  
collapse?





wishful  
blindness



John Perry Barlow  
created an ideology  
that protected him  
from seeing the truth

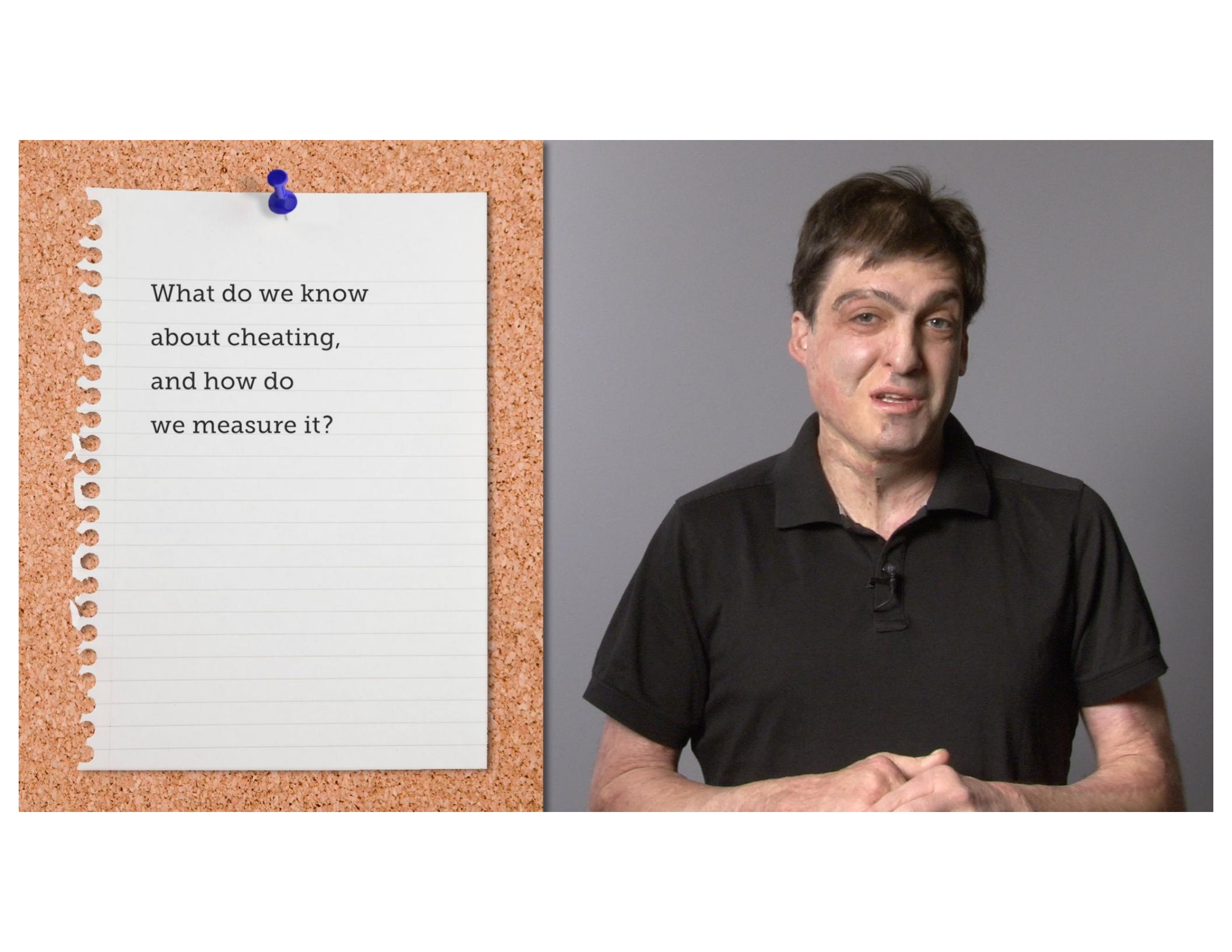
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Is dishonesty the result  
of a few bad apples?

Or is it due to many  
people cheating  
just a little bit?





What do we know  
about cheating,  
and how do  
we measure it?



# The Matrix Test

In each of the 20 boxes below, find a set of numbers that sum up exactly **to 10**. For each box, in which you found the set, circle the numbers and mark the corresponding 'Got it' box below. **See Example** →  
For each box you get, you will receive \$0.50.  
You have 5 minutes.  
On average people solve 4 boxes correctly.

## Example

3.91	0.82	3.75
1.11	1.69	7.94
3.28	2.52	6.25
9.81	6.09	2.46

Got it

## When finished:

1. Fill out the attached collection slip.
2. Submit both pages to the experimenter, who will check your answers.

1.69	1.82	2.91
4.67	4.81	3.05
5.82	5.06	4.28
6.36	5.19	4.57

Got it

0.46	0.53	1.88
6.13	5.11	3.42
7.05	5.43	4.15
7.15	5.76	4.77

Got it

0.49	0.74	1.17
3.72	2	1.22
3.75	5.22	5.67
8.83	8.23	7.7

Got it

0.47	4.58	2.57
3.15	3.82	4.38
4.94	5.42	5.98
2.95	4.86	7.54

Got it

0.13	0.24	0.41
2.81	1.86	1.2
3.33	3.46	4.07
5.67	5.46	5.18

Got it

0.81	1.31	2.09
4.55	3.75	3.19
5.62	9.41	6.81
7.02	8.48	8.51

Got it

0.17	2.46	2.44
6.02	5.6	2.63
6.05	6.21	6.6
8.22	8.19	7.54

Got it

0.46	1.98	2.38
0.48	1.79	2.48
0.58	1.69	2.59
1.65	0.98	2.94

Got it

0.06	5.07	5.39
1.71	0.03	8.98
2.1	4.96	9.42
4.53	4.65	9.92

Got it

0.85	1.62	1.63
6.06	5.63	1.69
6.25	5.01	1.78
6.36	3.16	1.91

Got it

0.15	0.95	1.31
4.98	2.9	2.88
6.66	6.73	7.67
9.75	9.85	8.17

Got it

0.63	0.65	1.02
2.64	2.34	2.12
2.89	5.98	8.89
9.49	9.37	9.33

Got it

0.14	0.15	0.32
5.51	5.68	0.52
5.48	6.15	0.84
5.28	3.31	1.17

Got it

0.84	1.54	7.28
4.42	3.54	7.18
5.54	4.78	5.55
6.99	6.93	6.76

Got it

0.77	1.47	1.69
3.38	3.18	2.28
3.62	3.01	2.48
3.68	2.93	2.53

Got it

0.63	0.74	2.23
8.05	7.68	3.71
8.31	7.06	4.51
8.45	6.44	5.29

Got it

0.12	0.71	0.74
4.27	3.07	2.27
5.09	5.73	5.82
9.27	7.03	6.79

Got it

0.74	1.93	2.76
7.24	5.03	3.14
7.71	6.38	3.8
8.28	9.18	9.48

Got it

0.14	0.67	2.22
5.96	5.58	5.22
7.04	7.59	9.33
9.77	9.5	8.52

Got it

0.2	2.54	2.8
1.05	2.39	2.96
1.44	2.28	3
1.73	2.19	3.85

Got it



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Example		
3.91	0.82	3.75
1.11	1.69	7.94
3.28	2.52	6.25
9.81	6.09	2.46
Got it	<input checked="" type="checkbox"/>	

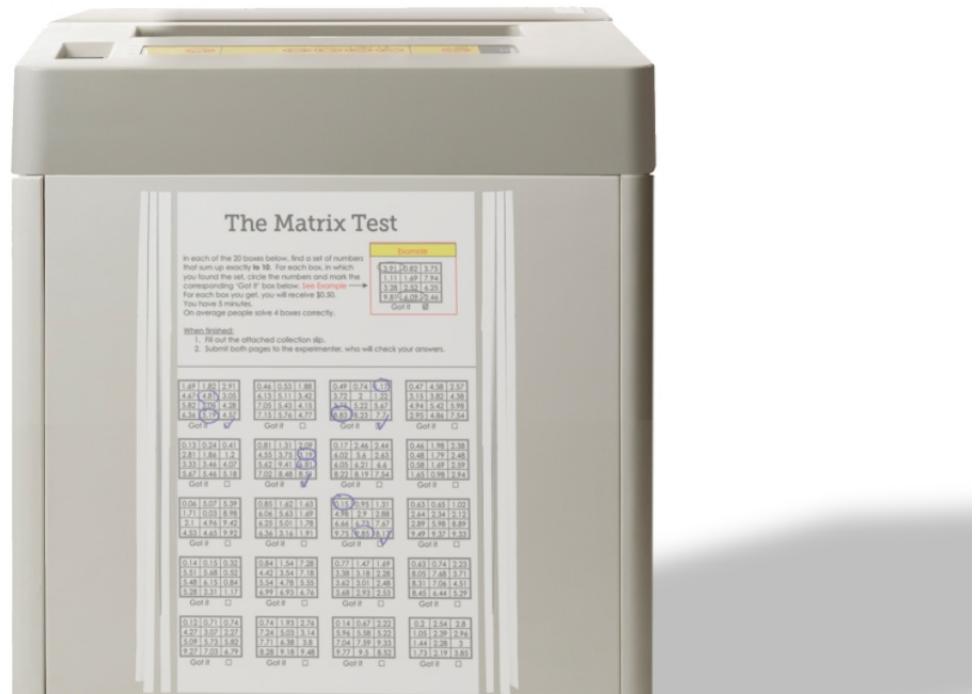
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1.69	1.82	2.91		
4.67	4.81	3.05		
5.82	5.06	4.28		
6.36	5.19	4.57		
Got it <input checked="" type="checkbox"/>				
0.12	...	...		
4.27	3.07	2.27		
5.09	5.73	5.82		
9.27	7.03	6.79		
Got it	<input type="checkbox"/>	Got it <input type="checkbox"/>	Got it <input type="checkbox"/>	Got it <input type="checkbox"/>
7.24	5.03	3.14		
7.71	6.38	3.8		
8.28	9.18	9.48		
5.96	5.58	5.22		
7.04	7.59	9.33		
9.77	9.5	8.52		
1.05	2.39	2.96		
1.44	2.28	3		
1.73	2.19	3.85		
54	2.8			



Only the sides of the  
paper were shredded.



On average,  
people solve  
4 problems,  
but report  
solving 6.

57  
38  
98  
54

8  
8  
9  
4

GOT IT



Lots of people cheat  
just a little bit.



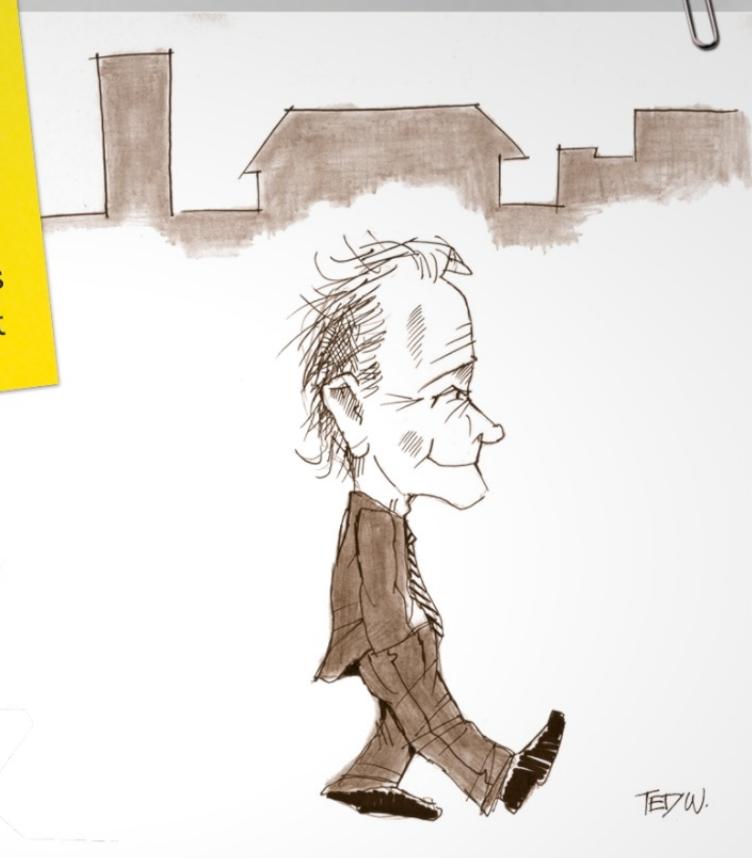


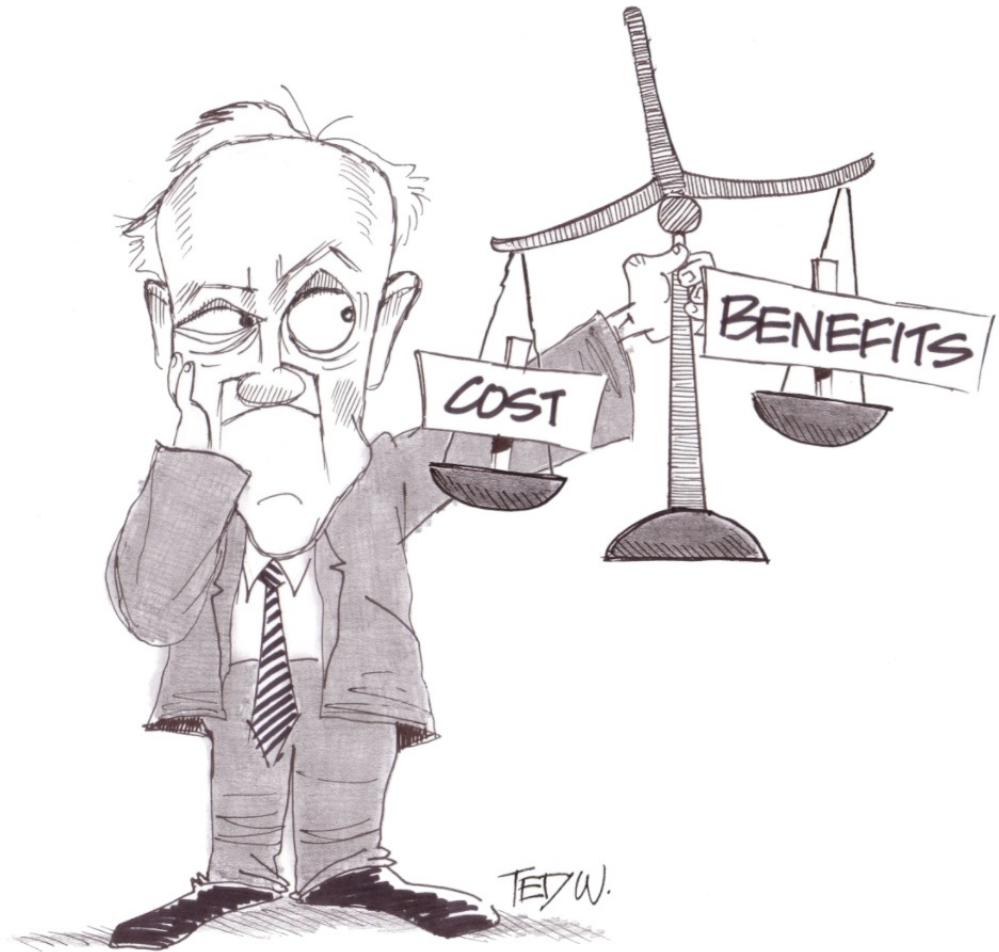
**Gary Becker**  
*Professor, University  
of Chicago*

**Nobel Prize for  
Economic Sciences,  
1992**

**cost/benefit  
analysis:**

weighing the  
benefit of being  
on time against  
the possible costs  
of getting caught





How much  
money do you  
stand to gain?



## Payment per "correct" answer:

1: .10

2: .25

3: .50

4: \$1.00

5: \$2.00

6: \$5.00

7: \$10.00

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Got it	<input checked="" type="checkbox"/>	

When finished:

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1.69	1.82	2.91	0.46	0.53	1.88	0.49	0.74	1.17	0.47	4.58	2.57
4.67	4.81	3.05	6.13	5.11	3.42	3.72	2	1.22	3.15	3.82	4.38
5.82	5.06	4.28	7.05	5.43	4.15	3.75	5.22	5.67	4.94	5.42	5.98
6.36	5.19	4.57	7.15	5.76	4.77	8.83	8.23	7.7	2.95	4.86	7.54
Got it	<input type="checkbox"/>		Got it	<input type="checkbox"/>		Got it	<input type="checkbox"/>		Got it	<input type="checkbox"/>	

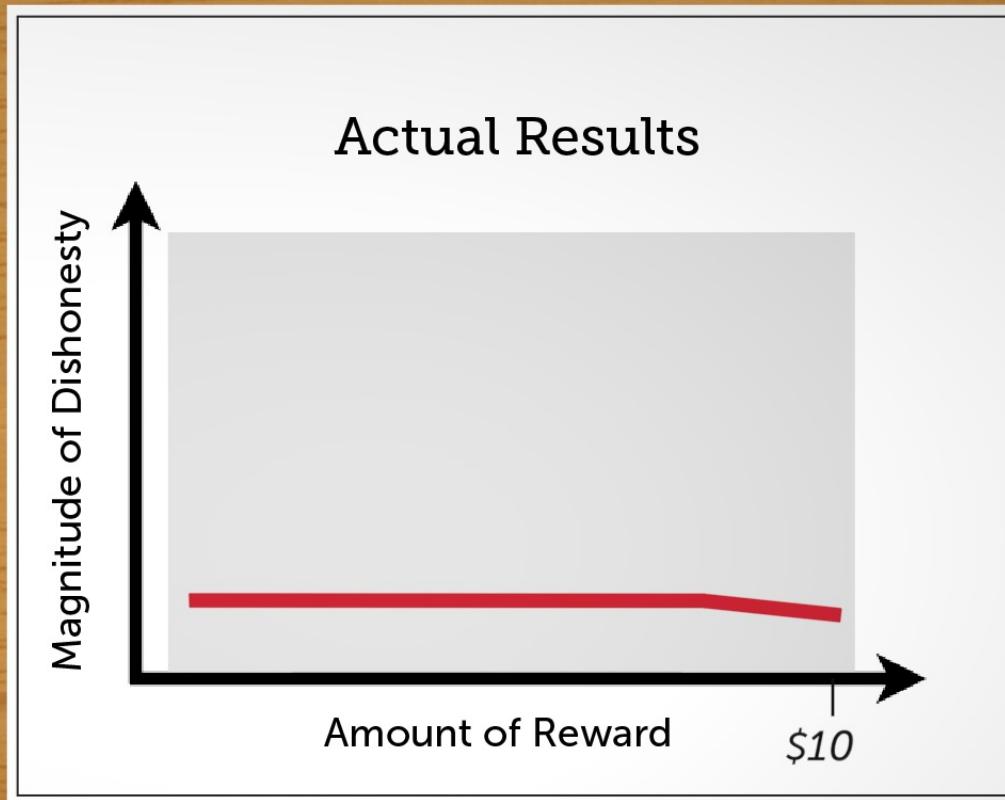
0.13	0.24	0.41	0.81	1.31	2.09	0.17	2.46	2.44	0.46	1.98	2.38
2.81	1.86	1.2	4.55	3.75	3.19	6.02	5.6	2.63	0.48	1.79	2.48
3.33	3.46	4.07	5.62	9.41	6.81	6.05	6.21	6.6	0.58	1.69	2.59
5.67	5.46	5.18	7.02	8.48	8.51	8.22	8.19	7.54	1.65	0.98	2.94
Got it	<input type="checkbox"/>		Got it	<input type="checkbox"/>		Got it	<input type="checkbox"/>		Got it	<input type="checkbox"/>	

0.06	5.07	5.39	0.85	1.62	1.63	0.15	0.95	1.31	0.63	0.65	1.02
1.71	0.03	8.98	6.06	5.63	1.69	4.98	2.9	2.88	2.64	2.34	2.12
2.1	4.96	9.42	6.25	5.01	1.78	6.66	6.73	7.67	2.89	5.98	8.89
4.53	4.65	9.92	6.36	3.16	1.91	9.75	9.85	8.17	9.49	9.37	9.33
Got it	<input type="checkbox"/>		Got it	<input type="checkbox"/>		Got it	<input type="checkbox"/>		Got it	<input type="checkbox"/>	

0.14	0.15	0.32	0.84	1.54	7.28	0.77	1.47	1.69	0.63	0.74	2.23
5.51	5.68	0.52	4.42	3.54	7.18	3.38	3.18	2.28	8.05	7.68	3.71
5.48	6.15	0.84	5.54	4.78	5.55	3.62	3.01	2.48	8.31	7.06	4.51
5.28	3.31	1.17	6.99	6.93	6.76	3.68	2.93	2.53	8.45	6.44	5.29
Got it	<input type="checkbox"/>		Got it	<input type="checkbox"/>		Got it	<input type="checkbox"/>		Got it	<input type="checkbox"/>	

0.12	0.71	0.74	0.74	1.93	2.76	0.14	0.67	2.22	0.2	2.54	2.8
4.27	3.07	2.27	7.24	5.03	3.14	5.96	5.58	5.22	1.05	2.39	2.96
5.09	5.73	5.82	7.71	6.38	3.8	7.04	7.59	9.33	1.44	2.28	3
9.27	7.03	6.79	8.28	9.18	9.48	9.77	9.5	8.52	1.73	2.19	3.85
Got it	<input type="checkbox"/>		Got it	<input type="checkbox"/>		Got it	<input type="checkbox"/>		Got it	<input type="checkbox"/>	







What is the  
probability  
you will  
get caught?

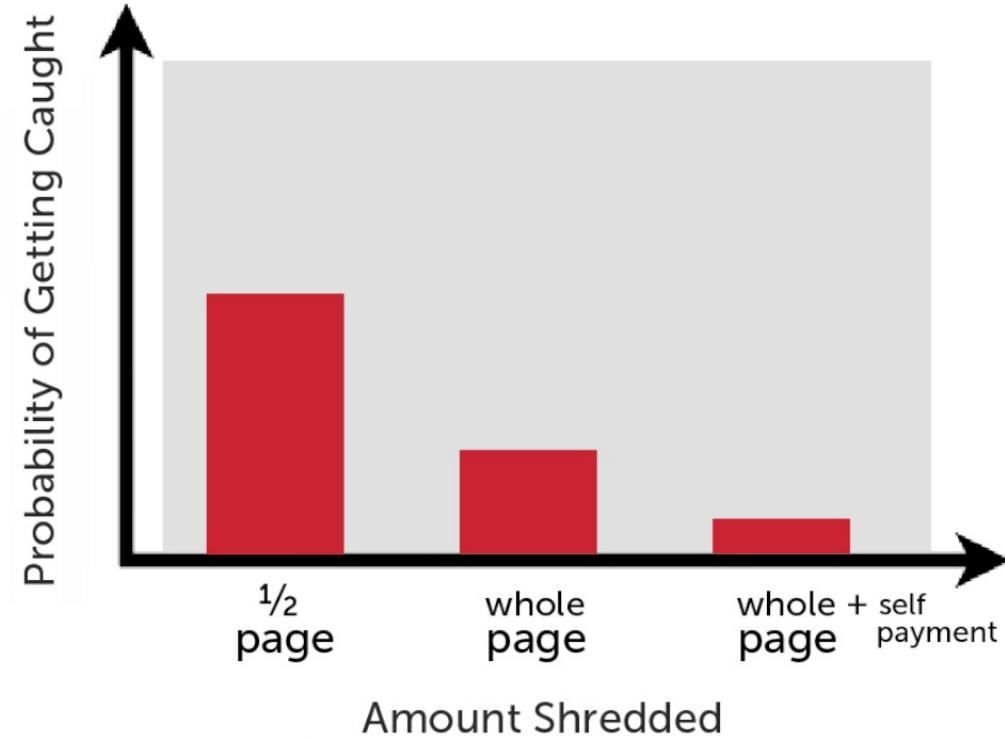


Group 1  
shredded  
half a page,  
submitted  
the other half

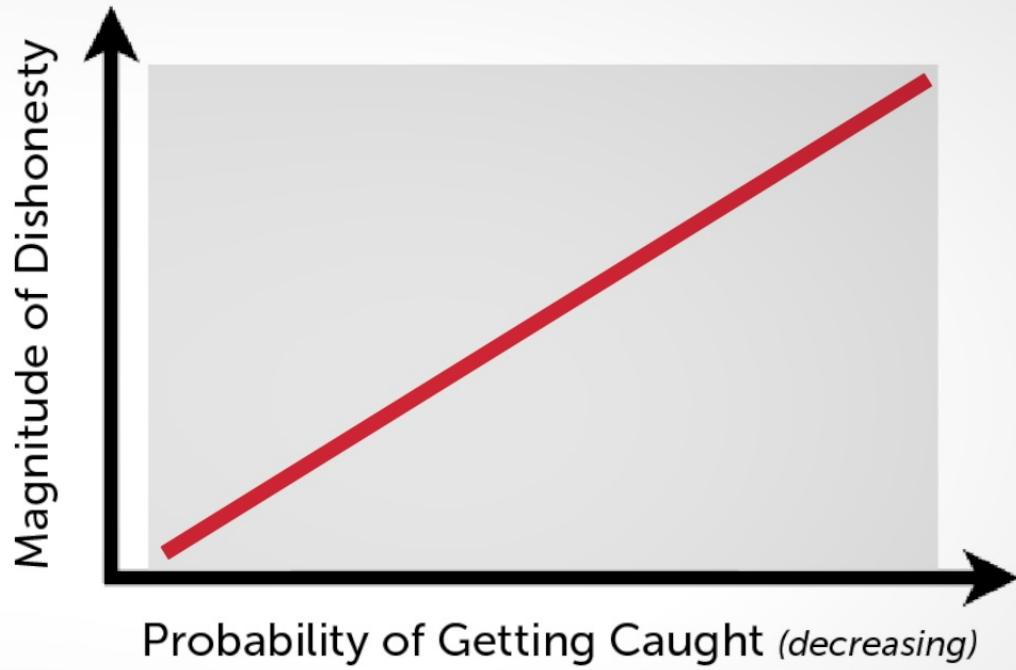
Group 3  
shredded the  
whole page,  
paid themselves

Group 2  
shredded the  
whole page

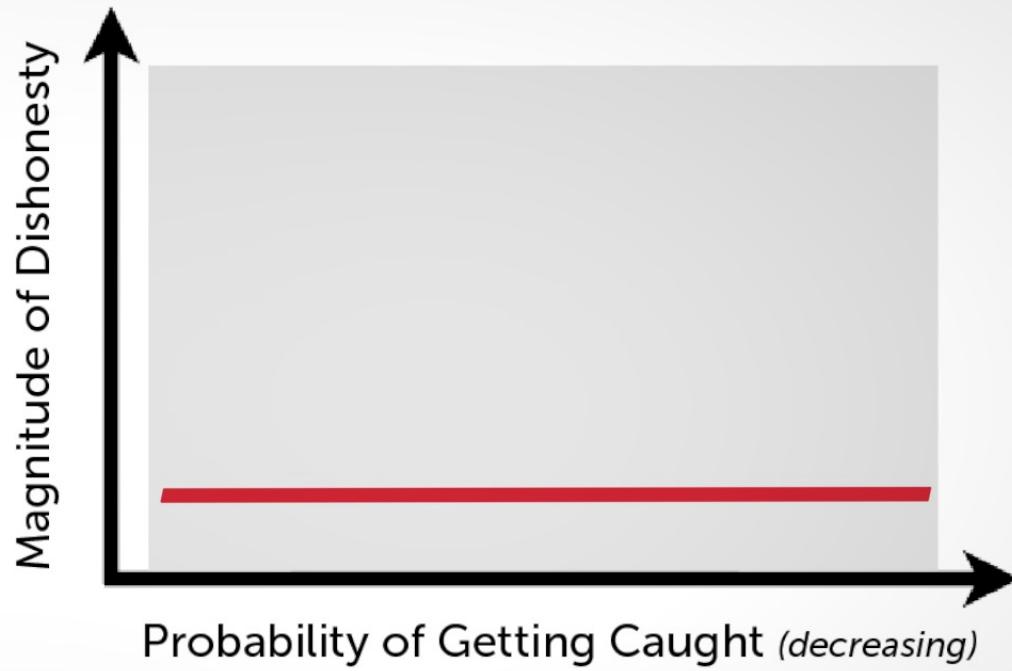




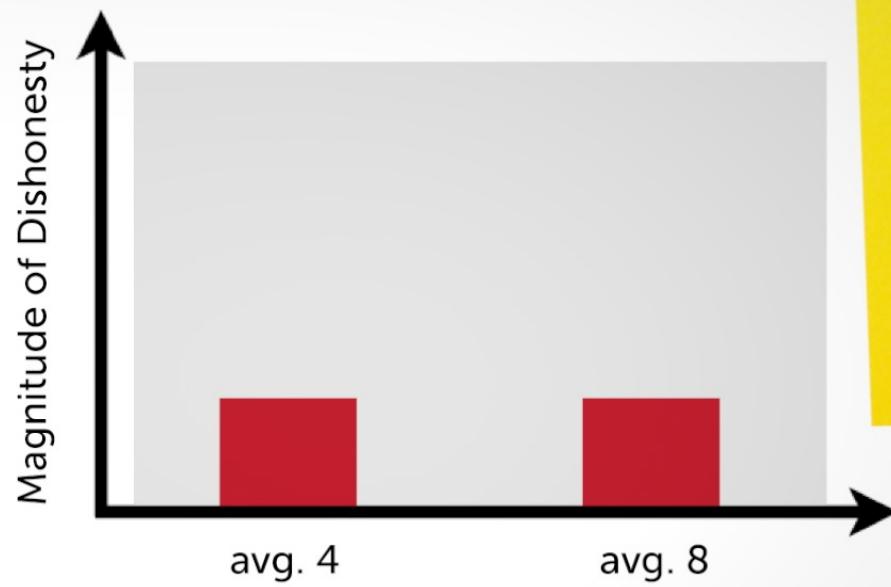
## Expected Results



## Actual Results

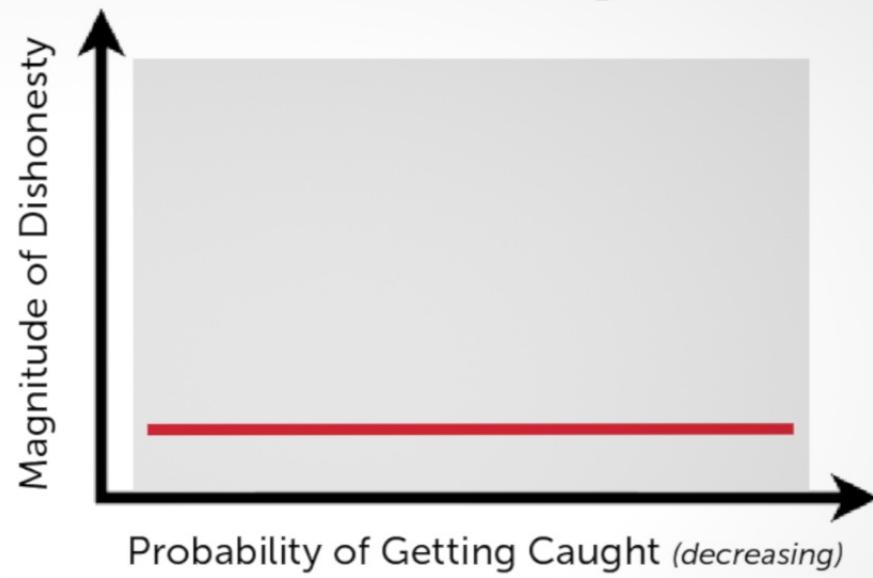


## Impact of Social Comparison



No difference:  
in both conditions,  
people solved 4  
but reported 6.

## Impact of Potential Consequences





We need a new economic model  
of dishonesty that doesn't solely  
rely on cost-benefit analyses:

1) rewards



2) probability of  
getting caught



3) punishment

